Global. Successful. Towards a green energy future.

Annual Report 2023/2024

thyssenkrupp nucera

thyssenkrupp nucera in figures

In EUR million	2022/2023[1]	**2023/2024**	% change
Result of operations			
Order intake	613	636	4%
thereof: Order intake AWE	206	356	73%
thereof: Order intake CA	408	279	–31%
Sales	661	862	30%
thereof: Sales AWE	328	524	60%
thereof: Sales CA	333	338	1%
Gross margin	96	91	–5%
Research and development cost	–19	–36	85%
EBIT	25	–14	––
EBIT margin	4%	–2%	–5%P
Earnings before taxes	36	12	–67%
Net income	24	11	–52%
Earnings per share (in euro) (basic = diluted)	0.22	0.09	–60%
Net assets			
Net financial assets	761	673	–12%
Total assets	1,150	1,261	10%
Equity	747	754	1%
Equity ratio	65%	60%	–5%P
Financial position			
Cash flow from operating activities	–13	–62	––
Cash flow from investing activities	243	–16	––
Free cash flow	230	–79	––
Employees (number)			
Employees as of the reporting date	675	1,012	50%

[1] The comparison figures for the 2022/2023 fiscal year have been retrospectively adjusted in accordance with IAS 8,41. Please refer to the disclosures in Note 33 page 164 in the Notes to the Consolidated Financial Statements.

Interactive PDF: Optimized for monitor use with Adobe Acrobat. Links can be reached by clicking on them.
Functions of the buttons on the right margin:

- Contents
- Table of sections
- Page back
- Page forward
- Previously visited page
- Search

We shape the new era

At thyssenkrupp nucera, we stand for the beginning of a new era in climate-friendly energy supply based on green hydrogen. Driven by a passion for innovation, we offer our customers cutting-edge electrolyzers for the industrial-scale production of green hydrogen as one of the global leaders in electrolysis technologies.

This is how we make it possible for customers to minimize their carbon footprint and contribute to climate protection. Our decades of proven expertise in chlor-alkali technology and international large-scale plant engineering provide the essential technological foundation for delivering hydrogen plants on a gigawatt scale.

Highlights 2023/2024

At thyssenkrupp nucera, we have made significant strides in achieving our ambitious goals for the 2023/2024 fiscal year. Our highlights from the past reporting year clearly reflect this progress. Once again, we successfully won over notable customers worldwide with our technology in both alkaline water electrolysis for green hydrogen production and chlor-alkali electrolysis. Numerous awards highlight the successful execution of our strategy, along with the addition of many new colleagues who decided to join our team.

October 10, 2023

The Finnish company Neste signs an agreement to reserve production capacities for six 20 MW scalum® modules for a refinery in Finland that will utilize green hydrogen. More

October 18, 2023

Unipar modernizes its chlor-alkali plant in Brazil with electrolyzers featuring thyssenkrupp nucera's environmentally friendly BM2.7 membrane technology – saving 70,000 tons of CO_2 annually. More

November 23, 2023

thyssenkrupp nucera receives the award in the "Impact IPO" category for its significant influence on transformation processes in the growth area of climate protection in recognition of its IPO in July 2023. More

January 9, 2024

CAPE IGARASSU invests in a chlorine supply solution in Brazil that minimizes environmental impact through the use of thyssenkrupp nucera's highly efficient membrane electrolyzers. More

March 13, 2024

A strategic partnership with Fraunhofer IKTS is signed to reinforce the hydrogen technology portfolio to include the highly innovative solid oxide electrolyzer cell (SOEC) high-temperature electrolysis technology. More

March 18, 2024

The US Department of Energy (DOE) is providing $50 million in funding to thyssenkrupp nucera to drive innovations in the mass production of electrolyzer cells for the US market. More

May 13, 2024

Moeve (formerly Cepsa) selects thyssenkrupp nucera as the preferred supplier for a 300 MW electrolysis plant featuring scalum® modules for green hydrogen production at the energy park in Huelva, southern Spain. More

May 30, 2024

thyssenkrupp nucera is named one of the world's TIME100 Most Influential Companies for 2024 and recognized in the "Leader" category for its electrolysis technology. More

June 13, 2024

thyssenkrupp nucera wins the German Brand Award in the categories "Corporate Brand of the Year" and "Industry, Machines & Engineering". More

September 3, 2024

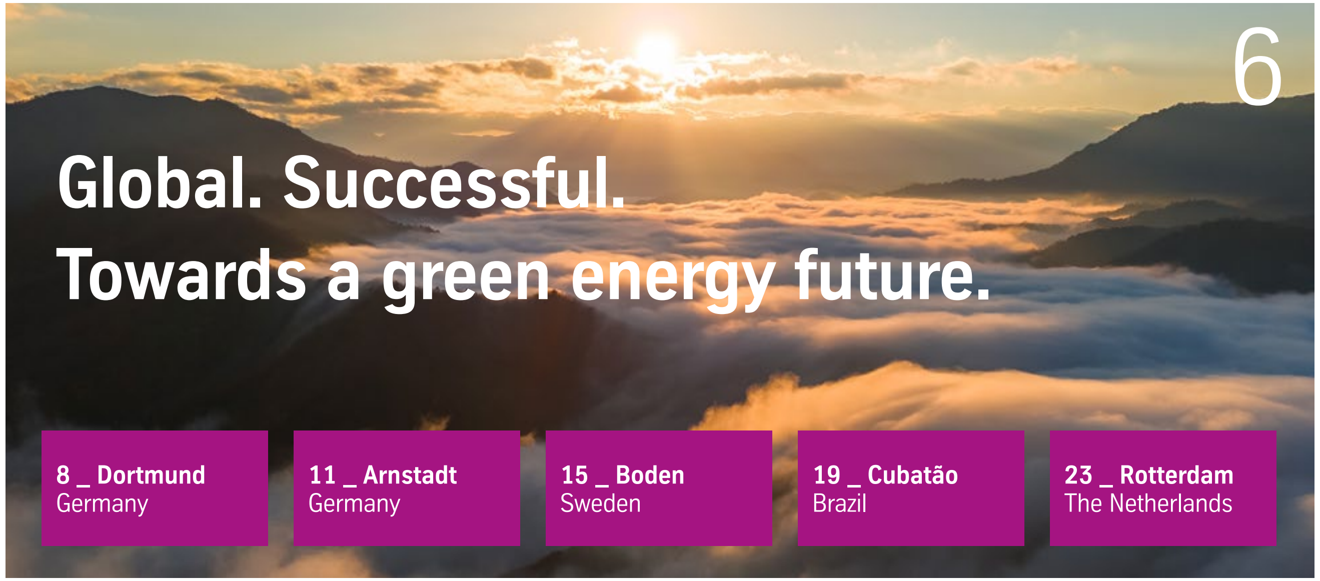
The scalum® hydrogen technology is honored with the Hydrogen Impact Investment Award in the category "Impact Technology of the Year 2024". More

September 18, 2024

Sachin Nijhawan has been appointed as the new US CEO and Jürgen Grasinger as US COO. Strengthening the North American management team is a key step in driving forward the international growth strategy. More

September 2024

thyssenkrupp nucera welcomes its 1,000th employee. The number of team members in the "We shape the new era" workforce has nearly doubled in the past two years.



Global. Successful. Towards a green energy future.

Rethinking technologies and infrastructures has been at the heart of thyssenkrupp nucera for over 60 years. With more than 600 successful projects, 240,000 cell elements produced, and over 10 gigawatts of installed electrolysis capacity, we are leveraging these deeply rooted strengths to advance alkaline water electrolysis (AWE) for the production of green hydrogen.

+30%
sales growth

1,012
employees worldwide
(as of Sept. 30, 2024)

>1.5 gigawatts
of annual production capacity

>3 gigawatts
of AWE projects secured with signed binding contracts

Utilization of renewable energy certificates also in chlor-alkali electrolysis to enable the production of green PVC

Our locations

Global advances towards a green energy future

TIME Magazine has named thyssenkrupp nucera one of the 100 most influential companies in the world, recognizing it in the “Leader” category. This accolade recognizes the company's cutting-edge technology for highly efficient electrolyzers, facilitating industrial-scale green hydrogen production for customers around the globe.

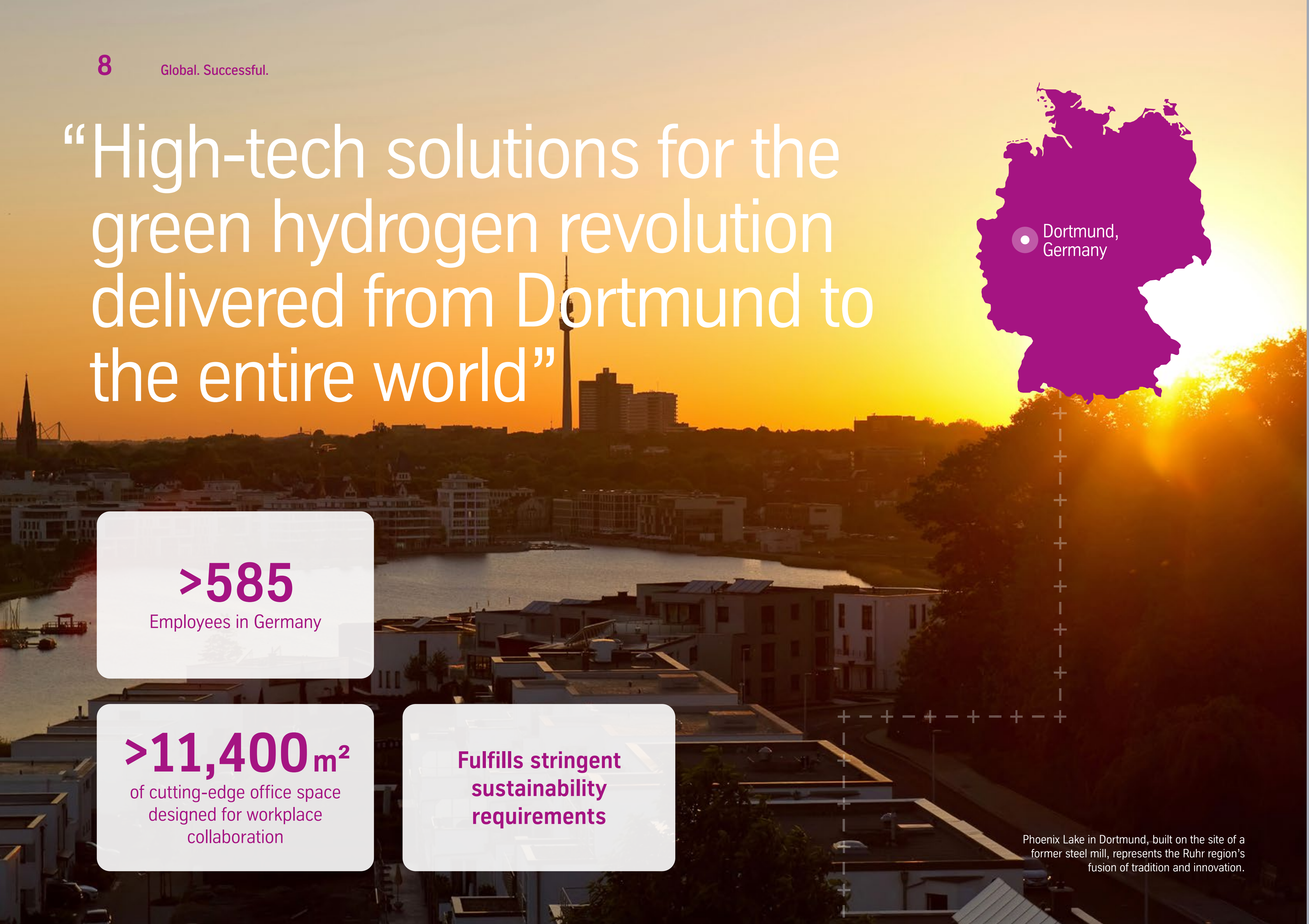
1 Dortmund, Germany
The global journey begins in Dortmund. From our modern, state-of-the-art headquarters in Dortmund, we deliver high-tech solutions for the green hydrogen revolution to customers worldwide.
See page 8

2 Arnstadt, Germany
thyssenkrupp nucera and Fraunhofer IKTS are collaborating to bring the future technology of high-temperature electrolysis to market maturity in Arnstadt (Thuringia). See page 11

3 Boden, Sweden
In Boden, Sweden, Stegra is constructing Europe’s first industrial-scale green steel plant, powered by thyssenkrupp’s alkaline water electrolysis technology for the efficient production of green hydrogen. See page 15

4 Cubatão, Brazil
Unipar is upgrading its chlor-alkali plant in Brazil with our eco-friendly BM2.7 membrane technology, achieving an annual reduction of approximately 70,000 tons of CO_2 emissions. See page 19

5 Rotterdam, The Netherlands
Shell is significantly cutting CO_2 emissions in the large-scale HOLLAND HYDROGEN I project using thyssenkrupp nucera's electrolyzers, paving the way for a more sustainable future.
See page 23



“High-tech solutions for the green hydrogen revolution delivered from Dortmund to the entire world”

>585
Employees in Germany

>11,400 m²
of cutting-edge office space designed for workplace collaboration

Fulfills stringent sustainability requirements

Phoenix Lake in Dortmund, built on the site of a former steel mill, represents the Ruhr region’s fusion of tradition and innovation.

The Dortmund headquarters is alive with the spirit of innovation and progress. After the successful launch of the NCAlab, the company’s move to its new building, nu|house, is underway.

“Our new corporate headquarters in Dortmund offers state-of-the-art workspaces and greater opportunities for creative and collaborative work to employees from around the world.”

Dr. Werner Ponikwar,
CEO of thyssenkrupp nucera

Nearly 200 years ago, the Ruhr region was at the forefront of an industrial revolution, with mining and steel production driving economic prosperity. The Ruhr River facilitated the transport of all types of goods, while the puddling process enabled the mass production of steel for the first time. Today, the Ruhr region is once again at the center of a transformation: the new era of energy supply through industrial-scale green hydrogen is being envisioned and directed from Dortmund, at the heart of Europe.

Anchored locally – Expanding internationally
Our company, thyssenkrupp nucera, one of the world’s leading provider of electrolysis technology, is rooted and headquartered here in Dortmund. With our chemical and technical DNA, we have built an excellent foundation for a technology that will play a decisive role in creating a climate-friendly future. Alkaline water electrolysis (AWE) enables the efficient production of the large volumes of green hydrogen needed to meet the immense demand for this CO_2-free energy carrier.

Our expertise in chlor-alkali electrolysis technology, spanning over more than 60 years, is now serving as the foundation for hydrogen production technology designed to drive the transformation of CO_2-intensive industries such as steel, refineries, and chemicals.

nu|house—State-of-the-art design for workplace collaboration
“At our Dortmund location, various disciplines and cultures converge – there’s a tangible sense of progress and high motivation,” says Christoph Noeres, Executive Director Green Hydrogen at thyssenkrupp nucera. “From here, we’re changing the world,” he adds. The company has recently relocated to its new headquarters, precisely tailored to its needs, just a few hundred meters away in Stadtkrone Ost. Known internally as nu|house, the new headquarters features state-of-the-art facilities specifically designed to foster innovation and enhance collaboration with our global teams, customers, and partners worldwide – all aimed at making green hydrogen technologies more affordable and efficient.

The office building is a top-tier property. At the company’s headquarters in Dortmund, more than 1,000 employees within the group will have access to approximately 11,400 m² of office space in a newly designed, vibrant urban district – featuring state-of-the-art design.

We had long outgrown our former office building, and in November, the Dortmund office relocated to a state-of-the-art new building.

This collaborative environment is essential for successfully executing thyssenkrupp nucera’s growth strategy centered on groundbreaking technological solutions for green hydrogen. The new headquarters also meets rigorous sustainability standards, including the KfW Efficiency Building 40 EE and DGNB Gold certification requirements.

Part of the company’s innovative strength lies in the NCAlab, led by engineer Dr. Felix Gabriel. He is responsible for prototyping, research, and development related to the automated assembly of AWE cells.

Like all the other members of the thyssenkrupp nucera team, he is thrilled by the modern, collaboration-focused nu|house design.

Faces of transformation

6 questions for

Dr. Felix Gabriel, Head of Group EMAT (Element Manufacturing, Assembly & Transportation) and Director of the NCAlab

thyssenkrupp nucera: What is the current status of the NCAlab?

Dr. Felix Gabriel: We've successfully set up the robotic cells and infrastructure for automated cell assembly using robots at our assembly lab at the Port of Dortmund. At the NCAlab, we are steadily and systematically driving forward essential research and development.

thyssenkrupp nucera: What is the next step?

Dr. Felix Gabriel: Having completed the construction phase, we are now in the testing phase. After about a year and a half, it feels good to have the goal of automated series production within reach!

thyssenkrupp nucera: Why is the work you and your team do so critical to the success of thyssenkrupp nucera?

Dr. Felix Gabriel: Cells are currently assembled manually by assembly workers and tools, which is adequate for smaller production volumes. However, to meet the high demand for green hydrogen, we need to enable the production of significantly higher quantities with consistent quality and a much shorter cycle time. Automating the assembly of cells, the core component of our electrolysis systems, with the use of robots, enables the series production of water electrolyzers. These electrolyzers enable our customers to produce green hydrogen efficiently.

thyssenkrupp nucera: What is the biggest challenge?

Dr. Felix Gabriel: Until now, the manual assembly of cell elements has relied on human skills – assembling numerous individual parts with high precision and millimeter accuracy. This presents significant challenges for robotics, as these skills must be replicated using sensors and appropriate programming. Still, it is a very exciting learning process.

thyssenkrupp nucera: What are you and your team working on now?

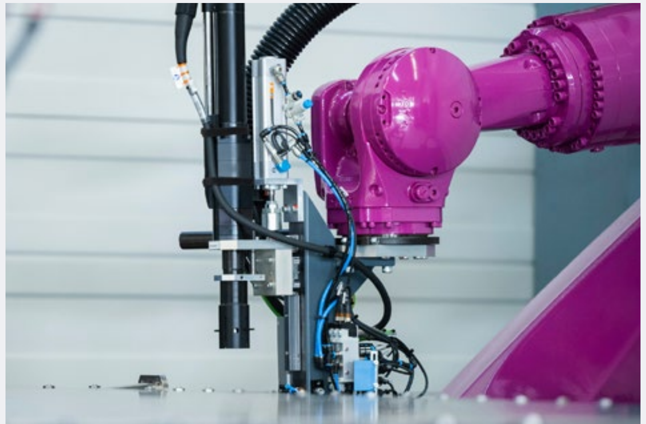
Dr. Felix Gabriel: Tackling the next challenges. We also need to adapt the cell design, which has been developed over decades, to the new conditions in order to fully leverage the advantages of series production. Everything is interconnected, which makes it challenging but also incredibly exciting. We've built the expertise and experience necessary and can use this for future projects.

thyssenkrupp nucera: What has been your personal highlight?

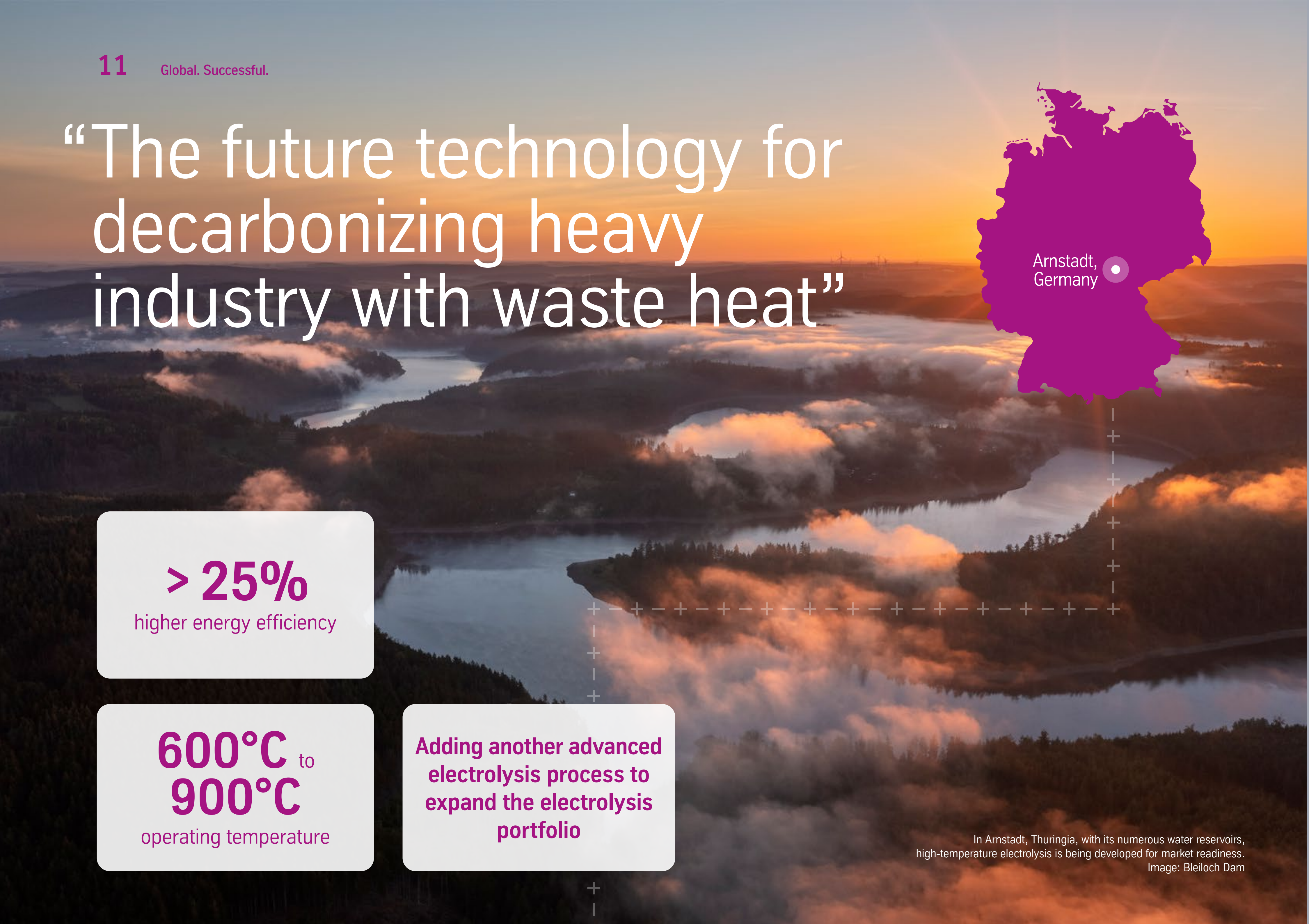
Dr. Felix Gabriel: The creative freedom and trust we are given. Building and managing a development center is by no means something to be taken for granted.

More about the NCAlab See page 56

Robots allow for substantially higher quantities in cell assembly for water electrolyzers, ensuring consistently high quality and considerably shorter cycle times.



“The future technology for decarbonizing heavy industry with waste heat”



> 25%
higher energy efficiency

600°C to **900°C**
operating temperature

Adding another advanced electrolysis process to expand the electrolysis portfolio

In Arnstadt, Thuringia, with its numerous water reservoirs, high-temperature electrolysis is being developed for market readiness.
Image: Bleiloch Dam

thyssenkrupp nucera and Fraunhofer IKTS are collaborating on SOEC technology.

Arnstadt in Thuringia is a charming town with a rich history. It is here that the Fraunhofer Institute for Ceramic Technologies and Systems (Fraunhofer IKTS) and thyssenkrupp nucera are collaborating to write a pioneering new chapter in the history of electrolysis technology for the production of green hydrogen.

This is based on a strategic partnership entered into in March 2024 with Fraunhofer IKTS in Arnstadt. This highly renowned research institute has been conducting extensive research and development in SOEC (Solid Oxide Electrolyzer Cell) technology for over 20 years and has carried out the groundwork for the industrial application of this electrolysis technology. Together, we are now taking the final steps to make this highly efficient technology available to companies to implement their decarbonization strategies.

The high operating temperature allows for 20-30% lower hydrogen production costs compared to other technologies.

Strengthening the hydrogen technology portfolio

"The SOEC technology complements our AWE technology and will significantly enhance our portfolio of solutions for green hydrogen production. This will position us as one of the few providers in the market offering customers a choice between, or even a combination of, two electrolysis technologies. By employing these advanced electrolysis methods, we can solidify our position as an innovation leader in this emerging industry of clean, sustainable energy sources for the future," says Werner Ponikwar, CEO of thyssenkrupp nucera.

Higher efficiency and lower costs

The partnership between thyssenkrupp nucera and Fraunhofer IKTS delivers more efficient and economical solutions for hydrogen production. SOEC technology, operating at higher temperatures, enables greater efficiency in the electrolysis process and reduces energy consumption. This technological progress helps to decrease CO_2 emissions while lowering operating costs for the users of this technology.

Professor Dr. Alexander Michaelis, Director of the Fraunhofer IKTS, adds: "High-temperature electrolysis offers not only greater efficiency in converting electricity to hydrogen but also the significant advantage of co-electrolysis capability. This enables CO_2 to be actively captured from the environment and converted,

> "With SOEC system solutions, we are systematically executing our company's growth strategy. High-temperature electrolysis will allow us to provide our customers with an exceptionally powerful technology that is set to become another strong pillar of the new CO_2-free and climate-friendly energy mix of the future, free from fossil fuels. Leveraging external heat sources significantly boosts the electrical efficiency of electrolysis using SOEC technology."

Dr. Werner Ponikwar,
CEO of thyssenkrupp nucera

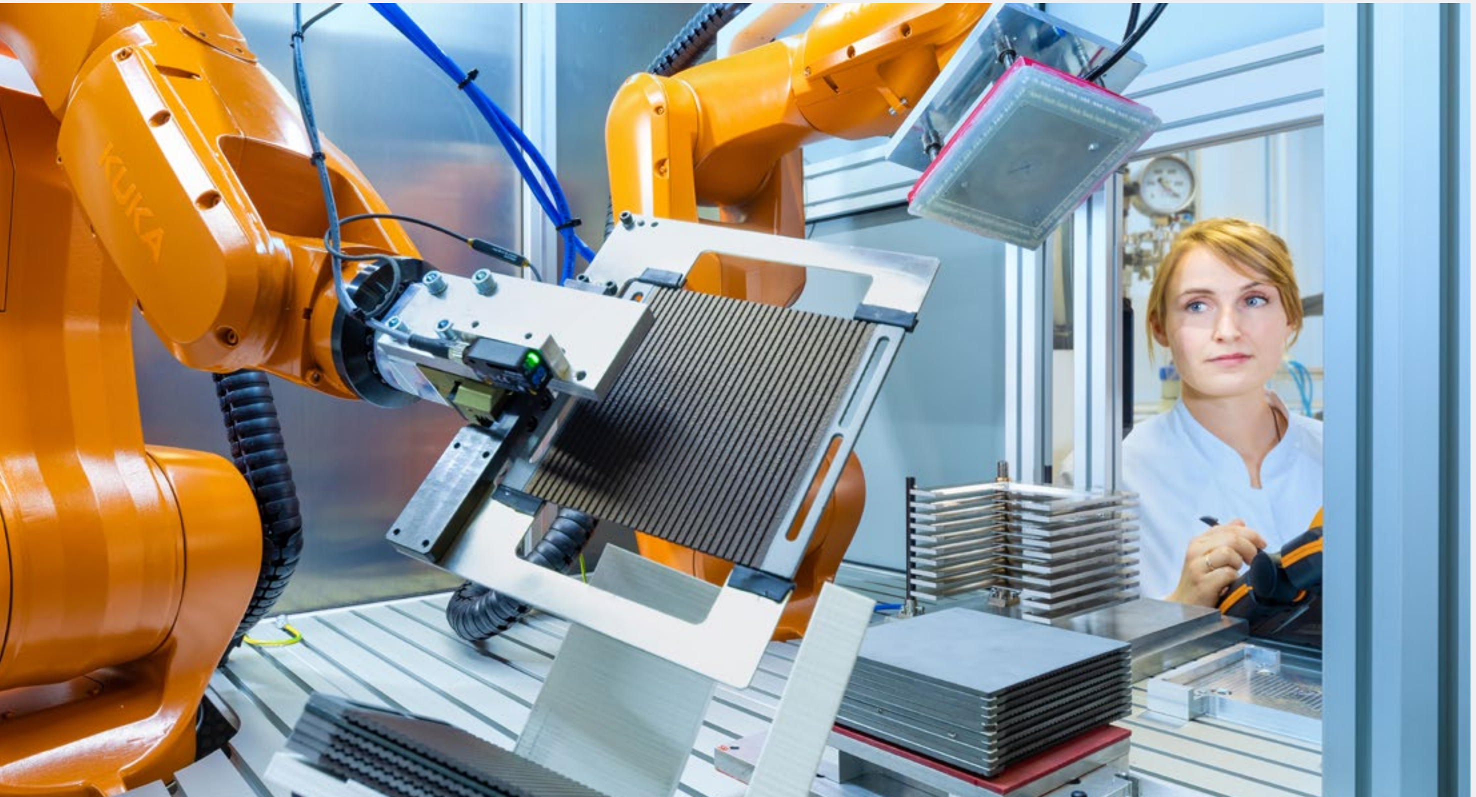
together with green hydrogen, into green syngas and derivatives such as e-fuels, for example, SAF (sustainable aviation fuel). This is a key enabler for the success of the energy transition. By scaling up the production of CFY stacks with their specialized high-temperature alloys, we enable our system partners to commercially access this core component."

Technology transfer of the CFY Stack Technology developed at Fraunhofer IKTS
The strategic partnership includes a license allowing thyssenkrupp nucera to advance, produce, and use CFY stacks (chromium-iron-yttrium) based on Fraunhofer IKTS's SOEC technology. These electrolysis stacks represent the essential core component of high-temperature electrolysis systems.

The SOEC stack technology uses oxygen-ion-conducting ceramic solid electrolytes, which are screen-printed with two electrodes and then joined with chromium-based interconnectors. This chromium-based alloy is specifically designed to withstand very high temperatures.

Industrial companies that generate waste heat during production will be the primary beneficiaries of the high energy efficiency of SOEC technology. Utilizing this waste heat to produce steam significantly reduces electricity consumption. Waste heat is generated, for example, in the production of green steel, ammonia, methanol, fertilizers, and in energy storage processes. Additionally, the high-temperature technology eliminates the need for rare precious metals.

Fully automated assembly of individual components into high-temperature electrolyzers and high-temperature fuel cells



Rapid ramp-up of pilot plant
he production of high-temperature electrolysis stacks with SOE cells – the core elements of SOEC stacks – will begin initially in small quantities. The team is already being assembled. The SOEC pilot plant will commence operation with a production capacity of 8 megawatts of stacks per year. After beginning operations at the pilot plant in Arnstadt, we plan to lay the groundwork for further upscaling.

"For our future SOEC system solutions, we can draw on our decades of experience in the development and upscaling of electrolysis plants, as we have already demonstrated with the successful development of our 20 MW AWE module scalum®," says Ulf Bäumer, Head of the SOEC Project.

This is placing Arnstadt, known as one of the five Thuringian Bach cities thanks to Johann Sebastian Bach's residency there, on its way to becoming a hub for green hydrogen production.

Video: thyssenkrupp nucera and Fraunhofer IKTS on SOEC technology

Faces of transformation

4 questions for

Ulf Bäumer, SOEC Project Director and Head of Service & Digitalization for thyssenkrupp ncera

"When waste heat from production processes is harnessed, high-temperature electrolysis technology can truly show its full power."

thyssenkrupp nucera: Ulf, what makes SOEC technology so special?

Ulf Bäumer: Electrolyzers using SOEC technology operate at high temperatures between 600°C and 900°C to convert steam into hydrogen and oxygen using electricity. This high-temperature operation allows SOECs to achieve higher efficiency compared to low-temperature electrolysis methods such as alkaline water electrolysis (AWE) or polymer electrolyte membrane (PEM) electrolysis. When waste heat from production processes can be utilized, SOEC technology achieves approximately 25% higher energy efficiency, offering significant advantages over AWE or PEM technologies. This is where high-temperature electrolysis technology can truly showcase its full power.

thyssenkrupp nucera: Aren't the high temperatures a drawback since they require more energy?

Ulf Bäumer: On the contrary. They require less energy. The high operating temperature reduces the need for electrical energy by replacing part of it with thermal energy. Additionally, higher temperatures enable better reaction kinetics, which is also an advantage. Solid oxide electrolysis cells (SOECs) are ideal when a baseload of energy is available but are also well-suited for integration with renewable energy sources such as solar and wind power. They operate efficiently even with fluctuating power levels. Integration not only improves the overall efficiency of renewable energy systems but also provides a practical solution for energy storage challenges and supports a sustainable energy ecosystem.

thyssenkrupp nucera: What do you see as the greatest challenges?

Ulf Bäumer: A solid strategy is important to get started, but that alone isn't enough. Another significant challenge is creating supply chains for systems with capacities in the range of several hundred megawatts to gigawatts. For this, we need to build partnerships with numerous suppliers to develop specific solutions. This also needs to be done at a larger scale to unlock cost-saving potential – for example, by building a supply chain, optimizing production, and further advancing the technology. Right now, we are growing our team to position ourselves effectively in these areas. It's a major undertaking, and we're handling multiple priorities, but so far everything is on track.

thyssenkrupp nucera: Your biggest personal highlight …

Ulf Bäumer: … Being part of such an important project. The potential of this technology and its remarkable energy efficiency is truly inspiring. It's also deeply rewarding to leverage my knowledge and experience to help bring this visionary project to life alongside my team.

“The steel industry is at the brink of a major transformation worldwide”

Approx. 700 megawatts
of installed power of the electrolyzer in Boden

≥ 95% reduction
in CO_2 emissions relative to conventional steel production

Production of approx.
2.5 million
tons of green steel p.a. with plans to double this to 5 million tons by 2030

Water is one of the continuous supply sources powered by renewable energy for the production of green hydrogen.

Stegra – a pioneer in green steel production using thyssenkrupp nucera's electrolysis technology

Two strong companies, one shared goal: to significantly reduce CO_2 emissions. Together, they have embarked on a journey to make the steel production process more climate-friendly. Stegra (formerly H2 Green Steel) is committed to driving the shift toward more sustainable steel through the use of hydrogen-based technologies. With its expertise in electrolysis technology for the highly efficient production of green hydrogen, thyssenkrupp nucera is one of the world's leading global technology provider.

This partnership not only marks a significant step toward decarbonization and a carbon-neutral future but also sets a benchmark for the industry, inspiring further advancements in sustainable manufacturing processes.

The global steel industry is embarking on a profound transformation driven by the urgent need to reduce greenhouse gas emissions.

Substantial reduction in the CO_2 footprint
"Our robust proprietary technical know-how, combined with thyssenkrupp nucera's proven, high-performance, and highly efficient electrolysis technology, allows us to transform the difficult-to-reduce process emissions in heavy industry. We are starting with steel in Boden, Sweden, but this is just the beginning," says Maria Persson Gulda, Chief Technology Officer of Stegra.

Steel production has long been a major source of carbon emissions, contributing to climate change. The production of green steel offers an essential opportunity for steel companies to lower their CO_2 footprint. The success of sustainable steel manufacturing depends heavily on the implementation of green hydrogen to replace fossil fuels in the steel production process.

Up to 95% lower CO_2 emissions compared to conventional steel production
The world's first large-scale, fully integrated, and digitized green steel plant is being constructed in Boden, Sweden. Stegra avoids using climate-damaging carbon in its steel production by employing green hydrogen in the direct reduction of iron. Instead of liquid pig iron, this process yields solid iron sponge, which is then refined into crude steel in an electric arc furnace. For this groundbreaking

The scalum® standardized 20 MW electrolysis modules allow electrolysis plants to be built by stringing together the standardized 20 MW scalum® electrolysis modules following a modular "Lego-style" design.

"Stegra is boldly tackling the decarbonization of the steel industry. This pioneering spirit is driving the urgently needed decarbonization of the steel sector forward with determination and at the high speed necessary to combat climate change."

Dr. Werner Ponikwar,
CEO of thyssenkrupp nucera

steel production, Stegra uses CO_2-free hydrogen, produced on-site in Boden in an electrolysis plant powered by a steady supply of electricity from hydropower and wind energy.

Operations are set to begin in 2026. In its initial phase, the plant will produce 2.5 million tons of green steel. By 2030, production is expected to increase to around 5 million tons. Green steel is already in high demand, particularly from the automotive industry, which sees it as a key way to significantly reduce its CO_2 footprint in the supply chain.

Stegra aims to reduce CO_2 emissions by up to 95% compared to conventional blast furnace steel production. This is made possible by thyssenkrupp nucera's alkaline water electrolysis technology for producing green hydrogen. By integrating standardized 20 MW scalum® electrolysis modules, an installed capacity of approximately 700 megawatts can be achieved. With this, thyssenkrupp nucera is building one of Europe's largest water electrolysis plants.

Cost parity through technological advances and economies of scale

The transition to green steel, as seen with Stegra, comes with significant challenges. Among the greatest is the currently higher cost of producing green hydrogen compared to traditional fossil energy sources. Overcoming this economic hurdle to achieve cost parity requires technological advances and economies of scale. The high scalability of our alkaline water electrolysis technology makes it a key technology for decarbonizing the industrial sector. For this reason, in the 2023/2024 fiscal year, we continued to enhance and consolidate our existing technology platforms and intensified the development of our next-generation AWE technology.

Direct reduction process

Iron production without a blast furnace? The direct reduction process (DRI) makes this possible. In this process, iron ore is reduced below its melting point to produce direct reduced iron (Hot Briquetted Iron, "HBI"). This approach is especially advantageous in regions where natural gas or other low-carbon reductants are available, making it a more environmentally friendly alternative to traditional blast furnace processes. The process significantly reduces CO_2 emissions in steel production, as it releases less carbon dioxide and is therefore more climate-friendly.

The direct reduction process also provides greater flexibility in the choice of raw materials, a key advantage when iron ore availability is inconsistent. Additionally, the use of direct reduced iron improves control over the chemical composition of the final product, enabling more consistent quality and easier adaptation to the specific requirements of the steel industry. Due to its advantages, the direct reduction process is being implemented more widely in modern steel mills around the globe, enabling more efficient production while reducing their ecological footprint. This trend has the potential to enhance the industry's competitiveness over the long term and drive the adoption of sustainable manufacturing practices.

Faces of transformation

4 questions for

Federico Cattaneo, Project Manager for thyssenkrupp nucera Italy

thyssenkrupp nucera: Federico, what is so unique for you about this project?

Federico Cattaneo: Stegra is driving decarbonization on a large scale. The company recognizes that decarbonizing heavy industry – responsible for a substantial portion of global CO_2 emissions – is essential to tackling the climate crisis. By using CO_2-free hydrogen for green steel production in its Boden electrolyzer plant, Stegra is setting a new standard. Stegra represents a commitment to excellence, and we are proud that thyssenkrupp nucera can contribute to these ambitious objectives with an electrolyzer plant of about 700 megawatts, making it one of the world's largest electrolyzers.

thyssenkrupp nucera: Many international specialists from different disciplines are working together on this project. How is collaboration managed successfully?

Federico Cattaneo: The steel plant in Boden, built on a greenfield site, requires a large electrolyzer to produce the amount of green hydrogen needed. Everyone has to work hand in hand – regardless of their nationality. This, of course, demands openness and intensive communication efforts because we need to deliver top performance. It's challenging, but it's also enjoyable. Another key to success is the expertise and experience from a wide variety of disciplines.

It's important to remember that this is the first time the steel company is making such a transformational leap. We are pioneers – and we are there to support them in their groundbreaking journey.

thyssenkrupp nucera: What do you find are the greatest challenges?

Federico Cattaneo: A large-scale plant project like this is highly challenging – even with the extensive experience we have gained from completing more than 600 successful projects over the past decades. However, for us as engineers, it is also a very exciting project because this client presents very specific tasks and requirements.

thyssenkrupp nucera: Your biggest personal highlight …

Federico Cattaneo: … Seeing a facility like this come together piece by piece with the standardized scalum® modules. And watching it all come together in a single electrolyzer. This is always incredible and rewarding for me as an engineer. In the end, we're delivering a true masterpiece!

“We’re setting new standards to sustainably transform the chemical industry”

Reduction of more than
70,000
tons
in CO_2/GHG (greenhouse gas) emissions per year (base year 2020)

Reduction of approximately
150
tons
per year in industrial waste emissions

Rainforests, such as the Mata Atlantic Forest in Brazil, naturally capture CO_2 from the atmosphere through the process of photosynthesis.

Proven chlor-alkali technology with a CO_2 reduction boost

Liquid, living, or even quick silver – the silvery-white, liquid heavy metal mercury, with the symbol Hg and atomic number 80, has many names. Known since antiquity, it was used as a remedy from ancient times until the 20th century. However, mercury is also considered a toxic heavy metal. The element's vapors are particularly harmful to the human body. And not only there.

Mercury released into the environment by human activities has far-reaching effects not only on humans but also on entire ecosystems. After long negotiations in Geneva, 140 states have finally signed the first binding agreement to restrict the production and contain the emissions of mercury in the Minamata Convention in 2013. The agreement regulates the production, use, and storage of mercury and the handling of waste containing mercury.

An innovative alternative to the traditional mercury-based process

Mercury also plays a significant role in the production of caustic soda and chlorine using chlor-alkali electrolysis according to the amalgam procedure. However, companies worldwide are increasingly converting their electrolysis plants that work with the amalgam procedure to alternative, mercury-free procedures in order to lower the mercury emissions – and often decide in favor of the membrane procedure from thyssenkrupp nucera.

thyssenkrupp nucera offers an innovative alternative to the traditional mercury-based amalgam process for producing caustic soda and chlorine. The innovative process reduces mercury emissions. In this way, the chlor-alkali plants equipped with the highly efficient BM2.7 technology from thyssenkrupp nucera contribute to improving sustainability.

Highly efficient and environmentally friendly BM2.7 membrane technology

One example of this is a conversion project in Brazil. Unipar is modernizing its chlor-alkali plant at the Cubatão site in Brazil with thyssenkrupp nucera's chlor-alkali technology. The publicly traded chemical company from Brazil and we at thyssenkrupp nucera have been working closely and successfully together for many years. Unipar is already using the BM2.7 technology at other plants in Brazil.

To modernize the plant, the Brazilian chemical company, Unipar, an important player in the chemical and petrochemical sector,

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> With this project, Unipar aims to maintain its competitiveness in the market and evolve in technology to make its operations increasingly efficient and sustainable, ready to meet the demand of the global market. This investment reinforces the company's strategic priority to grow sustainably, as well as being aligned with its purpose of being reliable and generating value in all relationships.”

Dr. Roland Beckmann,
Executive Director CA and Management thyssenkrupp nucera

stands out as one of the leading suppliers to the sanitation and construction industries and produces raw materials for all industries, will replace the existing mercury and diaphragm plants at Cubatão site in Brazil with our electrolyzers featuring the highly efficient and environmentally friendly BM2.7 membrane technology – and will thus be able to meet the requirements of the Minamata Convention and the Brazilian legislation.

70,000 tons fewer CO_2 emissions annually

When the project for technological modernization and unification of production methods is completed, the Cubatão plant will reduce its CO_2/GHG (Greenhouse Gas) emissions by more than 70,000 tons per year (base year 2020). In our BM technology, we have improved the design, coating and membranes, so that operating costs in particular are lower than before.

Upon completion of the project, the Cubatão plant will reduce industrial waste emissions by approximately 150 tons per year, improve occupational hygiene for employees, enhance the plant's operational safety, and optimize processes, logistics, and spare parts supply.

The Unipar site in Cubatão, Brazil

Minamata Convention

The Minamata Convention is an international agreement signed in 2013 with the aim of reducing mercury emissions and releases. It is named after the Japanese city of Minamata, where a severe mercury poisoning incident occurred in the 1950s, known as Minamata disease.

The Minamata Convention regulates the production, use and storage of mercury, as well as the handling of mercury-containing waste. It has been signed by 140 countries and is the first binding agreement to restrict the extraction and curb mercury emissions.

Faces of transformation

5 questions for

Gerhard Henßen, CEO thyssenkrupp nucera Italy

thyssenkrupp nucera: Gerhard, chlor-alkali electrolysis has been at the heart of chemical production for over half a century. What makes our membrane process stand out?

Gerhard Henßen: Our BM technology allows companies to eliminate mercury emissions and enhance energy efficiency. By using selective permeability to separate chloride ions from sodium ions, the technology requires far less electricity for electrolysis than conventional methods. This enables companies to substantially lower their CO_2 footprint, meet sustainability targets, and ensure compliance with regulatory standards.

thyssenkrupp nucera: How far along are you with the plant conversion?

Gerhard Henßen: The work is progressing smoothly. We are set to achieve the milestone of completing the detailed engineering in the current 2024/2025 fiscal year. The modernized plant will be operational by the end of 2025!

thyssenkrupp nucera: Do you expect to see more conversions from the mercury-based amalgam process to our eco-friendly membrane process?

Gerhard Henßen: Yes, that's the expectation. The challenge will vary from country to country and from customer to customer. That's what makes our work as engineers so exciting: exploring different ideas and concepts to find the best solution. In the end, each chlor-alkali plant is unique.

thyssenkrupp nucera: Where is the need for conversion still relatively high from a regional perspective?

Gerhard Henßen: Brazil is already well on its way. In Peru and Argentina, we expect some further conversion projects in the coming years. Furthermore, in North America there are still plants based on asbestos diaphragms to be converted in the near future. Above all, modular solutions are likely to be in demand there. However, companies are likely to become more active in the next few years to upgrade their plants to more environmentally friendly solutions.

thyssenkrupp nucera: Your biggest personal highlight...

Gerhard Henßen: ... Making it possible for our customers to take action for the environment and reduce their CO_2 footprint with our chlor-alkali technology, helping us to contribute to future generations.

“We are excited to support the development of a hydrogen hub in Europe.”

60,000 kilograms of green hydrogen daily

200 MW of installed capacity

350 KW of electricity from renewable energy from the offshore wind farm

Shell's HOLLAND HYDROGEN I is powered by electricity generated from renewable wind energy supplied by the Hollandse Kust (Noord) offshore wind farm.

Shell is driving green innovation right along the North Sea in Rotterdam

At the Port of Rotterdam (The Netherlands), Europe's largest port, Shell and thyssenkrupp nucera have jointly initiated a revolutionary project: HOLLAND HYDROGEN I. This is one of the most prominent and sizable efforts to advance industrial-scale green hydrogen production in Europe today.

The centerpiece of the HOLLAND HYDROGEN I facility, operated by one of the world's leading energy companies, is a hall the size of a football field. At its heart lies the electrolyzer from thyssenkrupp nucera. The water electrolysis plant boasts an installed capacity of 200 megawatts.

200 MW hydrogen plant for Shell at the Port of Rotterdam
Ideally situated near the North Sea, this facility is powered by renewable electricity from Shell's Hollandse Kust (Noord) offshore wind farm. This ensures the energy carrier is green and CO_2-free. The green hydrogen produced at Shell's facility in the Port of Rotterdam is destined for industrial use and in the transportation sector. A 40-kilometer pipeline connects the plant to Shell's Energy and Chemicals Park Rotterdam, transporting the CO_2-free energy carrier efficiently.

A highly challenging engineering task for the engineers at Shell and thyssenkrupp nucera when they began working on the project. Up to 45 engineers from thyssenkrupp nucera contributed their knowledge and expertise to the effort.

An ambitious engineering project
The facility for green hydrogen production also reinforces the Port of Rotterdam's status as a leading hub for innovation in sustainable energy. Today, Rotterdam is one of the most important ports for energy imports, with excellent infrastructure to support Western European industry.

> "With HOLLAND HYDROGEN I, we have set a benchmark. Our standardized module enables customers to scale up to the required performance quickly and effortlessly. The technology is designed to help customers decarbonize and begin their journey into a sustainable future."
>
> **Dr. Christoph Noeres,**
> Executive Director Green Hydrogen for thyssenkrupp nucera

Simulation of Shell's facility.

Click here for more information about HOLLAND HYDROGEN I

Faces of transformation

4 questions for

Ismail Polat, Project Director of thyssenkrupp nucera HOLLAND HYDROGEN I

thyssenkrupp nucera: Ismail, after managing numerous projects worldwide, what makes Shell's facility at the Port of Rotterdam so special?

Ismail Polat: HOLLAND HYDROGEN I is currently one of the largest hydrogen projects in Europe, which makes it truly unique. Situated directly on a dune by the North Sea in a very sandy area, it's also in a very interesting location. The ground on which the electrolyzer is built is fascinating for an engineer like me. Another aspect is the logistics: we deliver the modules from Spain, where they are manufactured. An offshore wind farm is directly linked to the facility, supplying green electricity. This link necessitates flexible ramp-up and wind-down operations – a highly sophisticated procedure. The green hydrogen produced by the water electrolysis plant we supply is transported directly to Shell's refinery via pipeline or truck. This project truly integrates the entire infrastructure.

thyssenkrupp nucera: And what do you see as the greatest challenge?

Ismail Polat: Actually, there are several challenges. One is the enormous time pressure on the teams. We need to achieve operational readiness at the facility in a very short amount of time. To do this, we need to coordinate and manage a number of partners and suppliers, as every component must meet the customer's quality requirements and be delivered precisely on schedule.

This coordination within the supply chain has also had to function during the Ukraine war. For a large-scale project like this, this degree of coordination requires substantial flexibility from all parties involved.

thyssenkrupp nucera: What impressed the customer the most?

Ismail Polat: The fact that the plant can be scaled up with minimal effort to reach the required capacity.

thyssenkrupp nucera: Your biggest personal highlight …

Ismail Polat: … Being able to bring my knowledge and experience to this pioneering project for a better climate through green hydrogen. This plant is also one of the first of its scale globally, which will always be memorable for me!

Rotterdam also plays a central role in the European Hydrogen Backbone (EHB) initiative, a project aimed at establishing an effective European hydrogen infrastructure based on existing and new pipelines. This initiative promotes cross-border collaboration and ensures the security of supply and demand. This enables the port to continue to play a key role in the import and distribution of green energy throughout Europe, including to the Ruhr Area with its energy-intensive heavy industry.

A partnership for the energy transition

The partnership combines decades of experience in large-scale projects from one of the world's leading energy companies with thyssenkrupp nucera's technological expertise and many years of experience in major plant projects. HOLLAND HYDROGEN I represents Shell's vision of using green hydrogen on a massive scale to drastically reduce CO_2 emissions, paving the way for a more sustainable future. Our electrolyzer, currently one of the largest in the world, is part of Shell's efforts to drive the energy transition forward in Europe. HOLLAND HYDROGEN I embodies the collaboration between Shell and thyssenkrupp nucera to promote a sustainable future.

Shell video on the HOLLAND HYDROGEN I project

“We have to think differently and in new ways – and also act differently and in new ways accordinglyn”

Katharina Immoor, Head of Communications, Public Affairs & ESG, in conversation with Jorgo Chatzimarkakis, CEO of Hydrogen Europe, and Dr. Werner Ponikwar, CEO of thyssenkrupp nucera, on the situation in the global hydrogen market.

Immoor: There is a great deal of uncertainty in the hydrogen market at the end of 2024. Final investment decisions are being made less frequently than expected. How do you assess the current market development?

Chatzimarkakis: The hydrogen market is currently shaped by two extreme sentiments: “ecstatic highs and crushing lows,” to loosely borrow a phrase from Johann Wolfgang von Goethe. Interestingly, there is actually a difference between Europe and the rest of the world in terms of the causes. The Europeans have regulated themselves into a crisis because, from an ethical point of view, they want to be the best. But globally, this is handled differently. Unfortunately, we are therefore only successful in imposing a great many rules on ourselves, which stifles our own progress. That has happened, unfortunately.

Immoor: Will the newly elected EU Commission be able to change this?

Chatzimarkakis: The messages from Commission President Ursula von der Leyen are clearly along the lines of: We have understood, we want to simplify, we want clean tech. The Industrial Clean Deal must come from the EU – and the nice thing about it is that hydrogen has already played a major role in the European Green Deal. So the prospects are good that we will also succeed in the follow-up concept, the Industrial Clean Deal. Then we can completely overcome the low mood in the hydrogen market. It's finally time to put our words into action and follow the example set by countries like Saudi Arabia, India, and the United States.

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It's finally time to put our words into action and follow the example set by countries like Saudi Arabia, India, and the United States.”

Jorgo Chatzimarkakis

Immoor: Let's move on from the political to the industrial level – electrolyzers. What is the situation there?

Ponikwar: In contrast to the past few years, we now have far too much black-and-white thinking. We can justifiably say that we have really achieved a lot. Over the past years, more than 25 gigawatts of electrolysis capacity have been created worldwide. This is a very strong performance that we should also appreciate. And we see that project announcements continue to increase worldwide. In the last six months alone, announcements for projects with around 70 gigawatts of capacity have been added around the world by November 2024. Of course, realizing this is a very big challenge. But these announcements demonstrate the unwavering conviction that we absolutely need green hydrogen as an essential component of a zero-emission energy system. And now it's time to implement the plans.

Immoor: Does the regulatory framework promote or hinder this?

Ponikwar: Unfortunately, it is true that we in Europe are overly constrained by the regulatory framework. That said, there are other factors slowing the ramp-up of the hydrogen industry. First, we are seeing the usual progression from PowerPoint presentations to actual projects – in other words, from theory to reality. In this phase, it is often found that ideas such as profitability expectations cannot be easily realized. Now we have to survive the reality check – and unfortunately some will not make it. Secondly, the global framework conditions are very challenging …

Immoor: … the days of cheap money are over …

Ponikwar: … yes, instead of that we have to deal with high inflation rates and high interest rates. Therefore, of course, we also have more difficult investment conditions in many regions of the world. Thirdly, although there are sufficiently high subsidies to ultimately support the ramp-up of the hydrogen industry, in some key countries, there is a great deal of uncertainty when it comes to the conditions and rules under which subsidies can be obtained.

Jorgo Chatzimarkakis

Jorgo Chatzimarkakis is the CEO of the European hydrogen association Hydrogen Europe. The organization represents the interests of the hydrogen industry and its stakeholders and promotes hydrogen as a pioneer for an emission-free society. With almost 500 members, including over 25 EU regions and more than 30 national associations, Hydrogen Europe covers the entire value chain of the European hydrogen ecosystem. Georgios “Jorgo” Chatzimarkakis is a German-Greek politician and former Member of the European Parliament for the FDP in the ALDE Group. From 2014 to 2015, he was an honorary ambassador of the Greek government. He holds both German and Greek citizenship.

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European Green Deal

The **European Green Deal** is a concept presented by the European Commission under Ursula von der Leyen on December 11, 2019, with the goal of reducing net European Union emissions of greenhouse gases to zero by 2050, making it the first “continent” to become climate neutral.

https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

Renewable Energy Directive

The **Renewable Energy Directive (RED)** refers to several directives of the European Union. Since 2019, they have formed the basis for European renewable energy policy. The guidelines are intended to effectively compensate for the financial and structural support and advantages for conventional energies over decades. The first version was published in 2009 as Directive 2009/28/EC (RED I), the second version in 2018 as Directive (EU) 2018/2001 (RED II) and the third version in 2023 as Directive (EU) 2023/2413 (RED III).

RED I: RED I: The Renewable Energy Directive (RED I) set out the mandatory targets for the share of renewable energies in the total energy consumed by each EU member state by 2020. The aim was to increase the share of renewable energies in total energy consumption to at least 20% across the EU by 2020.

RED II: RED II: The new Renewable Energy Directive RED II was announced on December 21, 2018, came into force on December 24, 2018, and should be transposed into national law by June 30, 2021.

RED III: RED III: The EU adopted the revision of the Renewable Energy Directive, known as RED III (Renewable Energy Directive III), in 2023. The revision significantly increased the cross-sectoral target for the use of renewable energies in the EU to 42.5% by 2030.

https://eur-lex.europa.eu/EN/legal-content/summary/renewable-energy.html

Immoor: Has the Inflation Reduction Act (IRA) in the US delivered what was promised?

Ponikwar: When the IRA was launched, the euphoria was very great. It has given way to disillusionment, because two years later, we still have no fixed set of rules defining when I will receive which funding. One example is Section 45V, the Clean Hydrogen Production Tax Credit (PTC). It has still not been finalized. That's why investors are waiting to make decisions until issues like this have been resolved.

Immoor: What is the situation in Europe?

Ponikwar: We have a similar situation there. Ultimately, we have created a very extensive and, in some cases, over-regulated system. With RED I, II and III, we are now in the phase in which these directives are to be implemented in applicable law at the national level. In doing so, we are realizing that this process is, firstly, very complicated and, secondly, once again raises many questions because many issues are still open in principle. Thirdly, the rules we have created are making projects unprofitable because we are demanding too much from companies too early.

Immoor: Can you give an example?

Ponikwar: According to the EU's current thinking, electrolyzers may only run when renewable energies are also being produced. This means that the operating times of electrolyzers are very much restricted. It definitely makes hydrogen more expensive. Then there is the complexity that arises from the fact that the development of renewable energies is planned more or less in parallel with the development of the green hydrogen infrastructure. The principle of additionality for hydrogen requires electrolyzers to be connected to newly built facilities that generate electricity from renewable sources to produce hydrogen. This introduces an almost unmanageable level of complexity. So I think we would all be well advised to think again about whether this is the right approach or whether we would be better advised to support the growth of the young green plant of hydrogen during the transition phase.

> “When the IRA was launched, the euphoria was very great. It has given way to disillusionment.”
>
> **Dr. Werner Ponikwar**

Immoor: What specifically do we need to ensure that developments in Europe move in the right direction?

Chatzimarkakis: I fully support Werner's idea of suspending the over-complex regulatory system for the time being. That would send a very important signal! The top priority here is to ensure that the current definition of green hydrogen is formulated in such a way that the market can work with it. The so-called revision clause must be introduced quickly. Then there is the issue of additionality, which needs to be changed. The third is the accumulation of funding. And, last but not least, the abolition of the bidding zones, which are a total bottleneck, especially for imports. This is a total showstopper for German electrolyzer manufacturers, who also sell their plants to India, Saudi Arabia and other countries.

Immoor: What about funding?

Chatzimarkakis: It is the second central topic. A lot of private funds are waiting for a good investment if the conditions are right. Much has been done for certain technologies but in such a fragmented manner that it can hardly be called a commitment. Two calls for proposals from the hydrogen bank are not enough if they are to hold their own against international competition from the Chinese or Americans.

Immoor: Speaking of the USA, what will change in the era of President Donald Trump?

Chatzimarkakis: The American funding system is not likely to change. Yes, the saying "Drill, Baby, Drill!" has once again become the battle cry of the US energy industry since Donald Trump's victory in the presidential election. The Republicans want to see a renaissance of oil, gas and coal. But they are also very active in renewable energies. We need this pragmatism from the Americans at the EU Commission when it comes to funding as well. That is why we need a fixed sum for hydrogen funding in the EU's seven-year budget, the so-called "Multiannual Financial Framework MFF". We have now reached the point where a new agency needs to be created to coordinate the necessary infrastructure measures in the EU in order to be successful.

> "That is why we need a fixed sum for hydrogen funding in the EU's seven-year budget, the so-called 'Multiannual Financial Framework MFF'."
>
> **Jorgo Chatzimarkakis**

Immoor: Don't we already have excessive bureaucracy?

Chatzimarkakis: Definitely not. Take the example of hydrogen pipeline construction. Scandinavian countries are refusing to build pipelines to Germany because they have different preferences for the type of hydrogen – blue or green – or even differences in the definition itself. So there is a lack of coordination in the development of the European hydrogen infrastructure. The consequence? A green steel plant in Germany, for instance, might not receive the hydrogen it requires from the originally planned pipeline. That is why we need stronger coordination, and that is what this agency could provide. Ultimately, it does not create more bureaucracy but leads through the jungle of different regulatory systems and brings structure and order to the wild and untidy toolbox of the already established funding arithmetic.

Immoor: Are we taking sufficient account of the necessary individual needs in the various countries when it comes to regulation?

Ponikwar: We have to think differently and in new ways – and also act differently and in new ways. It doesn't help us if we have a hydrogen core network in Germany, but in the end, we can't get any feed-in from other countries, so to speak. We urgently need to build infrastructure to cost-effectively bring hydrogen to where the customers are – and that's not necessarily always where it's best to produce. That's because we can produce best where we can use renewable energies as cheaply as possible and don't necessarily have the largest customers. I am convinced that if we act on this insight, hydrogen prices will be significantly lower.

Immoor: What is Europe's role in relation to China and the Gulf States?

Chatzimarkakis: On the one hand, we often condemn autocracies, but at the same time, we are the largest buyers of their fossil products. Europeans were the first to have their companies in China. At first, we used China as a workbench and later also as a sales market. And suddenly a real competitor is emerging for us.

Dr. Werner Ponikwar

Dr. Ponikwar began his career as Manager Controlling at Degussa AG. He has worked in various positions and locations, including Finance and Controlling, Project Management, Business Development and Marketing. In 2006, he joined Arthur D. Little as a strategy consultant. In 2008, he joined Linde AG, where he held various management positions in engineering and industrial gases. From 2017 to 2021, Dr. Ponikwar was CEO/Managing Director of Linde Hydrogen Fuel Tech GmbH. Since 2022 he has been the CEO of thyssenkrupp nucera. Dr. Ponikwar studied at Ludwig Maximilian University in Munich and holds a Ph.D. in chemistry.

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Green Deal Industrial Plan

The **Green Deal Industrial Plan** was developed in response to subsidies for climate-friendly technologies approved by the United States (in the Inflation Reduction Act, or IRA for short) and the People's Republic of China. On February 1, 2023, the EU Commission presented a draft of an industrial plan for the Green Deal (Green Deal Industrial Plan, including the Net-Zero Industry Act). The aim of the "Net Zero Industrial Act" is to enable targeted funding of clean industries and technologies in the EU. Specifically, energy transition technologies and so-called "strategic cleantech technologies" are to be promoted and brought to market maturity with the aim of covering at least 40% of Europe's energy needs by 2030.

We should abandon our hypocrisy and instead ask ourselves what our interest is. These are sales markets for our electrolyzers and clean technologies. First and foremost, we need to become resilient, not by unilaterally and unequivocally depending on just one power, but by distributing supplies among several countries and engaging with them as equals.

Immoor: What about the grid structure?

Chatzimarkakis: Hardly any other region in the world has as many electricity and gas grids as we do in Europe – especially in Germany. To drive the renewable energy revolution or the clean industrial revolution, we have to link these two grids. We are in a unique position here. Furthermore, we also have a better understanding of the necessary processes than others. And we can export the necessary understanding and standards of the processes – and become, so to speak, the control room of a global revolution that brings the networks together. This is extremely exciting.

Immoor: So, what is the next step?

Chatzimarkakis: This may come as a surprise, because we Europeans have to be taken seriously worldwide. To do that, we have to take action. We have to lead the way with a core network. We are in the control room of the global energy transition and should exercise this role pragmatically. We should finally make our ideas a reality. To do this, we need to present our ideas, take the lead, and not dwell on the negative half of Goethe's quote, but instead, reclaim the enthusiasm and joy of striving for great heights. This holds true regardless of election outcomes.

> “Europe has an enormous technological treasure trove when it comes to green value chains.”
>
> **Dr. Werner Ponikwar**

Immoor: Werner, how do you see this from the perspective of a global company?

Ponikwar: Europe has an enormous technological treasure trove when it comes to green value chains. Europe can be described as the technological home of electrolyzers. This is a competitive advantage in the global race for the energy transition. We should play this trump card consistently and without hesitation. I believe that we basically have to look to the future more positively, even in the face of what we all have to realize. The global south will always have an advantage over the global north when it comes to renewable energies. Conversely, the global north is typically the one with the greatest hunger for energy and therefore has to get energy from somewhere, so to speak. We will all have to face this universal rule.

Immoor: What does this mean for electrolyzers?

Ponikwar: They will most likely be more common in the southern hemisphere than in the global north. However, this also means that the global north will have to diversify much more when it comes to guaranteeing imports of green energy. Consequently, to meet the energy needs of the northern hemisphere, we have to look at all the countries that can ultimately meet those needs. This includes less democratic and perhaps even more autocratic systems.

Immoor: Where will we be in a year?

Chatzimarkakis: I would like to take up Werner's idea. We have to think in new and different ways – and act accordingly. So, we should think further about our commitments to climate targets. How can we use technology, for example, to fight hunger? With green hydrogen, we can produce fertilizers with low CO_2 emissions in Europe – and thus contribute to solving one of the most pressing problems facing humanity. That is why I am calling for climate targets and clean technologies such as electrolysis for the production of green hydrogen to be linked to specific activities of a global hydrogen program that is yet to be established. I would like to be able to present this program in a year's time.

Ponikwar: The industry has fulfilled its obligation to build capacity in Europe to a large extent. In a year's time, we may already be talking about the next obligation to create capacity in order to achieve our climate targets and the associated decarbonization goals. Furthermore, we have to start thinking about energy storage along with energy generation. This has been neglected far too much in recent years. If we develop a new wind farm, then we also have to think about how to store the wind energy. Such forward thinking will also lead to renewable energies becoming more cost-effective.

"The ramp-up is in full swing."

Dr. Werner Ponikwar
CEO

Ladies and Gentlemen,

The hydrogen industry experienced a wave of optimism and momentum in the 2023/2024 fiscal year. The ramp-up of the hydrogen sector has begun – also at thyssenkrupp nucera. We are rapidly building our first alkaline water electrolysis plants for green hydrogen production on an industrial scale worldwide. Step by step, thyssenkrupp nucera electrolyzers are set to start producing CO_2-free hydrogen globally, as scheduled. The delivery and installation of our scalum® modules are also advancing at full speed.

A prime example is the construction of the water electrolyzer plant in Neom, Saudi Arabia. As one of the world's first gigawatt-scale electrolyzer plants, we are driving its development forward on schedule. The 110 standardized 20-MW scalum® modules will deliver a total capacity of 2.2 gigawatts for green hydrogen production. The shipment of the first eight modules to the customer commenced in February 2024.

By the end of September, over 50 modules, representing more than 1 gigawatts of capacity, had been delivered to Neom, with more than half already installed. An on-site assembly facility for constructing electrolyzer cells has also been commissioned. This was achieved through a rapid and cost-efficient modular design concept for large-scale plants, enabling assembly and interconnection using a Lego-like approach.

Construction of plants based on the Lego principle

Work at Stegra (formerly known as H2 Green Steel) is proceeding on schedule. During the reporting year, we received the Full Notice to Proceed. The Swedish company is constructing Europe's first large-scale green steel plant, set to become one of the largest integrated facilities for green steel in Europe. Stegra is utilizing our water electrolyzers, with a total capacity exceeding 700 megawatts.

Our scalum® modules are set to produce 2.5 million tons of green steel annually. Once fully scaled, this output is expected to reach 5 million tons by 2030. By using CO_2-free hydrogen in steel production, carbon emissions can be reduced by up to 95% – equivalent to approximately 3.5 million tons of CO_2 in the first expansion phase alone. At thyssenkrupp nucera, we are proud to support our customer in making such a meaningful contribution to combating climate change.

Now let's turn to Moeve (formerly known as Cepsa) and another highly ambitious hydrogen project in Europe. The Spanish energy company is spearheading the development of the Andalusian Green Hydrogen Valley, part of a broader ecosystem of European alliances. This initiative is set to become Europe's largest green hydrogen hub. thyssenkrupp nucera and Moeve have signed an agreement to reserve production capacity for an electrolyzer with a capacity of 300 megawatts. In its initial phase, the water electrolysis plant, located in the Cepsa Energy Park in La Rábida, Palos de la Frontera (Huelva), is expected to produce 47,000 tons of green hydrogen annually.

Australian project developer ABEL Energy has also selected thyssenkrupp nucera for its 260 MW project in Australia. Specializing in green hydrogen and green methanol projects, the company seeks to reduce fossil carbon emissions in the maritime sector.

Our customers value not only our decades of experience in development and construction but also our reliable, safe, and highly efficient technology, exemplified by the standardized 20 MW scalum® module for production scaling. During the reporting year, our water electrolysis technology received the “Hydrogen Impact Investment Award” in the category “Impact Technology of the Year 2024” in recognition of its substantial impact on advancing hydrogen production and utilization.

To be more specific, by the close of the 2023/2024 fiscal year, we had produced approximately 1.5 gigawatts of installed capacity, secured binding contracts for more than 3 gigawatts of installed capacity, and signed reservation agreements for production capacities totaling 1.0 gigawatt. This achievement stands out as remarkable, particularly in light of the noticeably cooling “hydrogen boom” sentiment.

Despite successes and the initial sense of optimism surrounding green hydrogen, it has become clear that, after the initial euphoria, a certain realism about the pace of growth has emerged. We are witnessing the emergence of a highly complex international market driven by new technologies that integrate previously separate energy consumption sectors – electricity, heat, transportation, and industry (a process known as sector coupling). The pace is rapid, as are the challenges, and such an ambitious endeavor inevitably comes with friction. Other industries have taken decades to achieve market volumes that hydrogen is projected to reach within just a few years.

Regulation and subsidies as hindering factors

It is therefore hardly surprising that market participants’ expectations were overly optimistic early on due to a lack of experience and, in some cases, still are today. This was particularly evident during the reporting year in relation to final investment decisions (FID). Investors often needed more time and a higher degree of certainty than originally expected before finalizing their decisions on hydrogen projects. This delay was partly due to deteriorating financing conditions, including high interest rates and inflation, as well as price instability and, in some cases, insufficient customer and distribution infrastructures. Additionally, a lack of regulatory clarity for green hydrogen and uncertainty regarding subsidies posed significant challenges for some investments.

> **“Uncertainty surrounding regulation and subsidies is undermining investment decisions.”**

The United States took a bold, strategic step in introducing the Inflation Reduction Act (IRA) in an effort to accelerate the hydrogen industry’s ramp-up quickly and efficiently. More than two years later, however, the specifics of the subsidy rules remain unclear. Meanwhile, progress on the national implementation of EU-wide instruments, such as the RED III regulation, is advancing slowly within the EU.

Uncertainty surrounding regulation and subsidies continues to undermine investment decisions. We now need these temporary hindrances to be swiftly eliminated, as they have significantly delayed final investment decisions and, consequently, the ramp-up of the hydrogen industry in both the US and the EU.

Technology partner for pioneering projects

Ladies and gentlemen, thyssenkrupp nucera is one of the global leaders in chlor-alkali electrolysis technology. Over the past fiscal year, we have consistently leveraged emerging opportunities in this field and established ourselves as a partner in groundbreaking projects. thyssenkrupp nucera is the technology supplier for one of the world’s largest chlor-alkali plants. In the United Arab Emirates, we signed an agreement with TA’ZIZ for a basic engineering and design package for the chlor-alkali plant at the chemical and industrial hub in Al Ruwais Industrial City, Abu Dhabi.

We have also capitalized on the trend towards more environmentally friendly and safer solutions for chlorine and its derivatives to secure new contracts. CAPE IGARASSU, managed by Chlorum Solutions, is transitioning its chlor-alkali plant in Igarassu, part of Brazil’s Recife metropolitan region, from mercury-based electrodes to our state-of-the-art BM2.7 membrane electrolysis technology (bipolar membrane).

Unipar – South America’s leading producer of chlorine, caustic soda, and PVC – is also modernizing its chlor-alkali plant in Brazil using our BM2.7 technology. Unipar is replacing the existing mercury and membrane systems at its largest facility in Brazil. By implementing thyssenkrupp nucera’s environmentally friendly membrane technology, Unipar will save approximately 70,000 tons of CO_2 per year, decrease solid waste production, and achieve substantial energy savings.

Ladies and gentlemen, we can take great pride in these achievements. They would not have been possible without the knowledge and expertise of our teams. On behalf of the entire Management Board, I would like to thank all our colleagues. Well done!

SOEC – Investing in future-oriented technology

To further strengthen our position in the international electrolyzer technology market, we made substantial investments in technology during the reporting year. A pivotal step was enhancing our hydrogen technology portfolio through a strategic partnership with Fraunhofer IKTS in the future-oriented SOEC (solid oxide electrolyzer cell) technology. With Fraunhofer Institute's highly innovative high-temperature electrolysis, thyssenkrupp nucera is strengthening its position in the electrolyzer market of the future.

> "With the Fraunhofer Institute's highly innovative high-temperature electrolysis, thyssenkrupp nucera is strengthening its position in the electrolyzer market of the future."

Working together with this renowned research institute, we aim to finalize the development of high-temperature electrolysis for industrial application and ultimately establish a 300-MW production facility for green hydrogen. SOEC technology delivers exceptionally high energy efficiency, making it particularly appealing to industries with industrial waste heat, such as the steel industry.

To support the serial production of electrolyzer cells for our proven water electrolysis technology – the core of the electrolyzer – we established an assembly lab (NCALab) in Dortmund during the 2023/2024 fiscal year. This lab allows us to automate the assembly of electrolyzer cells from individual components using robotic systems. Serial production enhances quality assurance, boosts productivity, and achieves significant cost savings.

We are also progressing our organizational and operational expansion in alignment with market developments, with a clear focus on profitability and liquidity. This approach reflects our confidence in the sustainability of the long-term growth trend in the green hydrogen market and our ability to successfully harness it for our company. We are therefore implementing the necessary measures in both research and development and across our entire organization.

To further solidify our market position in the core US market, we have reinforced our local management by appointing Sachin Nijhawan as CEO and Jürgen Grasinger as COO of thyssenkrupp nucera USA. The knowledge, expertise, and innovative capacity of our thyssenkrupp nucera team provide the robust foundation needed to successfully execute our growth strategy.

We also intensified our commitment to the three pillars of ESG – Environmental, Social, and Governance – both internally and externally during the reporting year. Internally, we refined our strategy and set global medium- and long-term targets, including achieving net-zero greenhouse gas emissions across our entire value chain by 2050. For the first time, we are publishing a dedicated sustainability report following the Global Reporting Initiative standards. This represents a significant milestone for us, providing a transparent and detailed account of our status and progress in sustainability.

Maximizing opportunities in the growth market

As you can see, we achieved significant milestones in advancing our growth strategy during the 2023/2024 fiscal year. We have continued the organizational ramp-up and significantly increased the number of our employees worldwide.

To provide our employees with the collaborative environment needed to realize our growth strategy, we relocated within Dortmund to our new|house in November 2024. This modern office building offers across approximately 11,000 m² of very modern office space, designed with sustainability in mind to meet the standards for KfW Efficiency Building 40 and DGNB Gold certifications.

Order intake slightly exceeded the previous year's level, while sales showed significant growth, primarily driven by project execution in the alkaline water electrolysis segment. As anticipated, higher start-up costs caused a temporary and notable decline in EBIT (earnings before interest and taxes). However, these investments in our company's future are positioning us to systematically scale our business and sustainably enhance our long-term competitiveness and profitability.

The stable cash flow generated by our chlor-alkali business, along with our flexible asset-light business model and strong order backlog, equips us to navigate market fluctuations and confidently manage a period of temporarily slower growth. These strengths also underpin the successful execution of our growth strategy.

Ladies and gentlemen, backed by our robust and successful business model, exceptional technologies, and strong execution capabilities, we at thyssenkrupp nucera will continue to fully leverage our opportunities in the growing green hydrogen market. With our solid balance sheet, we can drive further growth along our strategic priorities consistently and independently. We will remain firm on our growth trajectory.

Dr. Werner Ponikwar
CEO

With expertise and innovative strength

The management of thyssenkrupp nucera

Dr. Werner Ponikwar CEO

- Communications/ESG (Environmental, Social, Governance) & Governmental Affairs
- Strategy & M&A (Mergers & Acquisitions)
- Legal & Compliance/Board Office
- Internal Audit
- Human Resources & HSE (Health, Social, Environment)
- Business Development / Sales
- Engineering
- Modules and Cell Production

Dr. Arno Pfannschmidt CFO

- Controlling, Accounting and Risk Management
- Finance
- IT
- Investor Relations (IR)
- Commercial Operations / Tax (Tax & Insurance)
- Project Risk Control (PRC) & Quality Management (QM)
- Procurement and Project Execution

Fulvio Federico CTO

- Innovation Center
- IP Management
- Technology Service
- Product Management

Development of sustainability at thyssenkrupp nucera

Katharina Immoor
Senior Director Communications, ESG, and Public Affairs

For the first time, thyssenkrupp nucera is sharing a dedicated report with its stakeholders on the company's sustainability initiatives. In an interview, Katharina Immoor, Senior Director of Communications, ESG, and Public Affairs, discusses key milestones, concrete goals, and the next steps.

thyssenkrupp nucera: What progress has thyssenkrupp nucera made in sustainability over the past reporting year? Where do we stand today?

Katharina Immoor: We have actively strengthened our commitment to the three pillars of ESG – Environmental, Social, and Governance – while intensifying our efforts both internally and externally. Internally, we have refined our strategy and set medium- and long-term global goals, including achieving net zero greenhouse gas emissions across our entire value chain by 2050. This means achieving a 100% improvement in absolute Scope 1 and Scope 2 emissions by 2030 and Scope 3 emissions by 2050.

We have also worked extensively to embed ESG in our company. This includes expanding our Sustainability team and continuously enhancing the knowledge of our colleagues worldwide on the critical topic of sustainability.

Essential is that we have established the necessary structures for processes and reporting. Sustainability has become a central criterion for managing our company, shaping both our decisions and governance. Our Management Board actively integrates sustainability into its approach. The topic is firmly anchored in the Supervisory Board through our Supervisory Board member Franca Ruhwedel, ensuring it remains highly visible.

thyssenkrupp nucera: And from an outside perspective?

Katharina Immoor: The first publication of a dedicated sustainability report based on the Global Reporting Initiative standards marks an important milestone for us. It enables us to fully and transparently present our status and progress in sustainability.

thyssenkrupp nucera: How do you define Scope 1, 2, and 3?

Katharina Immoor: Scope 1 refers to greenhouse gas emissions from sources directly controlled by thyssenkrupp nucera, such as emissions from on-site vehicles. Scope 2 pertains to indirect greenhouse gas emissions, such as those resulting from the purchase of electricity for company facilities. Scope 3 encompasses indirect emissions across the entire value chain, such as those from the production and transportation of materials and finished goods.

thyssenkrupp nucera: What were the greatest challenges in preparing the report?

Katharina Immoor: We first needed to establish the necessary prerequisites to collect and ultimately analyze the required data, addressing the complexity involved in preparing the report. This was only achievable once we had the appropriate structures in place. The considerable effort of colleagues across departments and close collaboration were key factors in its preparation.

thyssenkrupp nucera: Can you give us an indication of what's next?

Katharina Immoor: Sustainability will remain a top priority at thyssenkrupp nucera in the 2024/2025 fiscal year. We are already working extensively on preparing our sustainability report for the upcoming fiscal year. This integrated report will further enhance our transparency. At the same time, it comes with more stringent requirements due to the unified standards set by the Corporate Sustainability Reporting Directive regulation. To meet these requirements, we are currently performing a second double materiality analysis. This process will offer updated and deeper insights into the sustainability topics that matter most to our stakeholders and our company, enabling us to prioritize these areas effectively.

Sustainability Report for the 2023/2024 fiscal year

For the 2023/2024 fiscal year, thyssenkrupp nucera has published a sustainability report (incl. EU taxonomy) based on the standards of the Global Reporting Initiative. This standalone report complements the Annual Report 2023/2024 and can be accessed at the following link:

https://www.thyssenkrupp-nucera.com/sustainability/

Report of the Supervisory Board

Dear Shareholders,

Before detailing the specific work of the Supervisory Board of thyssenkrupp nucera AG & Co. KGaA and its committees during the 2023/2024 fiscal year, I would like to take a moment to reflect on the key events and challenges of the year that have significantly shaped our strategic direction and operations.

During the 2023/2024 fiscal year, thyssenkrupp nucera made significant strides, building on the strong growth of the previous year. With a stable financial foundation, thyssenkrupp nucera solidified its position as a leader in the green hydrogen sector. Recognition in the TIME100 list of the world's most influential companies and an award for its innovative hydrogen technology, scalum®, underscore the company's pivotal role in this global segment. Additionally, as the technology supplier for one of the largest chlor-alkali plants in the world, the company successfully expanded its international market presence.

Nevertheless, the alkaline water electrolysis (AWE) market is currently facing challenges. Regulatory uncertainties are causing project delays, which are further exacerbated by rising interest rates as financing such projects becomes more expensive for customers. The combination of regulatory uncertainties and higher financing costs creates a dynamic environment that leads to fluctuations in the stock price. These developments, however, also present investors with an opportunity to benefit from future market adjustments and long-term growth prospects in the green hydrogen technology sector.

Despite a challenging economic environment, thyssenkrupp nucera achieved solid growth and reaffirmed its leadership in innovation. Among the highlights of the reporting year was the strategic partnership with the Fraunhofer Institute for Ceramic Technologies and Systems (Fraunhofer IKTS) in the area of SOEC technology. This collaboration enhances thyssenkrupp nucera's research and development capabilities while broadening its portfolio in electrolyzer technologies.

In this dynamic environment, the Supervisory Board placed a stronger focus on the strategic development and implementation of the growth strategy. A particular emphasis was on global political measures to promote a sustainable industry.

Dr. Volkmar Dinstuhl,
Chair of the Supervisory Board

The European hydrogen strategy and the EU's Green Deal Industrial Plan significantly advanced investments in hydrogen infrastructure and production, providing important momentum for our business. At the same time, support from the U.S. Inflation Reduction Act (IRA) created opportunities for collaborations in the U.S. market, further enhancing thyssenkrupp nucera's global competitiveness. The Supervisory Board has closely accompanied this transformation process, laying the groundwork for sustainable international expansion in this challenging market environment.

Another key focus of the Supervisory Board's work was ensuring stable corporate governance as well as adapting and optimizing our structures to meet the growing demands of the capital market and regulatory environment. The decision by the Annual General Meeting in February 2024 to reappoint KPMG Aktiengesellschaft Wirtschaftsprüfungsgesellschaft (KPMG) as the auditor underscores our continued commitment to transparency and quality in financial reporting.

At the personnel level, we further expanded the expertise of the Supervisory Board. With Dr. Cord Landsmann and Luca Oglialoro, we welcomed two new members who bring extensive experience in international management, change management, and finance. Additionally, thyssenkrupp nucera's competence profile was bolstered through strategic hires across all company divisions.

The 2023/2024 fiscal year was marked by significant progress, adaptations, and external drivers designed to secure our market position for the long term. On behalf of the entire Supervisory Board, I would like to express my gratitude to all employees for their tireless efforts and to our shareholders and partners for their trust. With a clear strategy and a committed team, we are confident in our ability to continue capitalizing on opportunities in the growing green hydrogen market.

Cooperation between the Management Board and the Supervisory Board

thyssenkrupp nucera Management AG, as the General Partner of the company, fulfills its responsibilities through its Management Board (hereinafter referred to simply as the "Management Board"). In doing so, it is comprehensively supervised, advised, and supported by us, the members of the Supervisory Board. During the 2023/2024 fiscal year, the Supervisory Board performed its legally mandated, statutory, and rules-of-procedure-defined duties while adhering to the recommendations of the German Corporate Governance Code (GCGC).

The Management Board diligently fulfilled its duty to provide information. It regularly, promptly, and comprehensively informed us, both in writing and orally, about all aspects significant to the company, including strategy development, annual operational planning, business performance, internal audits, the risk situation and trends, and compliance. Members of the Supervisory Board had ample opportunity, both in committees and in plenary sessions, to thoroughly engage with the Management Board's reports and proposals, critically question them, and contribute their own suggestions. We intensively discussed all business matters of significance to the company, based on the written and oral reports from the Management Board, and conducted a detailed plausibility review.

In addition, the chairs of the Supervisory Board and its committees maintained close and regular exchanges of information and opinions with the Management Board outside of regular meetings, keeping themselves continuously informed of significant developments. Any relevant insights from these discussions were reported comprehensively in the subsequent Supervisory Board or committee meetings at the latest.

During the past fiscal year, no conflicts of interest occurred among members of the Management Board or Supervisory Board that would have required immediate disclosure to the Supervisory Board.

To support them in fulfilling their responsibilities, thyssenkrupp nucera provides organizational assistance to Supervisory Board members for independently conducted training and development activities. Furthermore, new Supervisory Board members are introduced to thyssenkrupp nucera's business model, corporate structures, and specific topics through a structured onboarding process.

Members of the Management Board attended meetings of the Supervisory Board and its committees. However, the Supervisory Board also met regularly in the absence of the Management Board.

Meetings of the Supervisory Board

During the reporting year, four regular meetings of the Supervisory Board were held. In addition, the Supervisory Board convened for an extraordinary meeting on December 18, 2023. Of the total five meetings, three were held in person (with some members participating via video conference), and two were conducted as video conferences.

During the 2023/2024 fiscal year, the Supervisory Board regularly focused on the current business situation, financial performance, and strategic matters.

Additionally, the Supervisory Board reviewed the annual financial statements for the 2022/2023 fiscal year and addressed all related resolutions during its extraordinary meeting on December 18, 2023.

At the first Annual General Meeting following the IPO, the Supervisory Board resolved to recommend the reappointment of KPMG as auditor to the Annual General Meeting.

The Supervisory Board also extensively discussed the corporate and investment planning for the 2023/2024 fiscal year and the subsequent years. In addition, amendments to the articles of association were reviewed and adopted in accordance with the requirements of the German Stock Corporation Act. The Supervisory Board also approved an updated qualifications matrix for its members, complementing the current competence profile, as well as the declaration of conformity with the German Corporate Governance Code (GCGC).

As part of the Management Board's reports on the company's status and the implementation of the growth strategy, which were central topics at all meetings, significant attention was devoted to discussions on strategy development, the execution of core projects, and short- and medium-term performance targets. The Supervisory Board was regularly updated on the progress in implementing the new product- and matrix-oriented corporate organization and resolved to conduct the next regular self-assessment of the Supervisory Board in the second half of 2025.

Meetings of the committees

The three committees of the Supervisory Board primarily serve to prepare decisions and topics for the full Supervisory Board plenary meetings. Where legally permissible, the Supervisory Board delegated specific decision-making powers to individual committees. The committee chairs provided regular and detailed reports to the Supervisory Board on their committee work. Additionally, they stayed in close contact with other committee members outside of regular meetings to coordinate on particularly important issues.

The **Audit Committee** convened a total of five times during the 2023/2024 fiscal year, including four regular and one extraordinary meeting. Two meetings were held in a hybrid format, while three were conducted virtually. In addition to members of the Management Board, particularly the Chief Financial Officer, representatives of the auditor, KPMG, regularly attended the meetings. The auditor assured the Audit Committee that no circumstances existed that could impair its independence. Prof. Dr. Franca Ruhwedel, Chair of the Audit Committee, maintained regular communication with the auditor between meetings. During the meetings, KPMG reported on the results of its audit. For specific agenda items, heads of relevant departments were also available to provide reports and answer questions. The Audit Committee held regular executive sessions without the Management Board, and in addition, in the presence of the external auditor.

The Audit Committee's work at the beginning of the fiscal year primarily focused on reviewing the annual financial statements and Consolidated Financial Statements for 2022/2023 and preparing the Supervisory Board's resolutions on these matters. Regarding its collaboration with KPMG, the Audit Committee resolved to approve the catalog of permissible non-audit services provided by the external auditor, along with the budget for such services in the 2023/2024 fiscal year. Other key areas of focus included the regular monitoring of financial performance, evaluating the effectiveness of the compliance management system, the internal control system, risk management, and internal auditing. The Audit Committee also regularly reviewed topics later resolved by the Supervisory Board, such as the recommendation to reappoint KPMG as auditor.

The Audit Committee also extensively addressed the quality of the financial statement audit. The quality of and collaboration with the auditor were carefully evaluated using an anonymous questionnaire. Regularly discussed topics included the development of sustainability reporting and the implementation of the new Corporate Sustainability Reporting Directive (CSRD). The members of the Audit Committee also ensured that sustainability-related topics were appropriately integrated into the internal control system, the risk management system, and the compliance management system. Additional topics of discussion included the areas of finance/treasury, the IT landscape, and cybersecurity issues. A special focus was placed on the migration to the new ERP system "Microsoft Dynamics 365" and enhancing the independence and development of the Internal Audit function.

The **Related-Party Transactions Committee** held one virtual meeting during the 2023/2024 fiscal year. During this meeting, the committee focused primarily on the general process for reviewing transactions with related parties (related-party transactions).

In the 2023/2024 fiscal year, there was no need for the **Nomination Committee** to convene a meeting.

Attendance at the meetings of the Supervisory Board of thyssenkrupp nucera AG & Co. KGaA and its committees in the 2023/2024 fiscal year

	Supervisory Board meetings			Committee meetings					
				Audit Committee			Related-Party Transactions Committee		
	Meetings held[1]	Meetings attended	Attendance in %	Meetings held[1]	Meetings attended	Attendance in %	Meetings held	Meetings attended	Attendance in %
Dr. Volkmar Dinstuhl, Chair of the Supervisory Board and of the Nomination Commitee	5	5	100	5	5	100			
Paolo Dellachá, Deputy Chair of the Supervisory Board	5	5	100						
Markus Fuhrmann	5	5	100				1	1	100
Jennifer Cooper[2]	5	5	100	1	1	100			
Michael Höllermann	5	5	100						
Dr. Klaus Keysberg[3]	3	3	100	4	3	75			
Dr. Arnd Köfler	5	5	100				1	1	100
Dr. Cord Landsmann[4]	0	0	0						
Dr. Sebastian Lochen	5	5	100						
Miguel Ángel López Borrego[5]	5	5	100						
Massimiliano Moi[6]	3	3	100	3	3	100			
Luca Oglialoro[4]	0	0	0						
Prof. Dr. Franca Ruhwedel, Chair of the Audit and RPT committees	5	5	100	5	5	100	1	1	100
Dr. Robert Scannell	5	5	100				1	1	100

[1] Four ordinary meetings and one extraordinary meeting.
[2] Member of the Supervisory Board as of June 10, 2024.
[3] Member of the Supervisory Board until May 31, 2024.
[4] Member of the Supervisory Board, judicially appointed, since September 24, 2024.
[5] Member of the Nomination Committee as of June 10, 2024.
[6] Member of the Supervisory Board until June 5, 2024.

Audit of the parent-company and consolidated financial statements and dependency report

KPMG AG Wirtschaftsprüfungsgesellschaft, elected by the Annual General Meeting on February 7, 2024 to audit the 2023/2024 fiscal year financial statements, audited the financial statements for the fiscal year from October 1, 2023 to September 30, 2024 prepared by the Management Board in accordance with the German Commercial Code (HGB) and the management report on thyssenkrupp nucera AG & Co. KGaA, which is combined with the management report on the thyssenkrupp nucera group. The auditor issued an unqualified audit opinion. In accordance with Art. 315e of the German Commercial Code (HGB), the consolidated financial statements of thyssenkrupp nucera AG & Co. KGaA and the management report on the thyssenkrupp nucera group were prepared on the basis of International Financial Reporting Standards (IFRS) as applicable in the European Union. The consolidated financial statements and the combined management report were also given an unqualified audit opinion by KPMG.

The auditor also determined that the Management Board has established an appropriate information and monitoring system that is suitable in its design and operation for the early detection of developments that could jeopardize the continued existence of the company.

The financial statement documents, the dependency report and the audit reports for fiscal year 2023/2024 were discussed in detail at the meetings of the Audit Committee on December 9, 13 and 17, 2024 and the Supervisory Board on December 13 and 17, 2024. The auditor reported on the key audit findings, as well as the findings concerning the accounting process and risk early warning system and was available to answer further questions and provide information. The chair of the Audit Committee reported in depth at the full Supervisory Board meeting on the Audit Committee's examination of the parent-company and consolidated financial statements as well as the dependency report.

On December 17, 2024, the auditor added the following certificate to the dependency report: Following our audit and judgment, performed in keeping with our professional duties, we hereby confirm that: 1. the statements as to fact made in the report are accurate, 2. the performance by the company under the legal transactions set out in the report was not excessive, 3. no circumstances regarding the measures set out in the report give rise to an assessment substantially different from that of the management board.

The Audit Committee and the Supervisory Board concur with the assessment of the auditor. The Supervisory Board examined the parent-company and consolidated financial statements, the combined management report, the dependency report and the compensation report pursuant to § 162 AktG and, as a consequence of the conclusive result of its audit, raised no objections. The parent-company and consolidated financial statements were approved.

December 17, 2024

Dr. Volkmar Dinstuhl
Chair of the Supervisory Board

Members of the Supervisory Board

Jennifer Cooper

- Senior Project Manager Mergers & Acquisitions thyssenkrupp AG

Member of the Audit Committee (as of June 2024)

Paolo Dellachá

Deputy Chair

- CEO of De Nora

Member of the Nomination Committee

Dr. Volkmar Dinstuhl

Chair

- Member of the Executive Board, thyssenkrupp AG

Member of the Audit Committee

Chair of the Nomination Committee

Markus Fuhrmann

- CEO GROPYUS AG

Member of the Related-Party Transactions Committee

Member of the Nomination Committee

Michael Höllermann

- CEO thyssenkrupp Industrial Solutions AG
- Member of the Executive Board and Chief Human Resources Officer of the Decarbon Technologies business segment of thyssenkrupp Group

Dr. Arnd Köfler

- Advisor

Member of the Related-Party Transactions Committee

Dr. Cord Landsmann

- CEO of Energy Solutions Company, a PIF Portfolio Company

Dr. Sebastian Lochen

- Group General Counsel, Head of Legal & Compliance, Chief Compliance Officer, thyssenkrupp AG

Miguel Ángel López Borrego

- CEO thyssenkrupp AG

Member of the Nomination Committee (as of June 2024)

Luca Oglialoro

- CFO De Nora

Member of the Audit Committee (as of October 2024)

Prof. Dr. Franca Ruhwedel

- Professor for Finance & Accounting at Rhein-Waal University

Chair of the Audit Committee

Chair of the Related-Party Transactions Committee

Dr. Robert Scannell

- Chief Regional Officer EMEIA Region De Nora
- Managing Director of De Nora Germany

Member of the Related-Party Transactions Committee

Memberships in committees are indicated by a grey bar.

Former members of the Supervisory Board who left during the 2023/2024 fiscal year:
Dr. Klaus Keysberg (until May 2024), Massimiliano Moi (until June 2024).

Competency Profile & Qualifications Matrix

Experience & Qualifications	Cooper	Dellachá	Dinstuhl	Fuhrmann	Höllermann	Köfler	Landsmann	Lochen	López	Oglialoro	Ruhwedel	Scannell
General international management		●			●	●	●		●	●		●
Industry-/sector-specific expertise of thyssenkrupp nucera							●					●
Industry-/sector-specific expertise beyond thyssenkrupp nucera			●	●	●	●	●		●			●
Leadership/governance of listed companies						●			●	●	●	●
Corporate strategy/development, growth/scale-up, M&A and portfolio management	●	●	●		●			●			●	●
Change management, transformation		●	●		●		●			●	●	
IT, innovation and digitalization				●					●			
Financial and capital markets experience			●	●					●	●	●	
Accounting and auditing	●		●							●	●	
Legal, compliance and corporate governance								●			●	
Marketing and sales		●		●								
Talent management, HR development and leadership		●			●							
Sustainability/ESG				●		●		●			●	

Diversity

	Cooper	Dellachá	Dinstuhl	Fuhrmann	Höllermann	Köfler	Landsmann	Lochen	López	Oglialoro	Ruhwedel	Scannell
Year of joining Supervisory Board	2022	2022	2022	2022	2022	2022	2024	2023	2023	2024	2022	2022
Gender	Female	Male	Male	Male	Male	Male	Male	Male	Male	Male	Female	Male
Year of birth	1967	1968	1972	1980	1964	1967	1969	1976	1965	1972	1973	1959
Nationality	German & British	Italian	German	Austrian	German	German	German	German	Spanish	Italian	German	Irish
Professional background	Economics	Engineering	Economics	Biotechnology and Genetics	Engineering	Engineering	Business Administration	Law	Business Administration	Business Administration	Finance & Accounting	Electro-chemistry

thyssenkrupp nucera on the capital market

thyssenkrupp nucera has been listed in the Prime Standard segment of the Frankfurt Stock Exchange since July 7, 2023. The shares trade under the ticker symbol NCH2 (ISIN: DE000NCA0001; WKN: NCA000). A total of 126,315,000 no-par value bearer shares have been issued. On September 18, 2023, thyssenkrupp nucera was added to the SDAX index, ranking it among Germany's most notable small-cap companies.

Performance of thyssenkrupp nucera shares in the 2023/2024 fiscal year

At the start of the fiscal year in October 2023, the shares followed the negative trend in the hydrogen sector. After reaching a record low of EUR 13.63 on October 27, 2023, the share price largely trended sideways in a range of EUR 14.00 to EUR 17.00 through mid-December 2023. Specific announcements, including the capacity reservation with Neste for a 120 MW alkaline water electrolysis project (October 10, 2023) and the signed chlor-alkali contract with Unipar (October 18, 2023), had no noticeable effect on the share price.

The release of the 2022/2023 Annual Report and the 2023/2024 fiscal year forecast on December 18, 2023, marked the beginning of a notable recovery in the share price. On December 27, the share peaked at EUR 18.86, marking its high for the fiscal year. By early January 2024, however, the stock had declined and fluctuated between EUR 14.00 and EUR 16.50 until the end of March 2024. Amid a generally difficult market for hydrogen stocks, the publication of the Q1 2023/2024 statement on February 13, 2024, provided only temporary support to the share price.

thyssenkrupp nucera share price performance

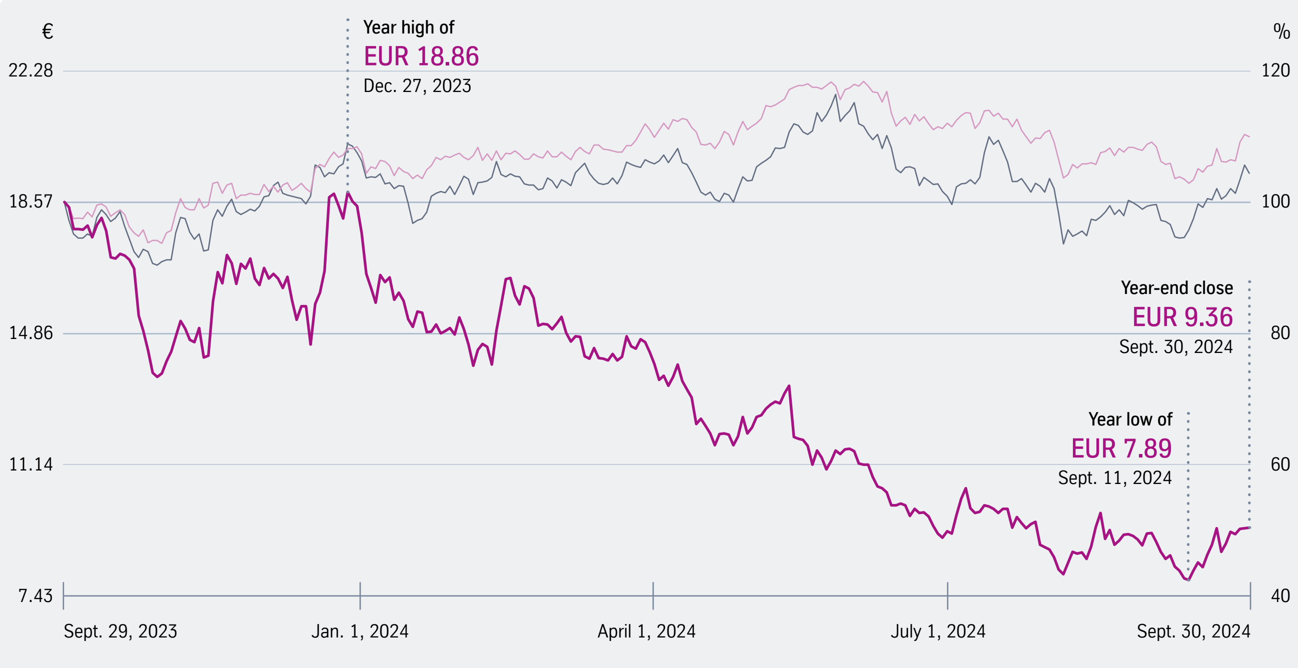


Chart based on the closing prices recorded by the Xetra electronic trading system for each trading day.
Index: September 29, 2023 = 100%

In early April 2024, the share price dropped below its prior low in October 2023, breaking out of the previously established trading range. As the fiscal year unfolded, persistent regulatory uncertainties in the US and ambiguous subsidy frameworks in the EU delayed project completions for customers and led to investor caution towards hydrogen shares. The lack of positive news from electrolyzer manufacturers in general, along with two adjustments to thyssenkrupp nucera's medium-term targets for the AWE segment in May and July 2024, driven by ongoing market uncertainties and increased planning challenges, further deepened the share's downward trajectory. Following the ad-hoc announcement on July 26, 2024, the share fell below the EUR 9 threshold for the first time and continued its steady decline.

The release of the Q3 2023/2024 figures on August 13, 2024, led to a slight upturn in the share price. In early September, however, the share resumed its decline. On September 11, 2024, the share hit a year low, closing at EUR 7.89. The share price recovered slightly afterward, closing at EUR 9.36 on September 30, 2024. For the full fiscal year, thyssenkrupp nucera shares recorded an overall decline of 50% (XETRA closing prices on September 30, 2024, vs. September 29, 2023, the final trading day of the 2022/2023 fiscal year). During the reporting period, the average XETRA trading volume was around 161,000 shares per day.

Peer and index comparison

The SDAX selection index, representing a cross-section of German small-cap companies across various industries, gained 10% between October 2023 and September 2024. The Solactive Hydrogen Economy Index NTR, designed to broadly reflect the hydrogen economy, posted a gain of approximately 4% during the same period. This index consists of a range of companies, many of which derive only a small portion of their operations from the hydrogen sector, such as industrial gas producers and automotive manufacturers.

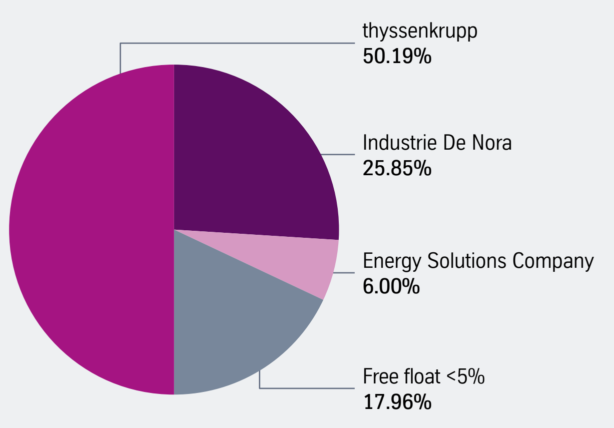
During the reporting period, the share prices of other international electrolyzer manufacturers, including direct peers such as Industrie De Nora, ITM Power, McPhy, Nel, and Plug Power, also declined in the negative double-digit percentage range, comparable to thyssenkrupp nucera shares.

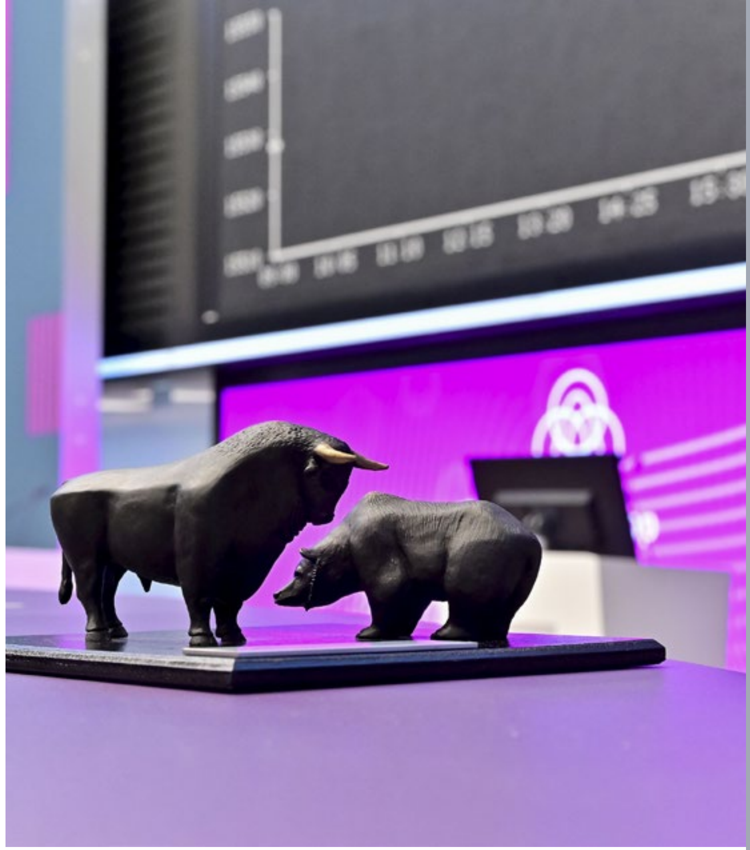
Shareholder structure of thyssenkrupp nucera AG & Co. KGaA

The shareholder structure as of September 30, 2024, based on voting rights notifications received by thyssenkrupp nucera in accordance with the German Securities Trading Act (WpHG) is presented below. The percentages based on the voting rights notifications refer to the number of voting rights from ordinary shares of thyssenkrupp nucera AG & Co. KGaA.

The largest shareholders are thyssenkrupp (50.19%), Industrie De Nora (25.85%), and the Energy Solutions Company (6.00%). The free float of voting rights (as defined by Deutsche Börse) as of the reporting date equaled 17.96% and was held by a diverse group of domestic and international investors. Regularly conducted shareholder identification analyses (shareholder ID analyses) show that among institutional investors, Norwegian and British investors hold the greatest percentage, followed by investors from the United States and other continental European countries.

Shareholder structure





Voting rights notifications and transactions conducted by members of the Management Board and Supervisory Board

In the 2023/2024 fiscal year, thyssenkrupp nucera received various voting rights notifications from institutional investors and published these notifications verbatim on the company's website at https://investors.thyssenkrupp-nucera.com/investors/legal-notices.

Additionally, members of the Management Board and Supervisory Board added to their shareholdings of thyssenkrupp nucera during the fiscal year. The transactions conducted by members of the Management Board and Supervisory Board is also presented at the above mentioned website.

Dividends and dividend policy

A dividend was not distributed for the 2023/2024 fiscal year. thyssenkrupp nucera AG & Co. KGaA generated net income of EUR 12 million under German GAAP (HGB) in the 2023/2024 fiscal year. As a result of the existing accumulated deficit, no dividend will be proposed to the Annual General Meeting. The dividend policy remains unchanged. thyssenkrupp nucera intends to retain future profits to finance further growth and does not plan to declare or distribute cash dividends in the foreseeable future.

Analyst recommendations

thyssenkrupp nucera maintains close communication with key players in the capital market and is regularly covered by numerous financial analysts. As of September 30, 2024, a total of 14 analysts from international banks and brokerage houses were tracking and evaluating thyssenkrupp nucera shares.

Eight analysts had issued a “Buy” recommendation, four rated the share as “Hold” or “Neutral,” and two recommended selling the share. The median price target as of the reporting date was EUR 13.30. A detailed, up-to-date summary of analyst recommendations can be found on the factsheet available on our Investor Relations website at https://investors.thyssenkrupp-nucera.com/investors/thyssenkrupp-nucera-at-a-glance#factsheet.

Investor Relations activities

thyssenkrupp nucera engages in regular dialogue with a diverse range of capital market participants. Exchanges with institutional investors and private shareholders largely occur at domestic and international conferences, virtual events, and extensive global roadshow activities. During the past fiscal year, thyssenkrupp nucera participated in more than 20 investor conferences, roadshows, and other events. This included hosting more than 100 individual and group meetings. Key discussion topics included managing the substantial order backlog, the market and competitive landscape, the benefits of the 20 MW scalum® electrolyzer, regulatory developments, and the long-term prospects for green hydrogen. In addition, the Investor Relations (IR) team engaged directly with private shareholders at several dedicated events.

The Investor Relations website https://investors.thyssenkrupp-nucera.com/ serves as another essential communication tool in this regard. It offers detailed information and extensive documentation on the company’s financial results, shares, and capital market events.

thyssenkrupp nucera share

Share class	No-par value ordinary bearer shares
Year high (December 27, 2023) [1]	EUR 18.86
Year low (September 11, 2024) [1]	EUR 7.89
Year-end closing price (September 30, 2024) [1]	EUR 9.36
Market capitalization (September 30, 2024) [1]	EUR 1.19 bn
Share capital	EUR 126,315,000
No. of issued shares	126,315,000
ISIN	DE000NCA0001
WKN	NCA000
Ticker symbol	NCH2
Exchange	Frankfurt Stock Exchange
Market segment	Regulated market (Prime Standard)

[1] Data based on Xetra closing prices.

Combined Management Report

About this report

This combined management report for 2023/2024 pertains to both the thyssenkrupp nucera Group and thyssenkrupp nucera AG & Co. KGaA. In it, we report on the business performance and the business results for the 2023/2024 fiscal year. In the Outlook chapter, we outline the expected development of the thyssenkrupp nucera Group and thyssenkrupp nucera AG & Co. KGaA in the 2024/2025 fiscal year.

Information concerning thyssenkrupp nucera AG & Co. KGaA is provided in a separate section of the economic report and contains disclosures prepared in accordance with the German Commercial Code (HGB). The statements pertaining to the developments in the segments of the thyssenkrupp nucera Group also apply to thyssenkrupp nucera AG & Co. KGaA, reflecting the influence of its subsidiaries. The reporting aligns with the internal management framework of the thyssenkrupp nucera Group and complies with German Accounting Standard No. 20 (DRS 20) “Group Management Report”.

The consolidated financial statements have been prepared in accordance with Section 315e of the German Commercial Code (HGB) and based on the International Financial Reporting Standards (IFRS) as adopted by the European Union. The annual financial statements were prepared in compliance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). thyssenkrupp nucera AG & Co. KGaA qualifies as a large corporation under Section 267 (3) of the German Commercial Code (HGB).

thyssenkrupp nucera AG & Co. KGaA and its subsidiaries are included in the consolidated financial statements of thyssenkrupp AG, Duisburg and Essen, Germany. As of September 30, 2024, the thyssenkrupp nucera Group was part of the Decarbon Technologies segment within the thyssenkrupp Group.

In the combined management report, figures are presented in millions of euros. This may result in rounding differences and deviations in percentage figures.

1. Fundamentals of the thyssenkrupp nucera Group

1.1 Organization, structure, and management

Legal structure

thyssenkrupp nucera AG & Co. KGaA (“thyssenkrupp nucera”) is legally formed as a partnership limited by shares (KGaA) under German law, headquartered in Dortmund, Germany, and entered into the commercial register of the District Court of Dortmund under the number HRB 33774. It is the parent company of the thyssenkrupp nucera Group.

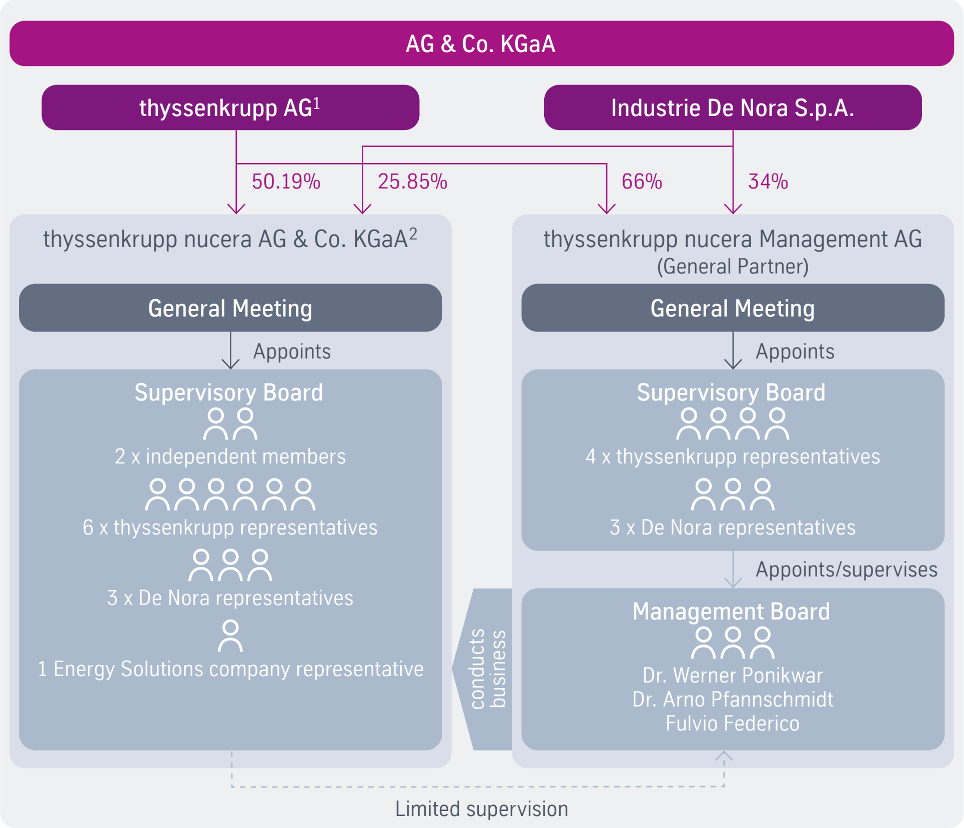
The general partner of thyssenkrupp nucera AG & Co. KGaA is thyssenkrupp nucera Management AG ("General Partner"), which is a stock corporation incorporated in Germany and subject to German law. It is also headquartered in Dortmund, Germany, and entered into the commercial register of the District Court of Dortmund under the number HRB 33591. thyssenkrupp nucera Management AG is a 66%-owned subsidiary of thyssenkrupp Projekt 1 GmbH, Essen, which in turn is an indirect 100% subsidiary of thyssenkrupp AG in Duisburg and Essen, Germany. Industrie De Nora S.p.A., Milan, Italy, holds a 34% interest in thyssenkrupp nucera Management AG.

The General Partner is solely entrusted with the management of the company. As General Partner, its activities for the company are always conducted through its Management Board, which is responsible for managing and representing the General Partner and indirectly thyssenkrupp nucera AG & Co. KGaA vis-à-vis third parties. The appointment of Management Board members is the responsibility of the Supervisory Board of the General Partner. The Management Board of thyssenkrupp nucera Management AG (hereinafter referred to as the "Management Board") has prepared this combined management report.

The shares of thyssenkrupp nucera AG & Co. KGaA (ticker symbol NCH2) have been trading on the Regulated Market of the Frankfurt Stock Exchange (the “Frankfurt Stock Exchange”) and simultaneously to the sub-segment of the Regulated Market with additional post-admission obligations (Prime Standard) since July 7, 2023. The International Securities Identification Number (ISIN) is DE000NCA0001 and the German Securities Identification Number (WKN) is NCA000. The company's share capital equals EUR 126,315,000.

Prior to the initial public offering and during the accompanying capital increase, thyssenkrupp AG held 66% of the shares and Industrie De Nora S.p.A. 34%; thereafter thyssenkrupp AG held 50.19% and Industrie De Nora S.p.A. 25.85%. The remaining 23.96% of the shares in thyssenkrupp nucera AG & Co. KGaA have been held by other shareholders since the initial public offering. thyssenkrupp nucera Management AG now serves as the General Partner. As General Partner, it holds no shares in the capital of thyssenkrupp nucera AG & Co. KGaA. It has no rights or obligations to make a capital contribution and does not share in the company’s profits, losses, or assets, including any hidden reserves.

Overview of AG & Co. KGaA structure and governance



[1] The full chain of subsidiaries can be found in the diagram entitled “Shareholding structure” on page 48.
[2] As a result of a capital increase carried out on July 5, 2023, the total number of shares rose to 126,315,000. Since the IPO on July 7, 2023, a total of 30,262,250 shares, or 23.96% of the shares in thyssenkrupp nucera AG & Co. KGaA, have been held by other shareholders. See also the explanations in the chapter entitled “thyssenkrupp nucera on the capital market”.

The following were the members of the Management Board as of September 30, 2024:

- Dr. Werner Ponikwar (CEO, Chief Executive Officer, Chair of the Management Board)
- Dr. Arno Pfannschmidt (CFO, Chief Financial Officer)
- Fulvio Federico (CTO, Chief Technology Officer)

History and shareholding structure

In 2013, the Electrolysis division of the future thyssenkrupp Industrial Solutions AG (tkIS), Essen, Germany (at that time, under the name thyssenkrupp Uhde GmbH, Dortmund) became a legally independent company, thyssenkrupp Electrolysis GmbH. On April 1, 2015, the electrolysis activities of Industrie De Nora S.p.A. were transferred to the company, and the company's name changed to thyssenkrupp Uhde Chlorine Engineers GmbH. thyssenkrupp Industrial Solutions AG initially held 66% of the shares, and Industrie De Nora S.p.A. 34%. On September 30, 2021, thyssenkrupp Projekt 1 GmbH acquired the shares of the company from thyssenkrupp Industrial Solutions AG.

On February 2, 2022, the shareholders' meeting of thyssenkrupp Uhde Chlorine Engineers GmbH resolved to change the company's legal form to a partnership limited by shares in accordance with Articles 190 et seq., 226, 238 et seq. of the German Transformation Act (Umwandlungsgesetz – UmwG). For the company name to reflect the new era and the hydrogen business, the company was also renamed thyssenkrupp nucera AG & Co. KGaA. This change in legal form and company name was entered into the commercial register of the District Court of Dortmund on February 18, 2022.

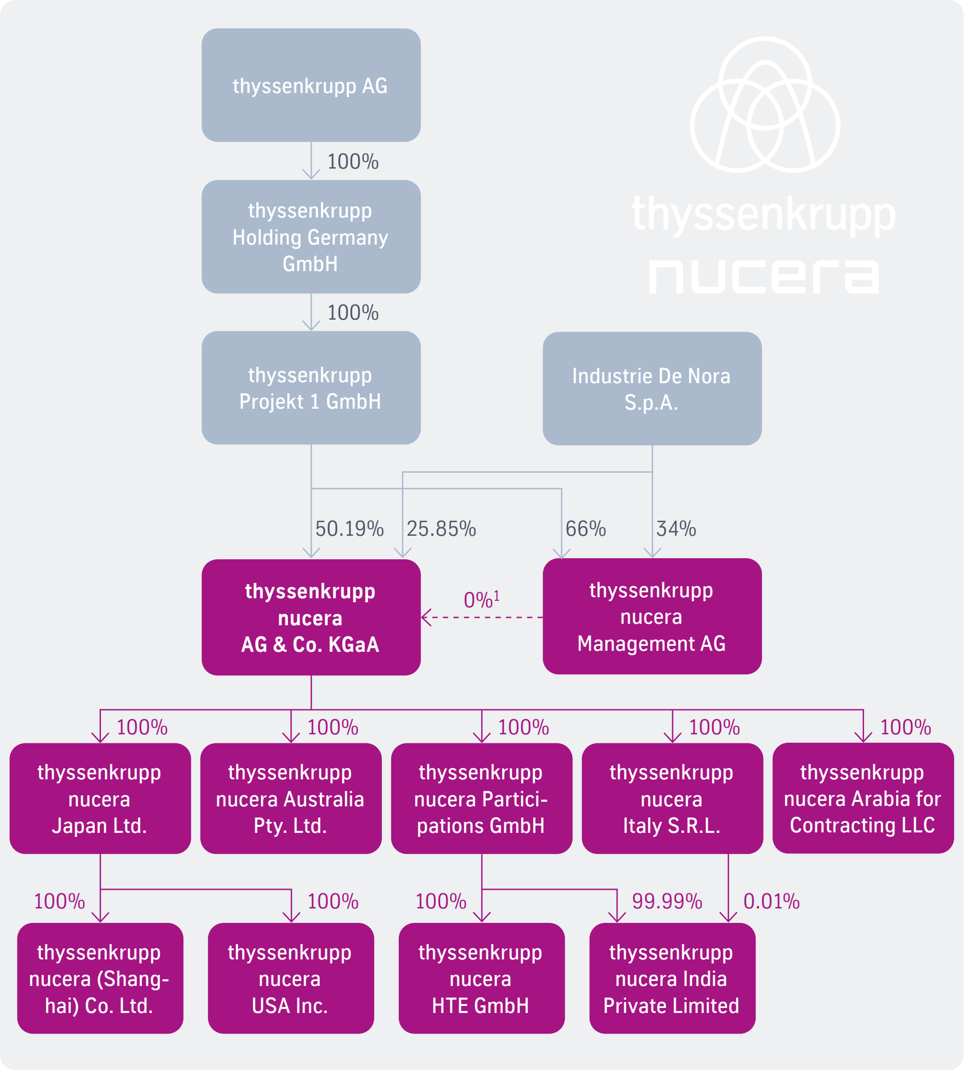
Since October 1, 2024, thyssenkrupp Projekt 1 GmbH has been wholly owned by thyssenkrupp Decarbon Technologies GmbH, which in turn is owned by thyssenkrupp Technologies Beteiligungen GmbH, a wholly owned subsidiary of thyssenkrupp AG.

Segment organization

The business activities of the thyssenkrupp nucera Group were consolidated into five segments in the 2023/2024 fiscal year, corresponding to the business activities of its subsidiaries. The segment management assumes entrepreneurial responsibility and oversees the management of the company's activities:

- Germany, Dortmund (headquarters): responsible for global coordination and primarily for business in Europe and the Middle East
- Italy, Milan: primarily responsible for business in Italy, the Middle East, Africa, South America, and parts of Asia

Shareholding structure as of September 30, 2024



[1] The General Partner has no interest in the issued or outstanding share capital of the Company, has not made a capital contribution to the Company, does not hold any shares in the Company and, therefore, will not participate in its assets or its profits or losses.

- Japan, Tokyo: responsible for business in Japan and the Asia-Pacific region
- China, Shanghai: responsible for business in China
- RoW (Rest of the World): the business activities of subsidiaries in the USA (Houston), Australia (Perth), Saudi Arabia (Riyadh), and India (Mumbai), as well as the newly established company in the 2023/2024 fiscal year for the commercialization of high-temperature electrolysis (Dortmund).

For the 2024/2025 fiscal year, the segment structure will be modified and aligned with the technological applications of thyssenkrupp nucera. Accordingly, management will be organized into two segments in the future: chlor-alkali electrolysis (CA) and green hydrogen (gH_2), with the latter including both alkaline water electrolysis and high-temperature electrolysis.

Local presence in all major markets

● thyssenkrupp nucera locations

1.2 Company profile and products

thyssenkrupp nucera provides technologies for electrolysis plants to companies. Our competitive strength is founded on over 60 years of experience in this sophisticated technology area and our high innovation.

Our business activities focus on chlor-alkali electrolysis ("CA") and alkaline water electrolysis ("AWE") technologies. Our technology expertise specializes in the development, engineering, purchasing, procurement and commissioning, as well as in the licensing of high-performance electrolysis technologies. Additionally, we offer design and selected construction services for electrolysis plants together with selected partners. Through our technology service, we support our customers throughout the entire life cycle of their installed plants.

Proven CA expertise provides technology foundation for AWE business expansion

At the heart of the thyssenkrupp nucera Group's business model is the application of our decades of experience in the industrial CA electrolysis value chain, as well as the know-how of our employees and strategic partners. This expertise allows us to offer high-quality AWE technologies and project services for plants to help meet the rapidly growing global demand for green hydrogen.

thyssenkrupp nucera has been an established player in the CA electrolysis technology market for decades. Our CA business engages in almost all aspects of the value chain for industrial-scale electrolysis. thyssenkrupp nucera Group also procures materials for our strategic partner Industrie De Nora S.p.A. for the contract manufacturing of CA electrolysis bipolar elements and half shells.

thyssenkrupp nucera Group's CA electrolysis technologies include the following:

- **BM2.7 single-element family (BM2.7)**
  Our current bipolar membrane (BM) 2.7v6 plus single-element offers customers optimized design features. The BM2.7v6 plus single-element is continuously evolving, with new generations offering backward compatibility to allow existing systems to be easily upgraded to the latest developments.

- **BiTAC® filter press family**
  The BiTAC® bipolar ion-exchange membrane process electrolyzer offers specific advantages, including rapid remembraning of the complete electrolyzer in the event of maintenance. The BiTAC® family, centered on the latest version, BiTACv7, is continually evolving, with all generations remaining backward compatible.

- **NaCl-ODC electrolysis**
  Our NaCl-ODC electrolysis technology (oxygen depolarized cathode) reduces the energy consumption for the production of caustic soda and chlorine. This energy savings is made possible because no hydrogen is produced during the NaCl-ODC process. This is a significant advantage to customers who have no use for hydrogen.

Our HCl electrolysis technology:

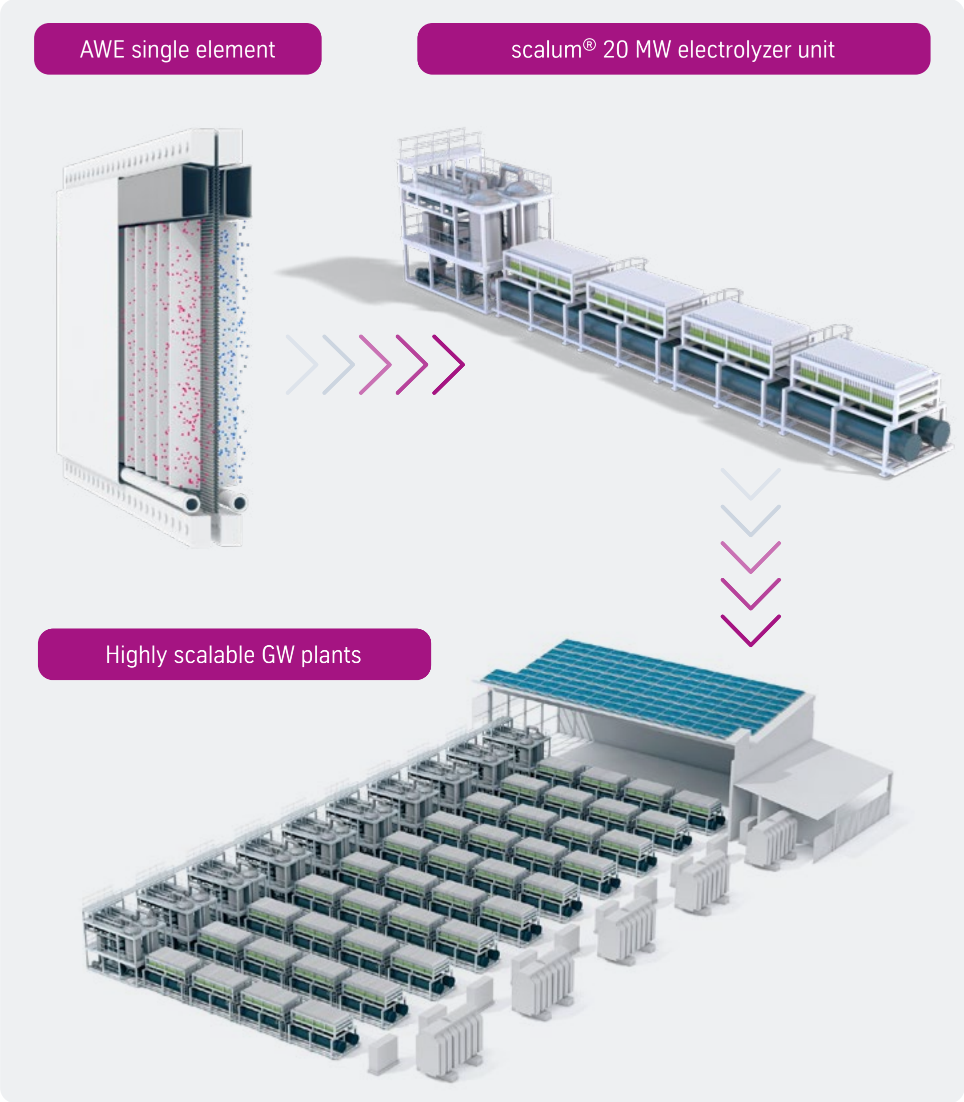
HCl (hydrochloric acid) is a by-product of chlorine use in many processes. HCl electrolysis from thyssenkrupp nucera is an effective process that converts the hydrochloric acid produced – but often not required – back into chlorine, thereby recycling it. This is one example of how we are promoting the sustainable use of resources.

- **HCl-ODC electrolysis**
  Our ODC (oxygen depolarized cathode) process reduces energy consumption compared with conventional processes. This results in a reduction of indirect carbon dioxide emissions during production. Hydrogen is not produced in the HCl-ODC process.

- **HCl diaphragm electrolysis**
  With HCl diaphragm technology, aqueous HCl acid is fed into the electrolyzer, producing chlorine on the anode side and hydrogen on the cathode side. The cell elements of the electrolyzer consist of a bipolar graphite electrode separated by a special diaphragm. This diaphragm is permeable and allows both the chloride ions and the cationic hydrogen ions to pass through.

thyssenkrupp nucera supports customers with on-site assembly and commissioning of the plants. Our services also include customer consulting on the handling and use of CA products, as well as converting existing older plants utilizing more environmentally friendly and efficient technologies. Additionally, we offer both technological and maintenance services through our service business.

thyssenkrupp nucera offers an efficient and highly scalable module concept [1]



[1] The content of this diagram was not included in the audit of the combined management report by the auditor.

Standardized 20 MW scalum® module for industrial-scale water electrolysis

With thyssenkrupp nucera's innovations, we enable our customers to produce green hydrogen at an industrial scale using alkaline water electrolysis technology. By utilizing climate-friendly hydrogen instead of fossil fuels, such as coal, companies can minimize their CO_2 footprint and contribute to the decarbonization of industry.

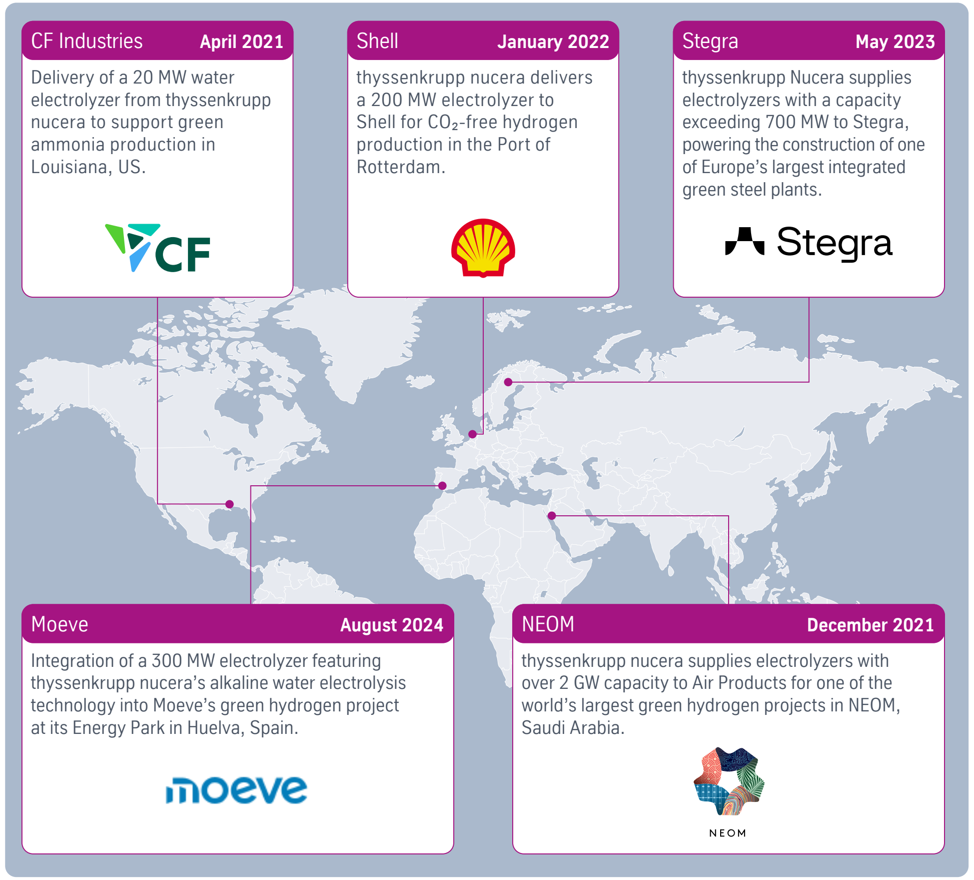
thyssenkrupp nucera is striving to achieve a leading market position in alkaline water electrolysis (AWE). To meet the demand for large-scale green hydrogen production, we have developed scalum®, which is a standardized 20 MW electrolysis module. scalum® offers high current density with optimized space requirements. The prefabricated AWE units can be easily transported, installed, and interconnected to achieve the desired plant capacity, ranging up to several hundred megawatts and even gigawatts. Contacts for various AWE projects in the megawatt and gigawatt range have already been contractually agreed and encompass a total capacity of approximately 3.3 GW.

The thyssenkrupp nucera Group supports customers with the on-site assembly and commissioning of water electrolysis plants. Our diverse range of customers in the global industrial and energy sectors includes refinery operators, fertilizer manufacturers, steel manufacturers, industrial gas producers, and project developers. Green hydrogen is used, in part, to replace gray hydrogen produced from natural gas. Additionally, there are numerous Power-to-X applications in which green hydrogen is converted into other chemical energy carriers, such as for energy storage, as fuel, or as raw materials for the chemical industry.

In line with our "single source" strategy, we also offer sales and services throughout the plant's life cycle, including the maintenance of elements (reactivation, replacement of diaphragms, membranes and seals, dismantling and assembly).

In addition to AWE technology, future system solutions in the field of high-temperature electrolysis are set to expand the hydrogen product portfolio as a second technology for industrial-scale applications. To this end, a strategic partnership with Fraunhofer IKTS was launched in the 2023/2024 fiscal year.

Central projects in the area of alkaline water electrolysis



1.3 Goals and strategy

thyssenkrupp nucera has set a goal to consolidate its market position in chlor-alkali electrolysis (CA) and become the leading technology provider for alkaline water electrolysis (AWE) for green hydrogen production. thyssenkrupp nucera can build on the foundation of more than 60 years of technological and business experience in the field of chlor-alkali electrolysis.

In the CA business, thyssenkrupp nucera is positioned as an integrated plant engineering company handling global orders. The growth in the PVC industry leads to the expectation of higher demand for chlorine. Aluminum production is the largest segment by application for caustic soda in the chlor-alkali market. Demand for chlorine and caustic soda is anticipated to grow steadily in line with global GDP, driven in part by global population growth and increasing infrastructure needs. Growth is expected to vary by region. thyssenkrupp nucera is therefore placing the strategic focus of its New Build business on China and India, where production capacities are expected to increase the most, and on regions with significant retrofit potential, such as North America. For thyssenkrupp nucera, maximizing the service potential is also essential.

While maintaining its market position remains the strategic focus in the chlor-alkali segment, thyssenkrupp nucera aims to expand and solidify its market position in the green hydrogen (gH_2) segment with a view to achieving resilient growth. The green hydrogen market provides a broad spectrum of applications and target customer segments to support this goal.

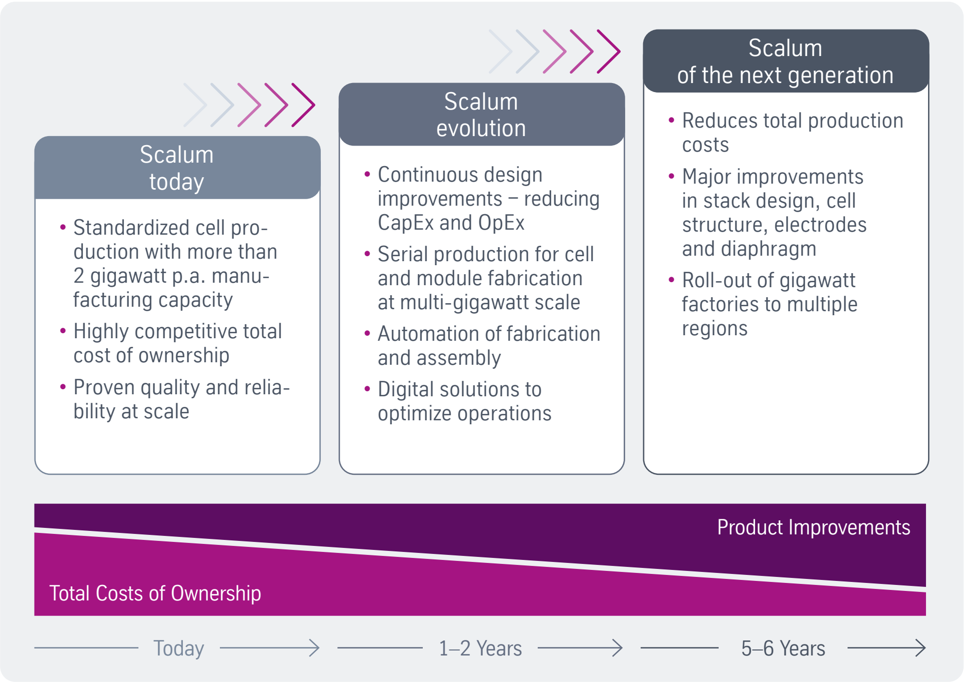
One of thyssenkrupp nucera's core strategic goals is to serve all relevant hydrogen markets by 2030. The company has already positioned itself as a leading player in the European market and is currently expanding into North America.[1] This will be followed by further regions, including the Middle East, India, and Australia, which are also considered attractive target markets.

Building on decades of experience with CA electrolysis technology and the standardized 20 MW AWE module scalum®, thyssenkrupp nucera has secured a leading position in the AWE technology segment.[2] AWE technology serves as the foundation of thyssenkrupp nucera's business. The company is committed to further advancing this technology platform. In the short term, this will involve the ongoing enhancement of existing AWE technology. In the medium term, it will focus on significant advancements in module and stack design, cell structure, electrodes, and diaphragm separators as part of developing a next-generation AWE technology.

To enhance its technology portfolio, thyssenkrupp nucera aims to commercialize the promising SOEC technology. A critical success factor in this effort is the partnership with Fraunhofer IKTS, with the shared goal of advancing the technology to market maturity within this complementary collaboration.

As part of its ongoing portfolio evaluation, thyssenkrupp nucera is also exploring and evaluating alternative and emerging technologies for compatibility with its growth strategy.

Strategic roadmap for advancing the AWE architecture [1]



[1] The content of this diagram was not included in the audit of the combined management report by the auditor.

[1] Assessment based on a market analysis published by VNZ insights in the first calendar quarter of 2024, which considers delivered capacities, contractually secured order backlogs, and non-contractually secured order backlogs as of the end of 2023.

[2] Assessment based on a market analysis published by VNZ insights in the first calendar quarter of 2024, which considers delivered capacities, contractually secured order backlogs, and non-contractually secured order backlogs as of the end of 2023.

thyssenkrupp nucera positions itself as an EPF (Engineering, Procurement, and Fabrication) provider, complemented by an extensive range of after-sales services and “Balance of Plant” components – essential equipment that supports the electrolyzers. These components include transformers, rectifiers, and water treatment systems. thyssenkrupp nucera is steadily expanding its offerings, with a consistent focus on balancing risk and customer value.

Automation and digitalization play a crucial role at thyssenkrupp nucera across all areas of its business. The company is developing solutions to enhance the automation of cell production, ensure the safe and reliable operation of AWE modules, and deliver digital products designed to optimize customers’ plant operations. thyssenkrupp nucera plans to offer these solutions as services within its service portfolio. This is also an area where the company benefits from its extensive experience in the chlor-alkali (CA) business.

thyssenkrupp nucera consistently tailors its procurement and manufacturing strategy to align with key hydrogen markets. Key aspects of development include product enhancements and strong partnerships with suppliers of materials and components. The company is also implementing a manufacturing and assembly strategy that focuses on automated series production in relevant hydrogen markets. thyssenkrupp nucera collaborates with strategic partners in this area, while also planning for the long term and evaluating the establishment of its own manufacturing and assembly capacities depending on evolving market conditions.

As key competitive features, thyssenkrupp nucera’s scalum® product stands out for its competitive cost position and its proven ability to handle large-scale projects in the gigawatt range. Its standardized 20-MW scalum® module minimizes on-site assembly work, actively reducing project risks. The standardized 20 MW scalum® module also reduces overall investment risks and accelerates project timelines significantly. Maximizing the standardization of scalum® modules, combined with highly automated series production for cell manufacturing and assembly, will enable even greater cost efficiency and large-scale series production, reaching several gigawatts per year in the future.

1.4 Management system

The Management Board of the thyssenkrupp nucera Group sets the Group's strategic agenda, makes important decisions with the management of the subsidiaries, and monitors the achievement of the subsidiaries' targets. The key performance indicators applied group-wide form the basis for the operational and strategic management decisions at thyssenkrupp nucera. Financial performance indicators are used to set targets and measure the company's success on an ongoing basis based on expected/actual comparisons.

We prepare the forecast for the following year within the framework of a rolling three-year plan. The planning approach is initially carried out bottom-up by those operationally responsible. In the steps that follow, this planning is then validated and finalized for each Group company with the respective managing directors and, at the Group level, with the Management Board.

The planning already includes expectations for general business development in the planning years. The actual results are compared to the forecasts on an ongoing basis as part of central monthly reporting at thyssenkrupp nucera. The expectations for key performance indicators for the current fiscal year are also updated monthly and fully revised at least once annually.

The most significant key financial performance indicators for managing the company's performance as defined by DRS 20 are sales and EBIT. These indicators are also applied to the internal management of the Group's segments. thyssenkrupp nucera considers order intake, which is an indicator of future sales, and EBITDA to be additional financial performance indicators.

Most important financial performance indicators

In the 2023/2024 fiscal year, management was organized by country subsidiaries. As of the 2024/2025 fiscal year, thyssenkrupp nucera's business activities will be consolidated into the following two reportable business segments: chlor-alkali electrolysis (CA) and green hydrogen (gH_2), which will include alkaline water electrolysis and high-temperature electrolysis.

Sales

Sales are generated from the sale of CA and AWE equipment and a range of related services. Sales are recognized over a period of time or at a point in time, depending on when the transfer of control to the customer takes place.

EBIT

EBIT (earnings before interest and tax), which represents earnings before deducting the financial result and taxes, provides information on the profitability of the units under review. It includes all components of the income statement that relate to operational performance.

Order intake

Order intake represents customer orders contractually agreed to by Group companies with their customers within a fiscal year or an interim period, as well as subsequent changes to these projects, including new construction projects and services.

EBITDA

A further key financial performance indicator is EBITDA. This indicator was added as a performance criterion as part of the variable remuneration. EBITDA enables an international comparison with companies with different fixed asset structures and the resulting depreciation and amortization. The key indicator reflects the income before the depreciation and amortization of fixed assets, financial income/(expense), net, and taxes.

1.5 Research and development

The foundation of our entrepreneurial strength is our market- and customer-oriented research and development (R&D) work. We also collaborate directly with external partners in certain areas. Through internal activities and external partnerships with strategic partners from industry and academia, we aim to enhance efficiency and customer focus in research and development. Examples of this are our collaborations with Industrie De Nora S.p.A., Italy, in the development of a new electrolysis cell design and with Covestro, Germany, using NaCl-ODC technology for the energy-efficient production of chlorine.

In addition, we collaborate as a partner in large, publicly funded consortia with research institutions and universities, as well as with companies along the value chain. Examples include projects such as INSTALL AWE (focused on automated manufacturing and assembly), PrometH2eus (development of anodes), NextH2 (development of high-performance diaphragms), and Element ONE (testing in the 20 MW module).

Carbon2Chem®: At the site of thyssenkrupp Steel Europe AG in Duisburg, we have been operating a pilot plant for alkaline water electrolysis with a capacity of 2 megawatts in cooperation with industry and science partners since 2018 as part of the Carbon2Chem® project. In this project, individual processes, from water electrolysis to the material use of CO_2 with the help of electrolytically produced hydrogen, are being brought together and tested under industrial conditions with actual metallurgical gases. Using this approach, we are also able to test different modes of operation, including rapidly changing load profiles.

The flexibility of the plant is important to cope with the intermittent supply of renewable energies and participate in the dispatchable electricity markets.

The performance and capacity of the Carbon2Chem® plant achieved in the 2023/2024 reporting year were in line with expectations. Following the successful completion of the first phase of the project, the intention of the second phase, launched in 2021, was to demonstrate long-term stability. With the conclusion of the second funding phase in June 2024, the proof of a long-term stable water electrolysis system was successfully demonstrated.

Consolidating our market position in electrolysis design

Our R&D initiatives are principally centered on advancing our technologies:

- Improving single-element cells in terms of both capital expenditures (CapEx) and operating expenditures (OpEx)
- Optimizing components of AWE electrolysis technology
- Advancing stacking and modular design
- Maximizing long-term operation
- Optimizing and scaling the production process
- Enhancing and automating product assembly

The thyssenkrupp nucera covers the necessary R&D activities in the field of chlor-alkali electrolysis and alkaline water electrolysis:

- Basic research in the field of industrial electrochemistry and performance of analytical evaluations in cooperation with universities, research institutes, partners, and customers
- Design, calculations, and simulations in the fields of electrochemistry, electrochemical reactor design, transport phenomena, hydraulics, mechanical and electrical engineering, materials, and design techniques, including those related to the overall plant
- Design, construction, and operation of test facilities, from laboratory cells to full-scale prototypes and pilot plants, for scale-up and validation of technological improvements and new technologies
- Operability of electrolyzers and other plant components, as well as their optimization in interaction with renewable energies
- Working closely with the customer with involvement in the areas of operating facilities and/or construction design

thyssenkrupp nucera's research facilities include numerous testing and pilot plants in Europe and Asia.

In the 2023/2024 fiscal year, the thyssenkrupp nucera Group spent approximately EUR 36 million on research and development, an increase of around 85% compared to the same prior-year period (2022/2023: EUR 19 million). The self-funded R&D ratio before subsidies was 4% and slightly above the previous year's level (2022/2023: 3%). As of the September 30, 2024 reporting date, a total of 68 employees (2022/2023: 53) were engaged in research and development worldwide.

R&D at thyssenkrupp nucera

	2022/2023	**2023/2024**
R&D costs in EUR millions	19	36
R&D ratio in %	3%	4%
R&D employees	53	68

R&D investment in the 2023/2024 fiscal year focused on the development of new products and technologies and adapting existing process expertise to new technical requirements, particularly in the AWE growth market. Our aim is to meet our customers' demand for industrial-scale green hydrogen production capacities through an attractive cost-performance ratio and further efficiency improvements at the plants, thereby strengthening our competitive position.

Increasing focus on next-generation technology

The majority of R&D costs for the AWE business in the 2023/2024 fiscal year were dedicated to improving the components and processes for operating the 20 megawatt scalum® module with high power density at steady output efficiency. Advances were also made in automating cell production and scaling up the module as part of the **H_2Giga initiative,** a funding program of the German Federal Ministry of Education and Research (BMBF), to be able to supply customers with electrolyzers with an output of up to 5 gigawatts per year.

thyssenkrupp nucera is the coordinator of **INSTALL AWE**, a subproject of the **H_2Giga** project, to implement the National Hydrogen Strategy. The project's focus is the fundamental research and testing of the production, use, and system integration of green hydrogen along the entire value chain. The goal of the scale-up project INSTALL AWE is the research and development of technologies for automated large-scale production of alkaline water electrolyzers and, thus, AWE industrialization.

In collaboration with the Institute for Machine Tools and Production Technology at TU Braunschweig, a research assembly facility was established to experimentally qualify selected assembly and automation technologies for the series assembly of thyssenkrupp nucera's AWE cells. The feasibility of automating cell assembly has already been successfully demonstrated. The next step is to translate the research results into industrial applications.

Complementary to the INSTALL AWE research project, thyssenkrupp nucera is exploring solutions in its own NCAlab laboratory and test center in Dortmund to enable rapid implementation of automated assembly solutions for individual process steps. This aims to accelerate the commercial application of the results and facilitate the series assembly of AWE cells.

We are also investigating broader R&D topics related to materials research, manufacturing technology, logistics, robotics, and digitization in an innovation pool with institutions, universities, and small specialized companies. The innovation pool provides an important cross-section for all subprojects to drive their own development by pooling scientific and technical expertise on the topic of series production of electrolysis plants in Germany.

A robot in the "NCAlab" laboratory and test center performing the sealing of a half-shell.

A test assembly system at TU Braunschweig designed for the automated assembly of AWE electrolysis cells, with an emphasis on process interlinking.

The next generation of technology

During the reporting year, thyssenkrupp nucera advanced its R&D efforts to develop an innovative plant architecture for the next generation of technology.

The next step will focus on further improving the design. To achieve this, a new HLT2plus test unit was commissioned at the Carbon2Chem® site in Duisburg in the 2022/2023 fiscal year to produce green hydrogen with alkaline water electrolysis. This additional unit is an essential part of our R&D strategy and marks an expansion in our test field. Tests with short test durations will be carried out by this unit to help improve various design and operational aspects without interfering with long-term testing.

We are also advancing R&D efforts on second-generation AWE technology. Enhancements in module and stack design, cell structure, electrodes, and diaphragm separators are intended to improve overall operating costs. To accelerate development as efficiently and quickly as possible, additional testing facilities have been designed in parallel with technology development and are now in the planning or construction phase. These include facilities for mechanical and flow optimization as well as for electrochemical testing.

Development of high-temperature electrolysis in partnership with Fraunhofer IKTS

In addition to alkaline water electrolysis, thyssenkrupp nucera initiated a strategic partnership in the 2023/2024 fiscal year with the Fraunhofer Institute for Ceramic Technologies and Systems (Fraunhofer IKTS) to industrialize the highly innovative high-temperature electrolysis (SOEC) for hydrogen production. In this partnership, the SOEC technology, exclusively licensed by Fraunhofer IKTS, will be further developed by both partners for industrial manufacturing and application.

thyssenkrupp nucera is currently expanding its development teams to work with Fraunhofer IKTS in establishing and commissioning pilot production for SOEC stacks. Additionally, the necessary laboratory and testing facilities are being planned and created to characterize, further develop, and qualify the stacks and the modules built from them.

R&D focus on environmentally friendly and energy-saving CA processes

In the CA business, thyssenkrupp nucera Group focused its R&D activities in the 2023/2024 reporting year on further developing the environmentally friendly and energy-saving membrane electrolysis process. The emphasis was on reducing the investment and operating costs of our current BM and BiTAC® technologies.

Design enhancements and the qualification of optimized coatings and membranes were achieved, which supports our customers in their drive to save energy. Work is also underway on resource-optimized internal cell structures.

Through our extensive testing, we have been able to advance our HCl-ODC and NaCl-ODC electrolysis technologies by expanding their application possibilities and reducing their energy consumption. We further optimized both technologies together with our partners and are continuing their development at our test centers in Gersthofen, Germany. In HCl-OCD technology, the introduction of a zero-gap concept, where there is no gap between the electrodes and the membrane, has achieved significant energy savings. This is primarily accomplished through a patented spring geometry that completely eliminates the gap.

To safeguard our new products and technologies, we employ a patent strategy. During the past fiscal year, the thyssenkrupp nucera Group strengthened its patent portfolio by receiving approval for 27 patents and filing 12 new applications, with further applications in preparation.

2. Economic situation

2.1 Economic environment

The following description of the economic environment includes the general global economic developments in the past fiscal year as well as details on regions of particular significance to thyssenkrupp nucera. It also highlights the changes compared to the previous year and incorporates relevant facts and events known at the time the Consolidated Financial Statements and Combined Management Report were prepared that may influence future business development. The main source for the qualitative description of the past fiscal year and the outlook is the International Monetary Fund's "World Economic Outlook", October 2024 issue. The figures presented are taken from S&P Global (Global Economy – November 2024). Other sources from German and international economic research institutes and organizations were also taken into account.

The **global economic situation** was volatile in the 2024 calendar year, with global growth staying below the pre-pandemic average due to the impact of tight monetary policy and increased geopolitical uncertainty. Following a 2.9% year-over-year increase in global economic output in 2023, the fourth quarter of 2023 saw a slightly lower growth rate of 2.8%, falling just below the annual average. A global GDP growth rate of 2.7% is anticipated for 2024.

High exports from Asia and strong regional growth in countries such as the United States, China, and India supported the development of the global economy in the 2024 calendar year. At the same time, the decline in inflation is slowing, particularly due to higher prices for services, which hampers global economic momentum. Global trade increased in the first quarter of 2024, driven by exports from Asia. The European Union also showed early signs of recovery, with economic growth reaching 1.0% in the third quarter of 2024, the highest level since early 2023. In China, increased domestic consumption has bolstered economic performance, although overall growth slowed slightly to +4.6% in the third quarter compared to the first two quarters of 2024.

The global economic outlook is broadly stable but overshadowed by significant uncertainties. Notable examples include escalating trade tensions and heightened political uncertainty stemming from the upcoming change of government in the United States. Furthermore, disinflation efforts have slowed, with inflationary pressures persisting in the service sector and wage growth remaining elevated. This trend is particularly pronounced in industrialized nations like the United States, leading central banks to exercise caution with interest rate cuts. Meanwhile, emerging markets are exposed to additional risks arising from interest rate differentials, including the risk of currency devaluations. Commodity prices, especially in the energy sector, are anticipated to fluctuate, with oil prices expected to stay elevated due to OPEC+ production cuts and geopolitical factors. This is likely to constrain economic growth beyond its current levels. In this context, the growth forecast for the global economy in 2025 remains steady at 2.7% compared to 2024.

Economic growth in the **European Union** has been on the rise since the fourth quarter of 2023, though it remains at a modest level. While inflation continues to ease and the labor market remains robust, the lingering effects of high energy prices and vulnerabilities in interest-sensitive manufacturing and corporate investments are expected to persist. Weakness in energy-intensive sectors, in particular, has placed a drag on overall economic performance. The GDP growth forecast for 2024 is 0.9%, reflecting an intra-year acceleration: growth rates of 0.6% and 0.8% in the first and second quarters of 2024, respectively, and 1.0% in the third quarter. For 2025, the forecast predicts further improvement, with overall growth expected to reach 1.3%.[3] Economic developments in the European Union are especially significant for the segments Germany and Italy. Equally important in this context are the industry trends detailed in the following section, "Industry Environment."

In **Germany**, an economic recovery has not yet materialized in the 2024 calendar year. After a decline of –0.2% in the fourth quarter of 2023, the first three quarters of 2024 also recorded a slight contraction in economic performance. Overall, a decline of –0.1% is forecast for 2024, reflecting the same development as in 2023 and underperforming its European neighbors. Demographic changes are reducing the labor force potential and driving a trend towards rising labor costs. Structural shifts are also significantly affecting the manufacturing sector. Energy-intensive industries, which struggle with high energy costs, and sectors such as mechanical engineering and automotive manufacturing, which face strong global competition, particularly face challenges. For 2025, the forecast predicts a modest recovery, with growth expected to reach 0.6%.[4]

[3] Qualitative description based on S&P Global (Economics Eurozone Economic Outlook August 2024); figures based on S&P (Global Economy – September 2024).

[4] Qualitative description based on the ifo Institute (ifo Economic Forecast Fall 2024: German Economy in Crisis); figures based on S&P (Global Economy – September 2024).

Global economic growth

Real year-over-year change in %	2023	**2024[A]**	2025[A]
World	2.9%	2.7%	2.7%
European Union	0.5%	0.9%	1.3%
Germany	–0.1%	–0.1%	0.6%
USA	2.9%	2.7%	2.0%
China	5.2%	4.9%	4.6%
Japan	1.7%	–0.2%	1.2%
India	8.1%	6.8%	6.5%
Middle East & North Africa	1.3%	1.0%	3.2%
South America	1.9%	2.1%	2.8%
Australia	2.0%	1.3%	2.3%

[A]Calendar year; figures for 2025 and partly for 2024 based on forecasts.

Source: S&P Global (Global Economy – November 2024).

Economic output in the **USA** is expected to increase by 2.7% in 2024. The third quarter of 2024 saw GDP growth of 2.7% year-over-year, marking a slight intra-year decline compared to earlier quarters, where growth was closer to 3% or occasionally above. After an extended period of more dynamic growth, the US economy is expected to slow down for the remainder of 2024, due to weakening consumer spending and a negative impact from foreign trade. A cooling labor market, declining consumption, and the gradual tightening of fiscal policy are anticipated to slow growth further, reaching 2.0% by 2025.

The economic outlook for **China** in 2024 points to GDP growth of 4.9%, which is slightly below the level of 2023. In the second and third quarters of 2024, the pace of economic recovery slowed to a growth rate of 4.7% and 4.6%, respectively, compared to 5.3% in the first quarter of 2024. The growth rate is expected to stabilize at this level. GDP is also forecast to grow by 4.6% in the upcoming year 2025. The recovery in private consumption and a temporary rise in exports are counterbalanced by negative effects from an aging population and a slowdown in productivity growth[5].

In Japan, economic output fell by approximately –1.0% year-over-year in the first quarter of 2024, due to temporary supply disruptions caused by the closure of a major automobile plant during the same period. This negative impact persisted into the second quarter, but by the third quarter, the trend had reversed, with growth reaching 0.3%. Nonetheless, due to the weak start to the year, the projection for economic growth in 2024 anticipates a contraction of –0.2%. The outlook for 2025 is more favorable. Growth is expected to increase to 1.2%, supported by expansionary fiscal policies such as tax relief, wage increases, and the recovery of the *"Silicon Cycle"* (periodic fluctuations in the semiconductor industry driven by demand shifts in the electronics sector). However, risks remain, including potential challenges in overseas markets and the possibility of yen appreciation[6].

In **India**, the economy continues to demonstrate strong growth momentum, with GDP growth for 2024 projected at 6.8%. In the third quarter of 2024, GDP in India expanded by 7.8% year-over-year, surpassing the 6.7% growth recorded in the second quarter. While export performance has been muted due to slower economic growth in industrialized countries, strong investment demand and increasing consumer demand, especially in rural areas, have driven growth so far in 2024. Looking ahead to the coming quarters, inflation is expected to decline further, aligned with global trends and driven by easing pressures on food prices. Meanwhile, a less restrictive monetary policy and ongoing fiscal consolidation are anticipated to support credit expansion. Export growth will likely benefit from the sustained momentum of the services industry. For 2025, GDP growth is forecast at 6.5%.[7]

[5] Qualitative description based on the World Bank Group (China Economic Update 2024); figures based on S&P (Global Economy – September 2024).

[6] Qualitative description based on Daiwa's Institute of Research (Japan's Economy, August 2024); figures based on S&P Global (Global Economy - September 2024).

[7] Qualitative description based on the Asian Development Bank (Economic Forecasts for India 2024); figures based on S&P (Global Economy – September 2024).

GDP growth in the **Middle East and North Africa** (MENA) region is projected to slow slightly, from 1.3% in 2023 to 1.0% in 2024. After a temporary slight contraction in the fourth quarter of 2023, the growth rate gradually improved, reaching 2.0% in the third quarter of 2024. This recovery is largely driven by increased oil production following the end of oil production cuts and strong performance in the non-oil sector, supported by diversification efforts and ongoing reforms. Additionally, eased monetary policy is boosting investment spending, responding to high housing demand in the Gulf region. At the same time, a prolonged, multi-year drought continues to negatively affect agriculture in parts of North Africa. While significant geopolitical risks persist in the region, the forecast for 2025 projects accelerated growth of 3.2%.[8] Developments in the Middle East and North Africa impact not only the Saudi Arabian subsidiary within the Rest of World segment but also the business activities of the Germany and Italy segments.

The economies of **South America** show varying growth prospects. Real GDP growth is projected to reach 2.1% in 2024, marking a slight acceleration from the 1.9% growth recorded in 2023. This forecast is underpinned by an intra-year growth increase from 0.9% in the first quarter to 1.9% in the third quarter, with further improvement expected in the fourth quarter. The growth is largely driven by stronger private consumption and a resilient labor market in Brazil, alongside Argentina's initial recovery from a severe recession following significant macroeconomic adjustments in 2024. Conversely, business sentiment and investment prospects in other South American countries remain muted. The positive growth momentum from 2024 is expected to carry forward into subsequent quarters, accompanied by rising inflationary pressures. In this context, economic growth of 2.8% is forecast for 2025.[9] thyssenkrupp nucera's South American operations are managed through the Italy segment.

Economic growth in **Australia** decelerated in 2024, with persistent price pressures hindering efforts to bring inflation down to the target level. GDP growth for 2024 is projected at 1.3%, a decline from 2.0% in 2023. Growth dropped to 1.0% in the second quarter of 2024, the lowest rate since the COVID-19 pandemic, but slightly rebounded to 1.4% in the third quarter. This improvement is expected to continue, with overall economic growth forecast at 2.3% for 2025. The expected recovery in real disposable household income is anticipated to drive a significant increase in consumption levels.[10]

2.2 Sector environment

Machinery and plant engineering: The global machinery and plant engineering sector is exhibiting diverse trends. Emerging markets such as India are expected to achieve robust industrial production growth of up to 7% in 2024, while industrialized nations face weaker performance. The tighter monetary policies implemented by many central banks are intensifying financing challenges, further restraining economic growth in 2024. In the Eurozone, higher interest rates compared to 2023 are dampening business sentiment in capital-intensive sectors like machinery and construction, as evidenced by low Purchasing Managers' Index (PMI) levels. While inflation is gradually declining, demand for capital goods such as machinery and equipment remains sluggish. As a result, industrial production in the Eurozone is forecast to shrink again by approximately 2% to 3% in 2024, following a significant decline in 2023. In the United States, elevated interest rates continue to weigh on capital-intensive industries like machinery and plant engineering. However, the automotive and high-tech sectors are anticipated to show strong performance in 2024.[11]

In the German machinery and plant engineering sector, conditions remained strained during the 2023/2024 fiscal year. Order intake has stayed at historically low levels, with a real decline of 12% reported in the first half of 2024 compared to the previous year. Domestic orders were particularly hard hit, dropping by 18%, while foreign demand decreased by 9%. Order backlogs also fell by 0.9%. The industry expects a sales decline of 4% to 5% in 2024. Factors such as high energy costs, a difficult financing environment, and a shortage of skilled labor are significantly affecting competitiveness.

A recovery in the global industry is anticipated in 2025, with projected economic growth in the machinery and plant engineering sector exceeding 3%. The impacts of restrictive monetary policy are expected to diminish, with interest rates overall likely to decrease. Economic growth in the machinery and plant engineering sector in the industrialized nations, particularly in Europe, is forecast to remain below the global average, though an improvement in conditions is expected for the European Union and Germany. In contrast, several major emerging markets are outperforming expectations and are expected to show stronger growth prospects for the machinery ad plant engineering sector in the near term.

[8] Qualitative description based on the World Bank Group (MENA Economic Update, April 2024), S&P Global (Economics and Country Risks, August 2024); figures based on S&P Global (Global Economy – September 2024).

[9] Qualitative description based on S&P Global (Economics and Country Risks, August 2024); figures based on S&P Global (Global Economy – September 2024)

[10] Qualitative description based on the Reserve Bank of Australia (Statement on Monetary Policy, August 2024); figures based on S&P Global (Global Economy – September 2024)

[11] Qualitative description and figures based on OPIS (Economy and Energy, August 2024).

Chemical industry: In the 2023/2024 fiscal year, the chemical industry was strongly affected by global economic conditions, which has a direct influence on the demand for chemical end products. Global economic growth has been curbed by higher interest rates compared to the previous year, particularly in the eurozone, where sentiment in the manufacturing sector suffered as a result. Despite these challenges, global industrial production is expected to grow by 2.6% in 2024, following growth of less than 2% in 2023. This countercyclical development is driven by companies adapting to higher financing costs, stabilized supply chains, and continued demand. These trends are reflected in stable demand for chemical products. Key end-user industries, such as consumer goods and electronics, are expected to sustain positive momentum, with signs of recovery also emerging in other industrial sectors [12].

Chemical production in emerging markets remains a key growth driver in 2024. In these markets, industrial production continues to be driven by strong demand, despite a slight slowdown. At the same time, a slow recovery is emerging in industrialized countries, following significant pressure on these markets in the previous year.

With regard to the energy and raw materials situation, natural gas remains a key energy source for the chemical industry, while the transition to renewable energies is gaining importance. So far, efficiency improvement measures have resulted in only a modest reduction in greenhouse gas emissions, but technological innovations, particularly in the field of chemical recycling, are expected to play a key role in making the industry more sustainable and competitive in the long term.

Ensuring the availability of raw materials remains a challenge for the industry, particularly as demand for traditional hydrocarbons continues to decline. It is becoming increasingly important to utilize alternative raw materials and enhance the efficiency of production processes. Emphasizing production volumes and advancing technology will be essential for maintaining the long-term competitiveness of the chemical industry. Moreover, growing demand from the consumer goods industry and expanding automobile production is expected to further support demand for chemical products. Overall, a growth rate of 3.2% is projected for 2025, surpassing the level projected for 2024.

Chlor-alkali industry: The global chlor-alkali market was valued at USD 52.2 billion in 2023 and is projected to increase to USD 53.2 billion in 2024, reflecting an average annual growth rate of 2.9%.

Chlor-alkali production facilities remain vital for manufacturing key chemicals like chlorine and sodium hydroxide (NaOH). These processes are very energy-intensive, with electricity consumption accounting for over 40% of operational costs. In 2024, membrane cell technology will continue to dominate, accounting for about 80% of global production capacity, while the remaining 20% will come from diaphragm and mercury cell technologies. A major trend in the chlor-alkali industry is the shift toward more environmentally friendly technologies. Stringent environmental regulations, especially in Europe and Canada, are accelerating the phase-out of mercury cell technology and supporting the adoption of membrane cell technology[13].

The market is divided into two main segments based on applications: chlorine and caustic soda. Chlorine production in 2024 is expected to reach nearly 76 million tons, after 75 million tons in 2023. The chlorine segment encompasses various applications, including water treatment, pulp and paper processing, and the production of organic and inorganic chemicals. PVC production remains a key driver, representing around 35% of chlorine applications in 2024. This strong link between chlorine demand and PVC production results in fluctuations in overall chlorine demand. Additionally, 18% of chlorine applications in 2024 continued to be attributed to the production of organic compounds, which are vital to the chemical industry and primarily used in manufacturing polyurethanes and within the fuel industry[14].

In 2024, total caustic soda production is expected to reach nearly 83 million tons, surpassing the 2023 level of 80 million tons. A significant portion – 26% of demand – is attributed to organic chemistry, where caustic soda is mainly used for processes such as degreasing and the finishing and dyeing of textiles. Even more important is the aluminum sector, accounting for approximately 34% of caustic soda usage. Rising aluminum demand, especially from the automotive industry and other sectors, is further fueling the need for caustic soda in terms of both sales and volume[15].

The Asia-Pacific region dominated the chlor-alkali sector in 2023 with a market share of 60%, representing a market volume of USD 31 billion. This dominance is expected to continue in 2024, fueled by strong growth in the construction industry and rising demand for PVC pipes in the agricultural sector. Additionally, the rising demand for chlor-alkali products in industries such as water treatment and vinyl polymer production is further boosting this development. China remains the key player, accounting for over 70% of regional consumption. [16]

[12] Qualitative description and figures based on OPIS (Economy and Energy, August 2024).
[13] Qualitative description and figures based on Fortune Business Insights (Chlor Alkali Market Size, Growth | Global Industry Outlook, October 2024).
[14] Qualitative description and figures based on OPIS (World Analysis Chlor-Alkali 2024, January 2024).
[15] Qualitative description and figures based on OPIS (World Analysis Chlor-Alkali 2024, January 2024).
[16] Qualitative description and figures based on Fortune Business Insights (Chlor Alkali Market Size, Growth | Global Industry Outlook, November 2024).

North America holds the second-largest share of the global market, with a strong concentration in the United States. Since 2018, demand for chlorine and caustic soda in North America has declined, leading to an average annual reduction of approximately 2.5% in chlor-alkali production capacity. This trend persisted in 2023, with production capacities reaching 11.5 million tons for chlorine and 12.1 million tons for caustic soda. In 2024, demand for chlorine is expected to stabilize, with production anticipated to grow but remain below 12 million tons for chlorine.[17]

Europe accounts for the third-largest market share, where close collaboration between industry and legislators aims to advance environmentally friendly practices. The European chlor-alkali industry however is currently grappling with challenges, evident in a substantial decrease in production and capacity utilization. In 2023, chemical production in the European Union decreased by a projected 8%. Looking ahead to 2024, production levels are expected to stabilize at the current low level and grow by 0.8%. Capacity utilization dropped to 77% in 2023 and is not expected to recover in 2024. The low production and utilization rates in the EU can be attributed to high cost levels (e.g., energy costs) and weak global industrial activity. Nevertheless, the long-term outlook for the industry remains positive, particularly due to increasing demand from various end-user industries. However, its future success will heavily depend on its ability to adapt to strict environmental regulations and implement innovative, environmentally friendly production methods[18].

The global chlor-alkali market is projected to see growth in 2025, aligning with global GDP trends. This growth will be supported by rising demand for chlorine and caustic soda, leading to a corresponding increase in capacity utilization. The Asia-Pacific region is expected to be the largest growth driver. In North America, production is expected to expand in the medium term, fueled primarily by demand for chlorine in vinyl production and the manufacture of organic chemicals. In contrast, lower growth is projected for the countries of the European Union. A comparable, slightly positive trend is anticipated in subsequent years, as demand is expected to increase across most chlor-alkali end-use segments. [19]

Hydrogen industry: Strategically, hydrogen is considered a crucial vector in the energy transition. The number of hydrogen projects with final investment decisions (FIDs) has increased sevenfold over the past four years. However, during the last reporting period, fewer FIDs were made than anticipated. The global hydrogen industry is currently in its ramp-up phase and still faces challenges in scaling production. Green hydrogen and its derivatives are also significantly more expensive to produce currently than hydrocarbon-based hydrogen.

Additionally, the hydrogen industry is facing macroeconomic headwinds ranging from rising inflation and interest rates to turbulence in global energy markets following geopolitical crises, supply chain bottlenecks, and higher-than-expected costs for renewable electricity. A key sector-specific challenge for the hydrogen industry is the uncertainty surrounding several regulatory frameworks (e.g., the pending implementation of the Renewable Energy Directive (RED III) at the member-state level and the Inflation Reduction Act (IRA) – 45V tax credit for clean hydrogen production), which are affecting project financing. Combined with cost increases for renewable energy and electrolyzers, this has led to delays and cancellations of projects – particularly those related to renewable hydrogen.

According to the International Energy Agency (IEA), global hydrogen demand surpassed 97 million tons in 2023, reflecting a 2.5% rise compared to 2022. In 2024, demand could reach nearly 100 million tons. Hydrogen demand remains concentrated in refining (44%) and ammonia production (34%). Additional demand came from methanol synthesis (17%) and the iron and steel industry (6%). The demand for low-emission hydrogen increased by nearly 10% in 2023 but still accounts for less than 1 million tons of demand.[20] Starting from this low level, demand is expected to grow further in 2024.

By the end of 2023, global installed capacity for water electrolysis had reached 1.4 gigawatts, with nearly 700 megawatts coming online during that year. China accounted for 80% of the new capacity, including the world's largest operational electrolyzer project, the 260-MW Kuqa plant by Sinopec. Around 12% of the new capacity was installed in Europe. From September 2023 to August 2024, European projects achieving FID amounted to a combined capacity of over 2 gigawatts and included developments in Sweden, Germany, Denmark, and Portugal[21].

In its September 2024 Hydrogen Insight Report, the Hydrogen Council identified 1,572 projects slated to become operational by 2030, with 434 projects having already reached final investment decision (FID). Europe's share of the global project pipeline has dropped to 40%, with North America now representing the second-largest region at 20%, followed by China and South America, each at 10%.

[17] Qualitative description and figures based on OPIS (World Analysis Chlor-Alkali 2024, January 2024).
[18] Figures based on Eurochlor (Chlor-Alkali Industry Review 2023/2024); qualitative description based on Fortune Business Insights (Chlor Alkali Market Size, Growth | Global Industry Outlook, November 2024).
[19] Qualitative description and figures based on OPIS (World Analysis Chlor-alkali 2024, January 2024).
[20] Qualitative description and figures based on the International Energy Agency (Global Hydrogen Review 2024, October 2024).
[21] Figures based on Hydrogen Council (Hydrogen Insights 2024, September 2024).

Meanwhile, project developers in India, the Middle East, and other regions are focusing on hydrogen and ammonia exports to demand hubs in Europe and East Asia. In Saudi Arabia, the company Air Products is part of the 2 GW, government-backed NEOM project for green hydrogen, currently under construction. AM Green announced an FID for a 1.3 GW electrolyzer project in India which should be capable of producing around 1 million tons of ammonia per year for nitrogen fertilizer production[22].

Clear regulations and increased government support are essential for fostering stronger future growth dynamics in the green hydrogen sector. Beyond the aforementioned examples, additional developments provide grounds for optimism regarding long-term growth prospects.

In 2024, the European Union announced the winners of the first Hydrogen Bank auction and approved the third IPCEI (Important Project of Common European Interest) round, "IPCEI Hy2Infra". This initiative will support up to 3.2 gigawatts of electrolyzer capacity, 2,700 km of pipelines, at least 370 GWh of storage capacity, and port handling facilities for liquid organic hydrogen carriers (LOHC), equivalent to 6 kilotons of hydrogen equivalent per year. In the EU, the European Commission's approval of state aid programs unlocks private sector investments. The EU and national governments, such as those of Denmark and the United Kingdom, have also awarded initial subsidy programs, and developers are signing preliminary supply agreements with industrial companies aiming to decarbonize their operations. The EU also approved German state aid of up to EUR 2 billion to support thyssenkrupp Steel in decarbonizing steel production and accelerating the use of renewable hydrogen.

In June 2024, Australia proposed a production tax incentive of 2 Australian dollars per kilogram of hydrogen (USD 1.3 per kilogram of hydrogen), similar to the Clean Hydrogen Production Tax Credit under the Inflation Reduction Act in the US. This incentive is set to take effect starting in 2027 for up to ten years for facilities operational by 2030. While the funding is uncapped, the estimated budget is AUD 6.7 billion (USD 4.4 billion) for the period 2024 to 2034. The incentive can be used for domestic consumption and export and also covers ammonia and methanol. Eligibility is restricted to hydrogen with less than 0.6 kilograms of carbon dioxide equivalent per kilogram of produced hydrogen[23].

In addition to developing certification systems, governments are clarifying the rules and requirements for green and low-carbon hydrogen within their national frameworks. The United States is developing guidelines for qualifying hydrogen under the Inflation Reduction Act (IRA) by the end of 2024, while the European Commission is developing a definition for "low-carbon" hydrogen as part of its hydrogen and gas decarbonization package. Brazil has advanced its Brazilian Hydrogen Certification System (SBCH2) and passed a law establishing a greenhouse gas threshold of 7 kilograms of CO_2 equivalent per kilogram of hydrogen produced for low-carbon hydrogen[24].

Based on the developments described, a slightly positive trend is anticipated for 2025. Green hydrogen production capacity is expected to grow, supported by increased regulatory clarity and a growing and maturing project pipeline, which should result in more FIDs for green hydrogen projects. The medium- and long-term outlooks indicate significant growth potential. By 2030, approximately 90 gigawatts of electrolyzer capacity could become operational—a 50-fold increase compared to the 1.75 gigawatts in operation as of May 2024.[25]

2.3 Overview of business performance

Order intake in the alkaline water electrolysis business was EUR 356 million, and higher than the previous year's level (2022/2023: EUR 206 million), mainly driven by the Stegra (H2 Green Steel) project. In the chlor-alkali business, a notable project to highlight is in Brazil with CAPE IGARASSU, a company operated by the Chlorum Solutions Group. The project replaces the existing mercury-based electrolyzer in Igarassu, Brazil, with electrolyzers using our BM2.7 technology. The total order intake in the chlor-alkali business was below the high level in the prior year, in which order intake had reached record levels due to the major OxyChem project in the US.

Sales development in the 2023/2024 fiscal year was largely driven by the progress in executing contracted projects in alkaline water electrolysis, particularly in Saudi Arabia and Sweden. Substantial progress was made during the fiscal year in constructing the electrolyzer plant in Neom, which features capacity of more than two gigawatts. By September 30, 2024, for example, the delivery of standardized 20 MW modules to the customer had already reached a capacity of over 1 gigawatt. Sales in the chlor-alkali business showed modest growth, supported by the continued execution of new construction projects.

22 Qualitative description and figures based on Hydrogen Insights (AM Green takes final investment decision on giant Indian renewable hydrogen-to-ammonia project, August 2024).
23 Qualitative description and figures based on Commonwealth of Australia 2024 (Budget Paper No. 2; Budget Measures, 2024).
24 Qualitative description and figures based on U.S. Department of the Treasury (Remarks by Aviva Aron, October 2024).
25 Qualitative description and figures based on Hydrogen Council (Hydrogen Insights 2024, September 2024).

2.4 Overall statement on business development and economic situation

During the 2023/2024 fiscal year, we achieved key milestones in executing our growth strategy and scaling our operations. This included continuing to ramp up organizationally, which enabled us to significantly increase our global workforce. We also expanded our manufacturing and research capacities in alkaline water electrolysis. Additionally, our strategic partnership with Fraunhofer IKTS on cutting-edge solid oxide electrolyzer cell (SOEC) technology established the foundation for broadening our technology portfolio and tapping into a new growth market.

Order intake in the 2023/2024 fiscal year was EUR 636 million, exceeding the previous year's level (2022/2023: EUR 613 million), driven by the AWE business. Order volume in the chlor-alkali business remained below the prior year's level. We also achieved substantial sales growth, largely due to the ongoing project execution in alkaline water electrolysis. As anticipated, we experienced a temporary, significant drop in EBIT (earnings before interest and taxes) as a result of necessary ramp-up costs. This was in alignment with the execution of our growth strategy and scaling our business to enhance our competitiveness and profitability over the long term.

The management considers the thyssenkrupp nucera Group's net assets, financial position, and results of operations to be positive overall and a solid basis for the company's further development.

2.5 Earnings, financial position, and asset position

Forecast versus actual business performance

We achieved the targets for the key performance indicator "Sales", which was communicated with the publication of the Annual Report 2022/2023, and we exceeded our target for the key performance indicator "EBIT".

Sales in the 2023/2024 fiscal year had been forecast to increase significantly by a mid-double-digit percentage compared to the previous fiscal year (2022/2023: EUR 661 million). This was expected to be driven primarily by the execution of already contracted projects in alkaline water electrolysis. With the publication of the 2023/2024 half-year financial report on May 15, 2024, a more specific sales forecast within the forecast range was announced – sales of EUR 820 million to EUR 900 million – which was in line with the previously expected significant mid-double-digit percentage year-on-year sales increase. With sales of EUR 862 million for the 2023/2024 fiscal year, we achieved this target.

At the segment level, we had expected Germany, Italy, and the US as part of the Rest of World (RoW) segment to contribute to higher sales. The China and Japan segments, on the other hand, were expected to come in slightly below their 2022/2023 fiscal year levels. Sales in the Germany, Italy, and China segments met these expectations. Sales in the Japan segment, in contrast, ended up slightly higher than the prior year's level, whereas sales in the RoW segment were unchanged from the prior year.

A negative EBIT in the mid-double-digit million-euro range (2022/2023: EUR 25 million) was forecast, primarily stemming from the Germany segment. In contrast to the Group's overall development, the Italy segment was anticipated to deliver higher EBIT compared to the previous year.

With EBIT of EUR –14 million, we surpassed this target at the Group level. At the segment level, the decline in Germany and the increase in Italy were in line with expectations. Deviating from the Group's overall development, the EBIT in the Japan and China segments exceeded expectations, ending slightly above the prior year's levels, while the RoW segment ultimately contributed to the EBIT's decline.

Results of operations

thyssenkrupp nucera's **order intake** for the 2023/2024 fiscal year amounted to EUR 636 million, or 4% higher than the volume in the prior year (2022/2023: EUR 613 million). Of this amount, EUR 356 million originated from the AWE business (2022/2023: EUR 206 million) and EUR 279 million from the chlor-alkali business (2022/2023: EUR 408 million).

The strong order intake in the AWE business was primarily driven by the Stegra project, which contributed more than EUR 300 million during the reporting period.

We also secured new orders in the chlor-alkali business. Particularly noteworthy is the project with CAPE IGARASSU, a company operated by the Chlorum Solutions Group. The project involves replacing the existing mercury-based electrolyzer in Igarassu, Brazil, with electrolyzers using our BM2.7 technology.

Of the total order intake in the chlor-alkali (CA) business, EUR 84 million (2022/2023: EUR 221 million) originated from the New Build business, and EUR 196 million (2022/2023: EUR 187 million) from the Service business. The decline in order intake in the CA business was therefore attributed to the New Build business, which had benefited in the prior year from a large order from OxyChem in the US. Order intake from the New Build business was lower than the prior year across all segments, with the most pronounced declines in the RoW and Italy segments. New orders in the Service business, in contrast, were slightly higher year-on-year, as growth in the Germany and China segments more than compensated for the decline in the Italy segment.

In EUR millions	2022/2023	**2023/2024**	% change
Order intake	613	636	4
thereof: Order Intake AWE	206	356	73
thereof: Order Intake CA	408	279	(31)

The **order backlog** as of September 30, 2024, amounted to EUR 1.1 billion (September 30, 2023: EUR 1.4 billion), of which EUR 0.7 billion was attributable to the AWE business (September 30, 2023: EUR 0.9 billion) and EUR 0.4 billion to the CA business (September 30, 2023: EUR 0.5 billion). The decline in the order backlog resulted from the progress in project execution, also reflected in the sales growth.

Sales rose 30% to EUR 862 million (2022/2023: EUR 661 million) in the 2023/2024 fiscal year. The largest share of sales, EUR 554 million (2022/2023: EUR 393 million), was generated by the Germany segment, representing 64% (2022/2023: 59%), followed by Italy with 14% (2022/2023: 12%) and China with 10% (2022/2023: 13%).

Broken down by electrolysis technology, sales in the AWE business experienced significant growth, reaching EUR 524 million, amounting to a year-on-year increase of 60% (2022/2023: EUR 328 million). Sales growth was driven primarily by the ongoing execution of the NEOM project in Saudi Arabia. The Stegra project in Sweden also contributed to the sales increase.

Sales in the chlor-alkali (CA) business equaled EUR 338 million (2022/2023: EUR 333 million). In the New Build business, we achieved sales of EUR 159 million (2022/2023: EUR 113 million), while the Service business generated sales of EUR 179 million (2022/2023: EUR 220 million). The New Build business experienced significant growth in the Italy segment, with an increase of 75% to EUR 58 million (2022/2023: EUR 33 million), and in the China segment, with an increase of 16% to EUR 55 million (2022/2023: EUR 47 million). The New Build business in the Rest of World (RoW) segment also grew significantly, reaching EUR 17 million (2022/2023: EUR 4 million). In the Japan segment, the New Build business increased to EUR 15 million (2022/2023: EUR 11 million). The chlor-alkali New Build business in the Germany segment declined to EUR 15 million compared to EUR 18 million in the previous year (2022/2023). Sales from the Service business declined across all segments during the reporting period.

In EUR millions	2022/2023[1]	**2023/2024**	% change
Sales	661	862	30
thereof: Sales AWE	328	524	60
thereof: Sales CA	333	338	1

[1]The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Gross margin decreased to EUR 91 million (2022/2023: EUR 96 million). Due to the currently lower-margin AWE segment, alongside mix and volume effects, the gross margin as a percentage of sales declined from 15% to 11%.

Research and development cost increased to EUR 36 million (2022/2023: EUR 19 million). The steady expansion of the alkaline water electrolysis business caused **selling expenses** to rise to EUR 22 million (2022/2023: EUR 20 million). As a result of the continued organizational build-up, **general and administrative expenses** increased by EUR 19 million to EUR 56 million (2022/2023: EUR 37 million).

Earnings before interest and taxes (EBIT) decreased during the reporting period by EUR –39 million to EUR –14 million (2022/2023: EUR 25 million). Of this amount, EUR –76 million was attributed to alkaline water electrolysis, while EUR 62 million was related to the chlor-alkali business. The EBIT decline, as planned, was primarily due to increased research and development cost and higher administrative expenses related to the growth strategy for AWE and organizational expansion. Additionally, the higher share of sales from AWE, which is currently associated with lower gross margins, contributed to the expected decline in earnings. This decline was partially offset by higher contributions from the CA business and one-off effects, including those related to inventory valuation.

Financial income/(expense), net improved to EUR 26 million, driven by higher interest income (2022/2023: EUR 11 million). Income taxes totaled EUR –1 million (2022/2023: EUR –12 million). This was partly due to a reduction in current income tax expenses, reflecting the development of earnings before taxes. Additionally, the German tax group of consolidated companies reported a loss, resulting in a deferred income tax benefit, supported by sufficient evidence of the recoverability of recognized deferred tax assets. After taxes on income and earnings, **net income** amounted to EUR 11 million, compared to EUR 24 million in the prior year. **Earnings per share** attributable to the shareholders of thyssenkrupp nucera decreased to EUR 0.09 (2022/2023: EUR 0.22).

thyssenkrupp nucera – Consolidated Statement of Profit and Loss

In EUR millions	2022/2023[1]	**2023/2024**
Sales	661	862
Cost of sales	(565)	(771)
Gross margin	**96**	**91**
Research and development cost	(19)	(36)
Selling expenses	(20)	(22)
General and administrative expenses	(37)	(55)
Other income	7	12
Other expenses	(2)	(4)
Income from operations	**25**	**(14)**
Finance income	14	29
Finance expenses	(3)	(3)
Financial income/(expense), net	**11**	**26**
Income before taxes	**36**	**12**
Income tax expense	(12)	(1)
Net income	**24**	**11**
Thereof: Attributable to thyssenkrupp nucera AG & KGaA stockholders	24	11
Earnings per share (in euros) (basic = diluted)	0.22	0.09
Weighted average of outstanding shares (in million units)	106	126

[1]The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Net assets

Total assets for the fiscal year compared to September 30, 2023 increased by EUR 111 million to EUR 1,261 million. Non-current assets equaled EUR 108 million, exceeding the prior year's level (September 30, 2023: EUR 90 million). The rise in non-current assets was primarily driven by deferred tax assets, which grew to EUR 29 million (September 30, 2023: EUR 21 million) as a result of tax loss carryforwards in Germany, along with an increase in property, plant, and equipment, and intangible assets.

Current assets grew from EUR 1,060 million to EUR 1,153 million. The main factors contributing to this increase are detailed below.

Inventories increased by EUR 42 million to EUR 147 million, driven partly by higher raw material stocks due to strategic stockpiling to fulfill future order backlogs. Progress in production orders was the primary driver of the increase in contract assets to EUR 122 million during the 2023/2024 reporting year (September 30, 2023: EUR 34 million). The EUR 14 million increase in trade accounts receivable to EUR 63 million was reporting date related. Other non-financial assets, consisting primarily of advance payments to suppliers, rose from EUR 100 million to EUR 132 million during the 2023/2024 fiscal year.

Offsetting this was the decline in cash and cash equivalents to EUR 680 million (September 30, 2023: EUR 767 million), driven by high capital expenditures related to strategic inventory stockpiling.

Equity totaled EUR 754 million (September 30, 2023: EUR 747 million). The equity ratio decreased from 65% to 60%. Equity was boosted by EUR 11 million from net income (September 30, 2023: increase of EUR 24 million). No dividends were paid, as was the case in the prior year.

The rise in trade accounts payable from EUR 128 million to EUR 163 million mainly reflected progress in production orders, as reflected, among other factors, by the growth in contract assets. Additionally, a rise in current obligations from EUR 7 million to EUR 9 million resulted from the company's subordinate liability for the Management Board's pension obligations and the transfer of employees from the thyssenkrupp Group. The higher order execution and related warranty risks from project activities drove current other provisions up from EUR 45 million to EUR 56 million. Contract liabilities increased to EUR 225 million compared to the prior year (September 30, 2023: EUR 174 million), primarily due to the higher order backlog and related advance payments on long-term production contracts. Other non-financial liabilities grew from EUR 12 million to EUR 20 million.

thyssenkrupp nucera – Consolidated Statement of Financial Position

In EUR millions	Oct. 1, 2022[1]	Sept. 30, 2023[1]	**Sept. 30, 2024**
Property, plant and equipment	8	10	14
Goodwill	57	55	55
Intangible assets other than goodwill	1	1	7
Other financial assets	1	0	0
Other non-financial assets	2	3	3
Deferred tax assets	12	21	29
Non-current assets	**81**	**90**	**108**
Inventories	77	106	147
Trade accounts receivable	36	49	63
Contract assets	13	34	122
Other financial assets	256	3	3
Other non-financial assets	55	100	132
Current income tax assets	0	1	6
Cash and cash equivalents	27	767	680
Current assets	**464**	**1,060**	**1,153**
Total assets	**545**	**1,150**	**1,261**

In EUR millions	Oct. 1, 2022[1]	Sept. 30, 2023[1]	**Sept. 30, 2024**
Capital stock	100	126	126
Additional paid in capital	17	510	506
Retained earnings	90	114	126
Cumulated other comprehensive income	6	(3)	(4)
Equity attributable to thyssenkrupp nucera AG & KGaA stockholders	**213**	**747**	**754**
Provisions for pensions and similar obligations	7	7	9
Provisions for other non-current employee benefits	0	1	0
Other provisions	2	1	1
Deferred tax liabilities	10	14	13
Lease liabilities, non-current	2	2	3
Other financial liabilities	–	1	1
Non-current liabilities	**21**	**26**	**27**
Provisions for current employee benefits	3	4	5
Other provisions	38	45	56
Current income tax liabilities	3	7	5
Lease liabilities, current	2	3	2
Trade accounts payable	43	128	163
Other financial liabilities	4	4	4
Contract liabilities	205	174	225
Other non-financial liabilities	13	12	20
Current liabilities	**311**	**377**	**480**
Total liabilities	**332**	**403**	**507**
Total equity and liabilities	**545**	**1,150**	**1,261**

[1]The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Financial position

Principles and objectives of financial management
The financing of the thyssenkrupp nucera Group is generally the central responsibility of thyssenkrupp nucera AG & Co. KGaA. Multi-year financial planning and a monthly rolling liquidity plan with a planning horizon of up to one year form the basis of financing. The Group has liquidity surpluses that are largely attributable to the IPO conducted in the 2022/2023 fiscal year.

Through centralized financing, thyssenkrupp nucera seeks to strengthen its negotiating position with banks and other market participants while securing capital investments under optimal conditions. The primary focus is on maintaining liquidity and ensuring the security of related financial assets.

Net financial assets and available liquidity
Net financial assets are calculated as the balance of recognized cash, cash equivalents, and term deposits, offset against current debt instruments and non-current and current financial liabilities. As of September 30, 2024, thyssenkrupp nucera recorded net financial assets of EUR 673 million (September 30, 2023: EUR 761 million). The available liquidity of thyssenkrupp nucera equaled EUR 680 million as of September 30, 2024 (September 30, 2023: EUR 767 million).

The financing and liquidity of the thyssenkrupp nucera Group were ensured at all times during the reporting year.

Analysis of the Statement of Cash Flows
The liquid funds referred to in the cash flow statement correspond to the item “Cash and cash equivalents” on the statement of financial position.

Cash flow from operating activities
In the reporting year, negative cash flow from operating activities amounted to EUR –62 million, representing a deterioration compared to the prior year (2022/2023: EUR –13 million). The primary drivers were higher inventory levels and an increase in contract assets. Contract assets increased to EUR 122 million in the 2023/2024 fiscal year (2022/2023: EUR 34 million), primarily driven by a decline in unbillable sales related to the fulfillment of performance obligations. These exceeded the amounts invoiced to customers for projects recognized as contract assets.

Offsetting effects resulted largely from an increase in trade accounts payable.

Contract liabilities rose to EUR 225 million in the 2023/2024 fiscal year (2022/2023: EUR 174 million), mainly due to higher advance payments linked to new large-scale projects.

Cash flow from investing activities
Cash flow from investing activities amounted to EUR –16 million, predominantly driven by investments in property, plant, and equipment, and intangible assets and expenditures for the purchase of consolidated companies (2022/2023: EUR 243 million). The significant positive effect in the previous year resulted from the proceeds from freed-up cash pool deposits.

As of the end of the 2022/2023 fiscal year, cash-pooling activities had ceased, as the agreement with thyssenkrupp AG was terminated in June 2023 in preparation for the IPO. The freed-up funds were invested in short-term money market instruments that qualify as cash and cash equivalents.

Cash flow from financing activities
After cash inflows from financing activities totaling EUR 515 million in the prior year, largely resulting from IPO proceeds, cash outflows from financing activities in the 2023/2024 fiscal year amounted to EUR –7 million. This was primarily due to repayments of lease liabilities and payments for capital procurement costs related to the IPO completed in the prior year.

Free cash flow
Free cash flow (cash flow from operating activities plus cash flow from investing activities) from continuing operations was sharply negative, totaling EUR –79 million (2022/2023: EUR 230 million). This year-over-year decline was primarily driven by the cash flow from investing activities.

thyssenkrupp nucera – Consolidated Statement of Cash Flows

In EUR millions	2022/2023[1]	2023/2024
Net income	**24**	**11**
Adjustments to reconcile net income/(loss) to operating cash flows:		
Deferred tax expense/(income)	(1)	(8)
Depreciation, amortization and impairment of non-current assets	6	6
(Gain)/loss on disposal of non-current assets	0	0
Changes in assets and liabilities, net of other non-cash changes:		
- Inventories	(32)	(42)
- Trade accounts receivable	(14)	(15)
- Contract assets	(21)	(89)
- Accrued pension and similar obligations	1	1
- Other provisions	7	11
- Trade accounts payable	88	36
- Contract liabilities	(24)	52
- Other assets/liabilities not related to investing or financing activities	(47)	(25)
Operating cash flow	**(13)**	**(62)**
Expenditures for acquisitions of consolidated companies net of cash acquired	–	(3)
Investments in property, plant and equipment (including advance payments)	(4)	(6)
Investments in intangible assets (including advance payments)	0	(7)
Proceeds from disposals of property, plant and equipment, intangible assets and non-current assets	0	0
Cash pool withdrawals (deposits)[2]	247	0
Cash flow from investing activities	**243**	**(16)**

In EUR millions	2022/2023[1]	2023/2024
Repayment of lease liabilities	(3)	(3)
Deposits of shareholder[3]	532	–
Cost of capital procurement	(14)	(4)
Payment of dividends to shareholder	–	–
Other financial activities	–	0
Cash flow from financing activities	**515**	**(7)**
Net increase/(decrease) in cash and cash equivalents	**745**	**(85)**
Effect of exchange rate changes on cash and cash equivalents	(5)	(2)
Cash and cash equivalents at the beginning of the reporting period	27	767
Cash and cash equivalents at the end of the reporting period	767	680
Additional information regarding income tax amounts included in operating cash flow:		
Net taxes on income and earnings	(10)	(16)
Interest received	11	26
Interest paid	0	0

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

[2] Cf. Note 2 regarding the change in the presentation of cash pool activities.

[3] Includes, among other things, reimbursed costs for services in connection with the preparation of the IPO by the tk Group in the amount of EUR 2 million.

Annual financial statements of thyssenkrupp nucera AG & Co. KGaA

thyssenkrupp nucera AG & Co. KGaA is the parent company of the thyssenkrupp nucera Group. The annual financial statements of thyssenkrupp nucera AG & Co. KGaA are prepared in accordance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). The separate financial statements are used to determine the unappropriated net profit and, thereby, the potential dividend payout.

The analysis of the net assets, financial position and results of operations are based on the key figures under commercial law and explained in more detail below. The statement of profit and loss prepared in accordance with commercial law is presented using the nature of expense method. The most significant IFRS figures used for internal reporting are also presented, when necessary, to provide an understanding of the net assets, financial position, and results of operations. This is due to the fact that the financial performance indicators are calculated in accordance with International Financial Reporting Standards (IFRS) as a result of integration into the thyssenkrupp Group's management system. As with the thyssenkrupp nucera Group, the most significant performance indicators are sales and EBIT.

The following key aspects of the performance indicators and internal reporting must be taken into account in comparison to the presentation under commercial law:

- The timing of sales recognition, as sales are recognized over a period of time if the requirements are met in accordance with IFRS 15, which is also customary in plant construction
- The focus on the group-wide standardized EBIT, which does not include components such as income from investments, amounting to EUR 17 million in the 2023/2024 fiscal year (2022/2023: EUR 17 million)
- The presentation of the statement of profit or loss using the cost of sales method

Reconciliation of sales from HGB to IFRS*

In EUR millions	2022/2023[1]	**2023/2024**
Sales German GAAP	125	302
IFRS 15 adjustment	298	286
Sales IFRS	423	588

[1]The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Reconciliation of EBIT from HGB to IFRS[1]

In EUR millions	2022/2023[1]	**2023/2024**
EBIT German GAAP	(30)	(30)
IFRS 15 adjustment	298	286
Cost of sales	(282)	(275)
Selling expenses	(1)	(1)
General and administrative expenses	(10)	(24)
Research and development cost	0	0
Other income	16	(6)
Other operating expenses	0	12
EBIT IFRS	(6)	(38)

[1]The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Forecast compared to actual business performance

The sales (IFRS) target communicated in the 2022/2023 annual report for thyssenkrupp nucera AG & Co. KGaA was achieved, while the EBIT (IFRS) target was exceeded.

For the 2023/2024 fiscal year, sales (IFRS) was expected to increase significantly, in the mid-double-digit percentage range, compared to the previous fiscal year (2022/2023: EUR 423 million). This growth was expected to be driven largely by the execution of already contractually agreed projects in alkaline water electrolysis. With sales of EUR 588 million, representing a year-on-year increase of 40%, we successfully achieved this target.

In the case of EBIT (IFRS), a negative figure in the high double-digit million-euro range (2022/2023: EUR –7 million) had been expected. With an EBIT of EUR –38 million, we exceeded this target. This development was driven above all by a stronger earnings contribution from the CA business and one-time effects, particularly related to inventory valuation.

Results of operations

In the 2023/2024 fiscal year, thyssenkrupp nucera AG & Co. KGaA recorded a net profit of EUR 12 million, following a net loss in the previous year of EUR 8 million.

Order intake at thyssenkrupp nucera AG & Co. KGaA amounted to EUR 300 million in the 2023/2024 fiscal year, above the level of the prior period (2022/2023: EUR 181 million). A significant portion of the recorded order volume was related to the Stegra project in alkaline water electrolysis.

Sales (under HGB accounting) increased to EUR 302 million (2022/2023: EUR 125 million). Sales by major sales regions included Germany with EUR 30 million (2022/2023: EUR 25 million), other EU countries with EUR 117 million (2022/2023: EUR 27 million), the rest of Europe with EUR 1 million (2022/2023: EUR 1 million), Asia with EUR 144 million (2022/2023: EUR 54 million) and North America with EUR 9 million (2022/2023: EUR 17 million).

The cost of materials rose to EUR 534 million (2022/2023: EUR 345 million). Personnel expenses rose in the 2023/2024 fiscal year to EUR 58 million (2022/2023: EUR 39 million) due to new hires in connection with the expansion of our growing AWE business and the creation of central administrative functions.

Other operating income declined to EUR 10 million (2022/2023: EUR 11 million). Key contributors to other operating income included the partial reversal of provisions for anticipated costs on completed contracts, the reversal of provisions for warranty obligations, and an insurance reimbursement. The results of operations of the 2023/2024 fiscal year were also significantly affected by the write-off of hidden reserves disclosed during the legal spin-off in 2013, which amounted to EUR 7 million (2022/2023: EUR –7 million). Other operating expenses increased to EUR 57 million (2022/2023: EUR 46 million), mainly due to additions to provisions for follow-on costs, external services, and consultancy costs.

In the 2023/2024 fiscal year, thyssenkrupp nucera AG & Co. KGaA received EUR 17 million in income from investments in its direct subsidiaries (2022/2023: EUR 17 million). A positive interest result was generated in the 2023/2024 fiscal year due to higher bank balances after the IPO and the related higher interest income. Earnings before taxes increased to EUR 10 million (2022/2023: EUR –5 million). The net profit also increased to EUR 12 million (2022/2023: EUR –8 million) and exceeded the pre-tax result as a result of a deferred income tax benefit.

In terms of IFRS key figures, sales increased by EUR 165 million to EUR 588 million compared to the previous year. While sales from the Service business decreased, there was a significant increase in sales in the New Build business, which was mainly due to the progress made in the processing of major orders in the field of alkaline water electrolysis.

EBIT (IFRS) fell by EUR –32 million to EUR –38 million. Although higher sales led to an increase in gross profit under IFRS, the drop in EBIT (IFRS) was driven by rising research and development cost, along with higher administrative and selling expenses to support the implementation of the growth strategy and the organizational scaling of the expanding AWE business.

Net assets

Total assets increased by EUR 28 million compared to September 30, 2023 and amounted to EUR 955 million at the end of the September 30, 2024 reporting period.

On the assets side of the balance sheet, fixed assets remained essentially unchanged. Additions of EUR 9 million were primarily offset by scheduled amortization of intangible assets of EUR 7 million (September 30, 2023: EUR 7 million) and depreciation of property, plant and equipment of EUR 1 million (September 30, 2023: EUR 0 million). Financial assets, which include shares in subsidiaries, rose mainly due to capital increases at subsidiaries in Germany and Saudi Arabia.

Current assets (after netting out advance payments received within inventories) increased overall by EUR 19 million compared to September 30, 2023, reaching EUR 759 million as of September 30, 2024. The increase was primarily attributable to the rise in raw materials, supplies, and work-in-progress, partially offset by a decline in cash and cash equivalents, which included other securities, cash on hand, and bank balances.

The rise in provisions was primarily attributable to the increase in other provisions. The recognition of provisions for outstanding supplier invoices and provisions for anticipated costs on billed contracts, which depend on the volume of order backlog, and higher personnel provisions due to new hires, were largely the contributors to an increase of EUR 11 million in other provisions, bringing the total to EUR 69 million (September 30, 2023: EUR 58 million). Provisions for accrued pensions and similar obligations showed little change. A reduction in tax provisions resulted from the elimination of a tax obligation in Spain.

Liabilities increased overall in the reporting year. The increase in trade accounts payable of EUR 8 million to EUR 62 million resulted mainly from liabilities for material deliveries. Liabilities to affiliated companies amounted to EUR 56 million and were EUR 2 million lower than in the previous year (September 30, 2023: EUR 57 million).

As a result, the total equity and liabilities as of September 30, 2024 equaled EUR 955 million (September 30, 2023: EUR 927 million). Equity increased by EUR 12 million due to the profit (September 30, 2023: a reduction of EUR 8 million). No dividends were distributed during the 2023/2024 fiscal year, as was the case in the prior year. Equity at the end of the reporting period thus amounted to EUR 761 million (September 30, 2023: EUR 749 million), yielding a solid equity ratio of 80% (September 30, 2023: 81%) and continuing to significantly exceed fixed assets of EUR 191 million (September 30, 2023: EUR 184 million).

Financial position
The company itself is responsible for financing thyssenkrupp nucera AG & Co. KGaA. The most important source of liquidity is cash inflows from operating activities. No financing is received from third parties, such as banks.

thyssenkrupp nucera AG & Co. KGaA uses off-balance-sheet financing instruments, such as operating leases, specifically in the context of fleet management and real estate leasing. The reason for this approach is the low capital commitment compared to acquisition as well as the absence of residual value risk. The advantage of real estate leasing is the flexibility to react to any changes in the branch structures.

Financing and liquidity were ensured at all times during the reporting year.

Expectations for 2024/2025
For a detailed overview of the material macroeconomic assumptions and expected economic conditions for the 2024/2025 fiscal year, especially concerning growth in the green hydrogen sector, please refer to the sections “Economic Environment” and “Sector Environment” at the beginning of this chapter. Related opportunities and risks are discussed in the chapter “Opportunity and risk report.”

We anticipate sales (IFRS) for thyssenkrupp nucera AG & Co. KGaA to range between EUR 480 million and EUR 580 million (2023/2024: EUR 588 million). Sales are expected to be generated largely from the already contractually agreed projects. The projected decline in sales compared to the prior fiscal year is expected to stem from lower AWE sales, particularly due to the recognition of lower sales from the NEOM project in Saudi Arabia, which has already reached an advanced stage of completion. In the CA business, we expect sales to grow in line with the positive trends in the chlor-alkali service business. This forecast also incorporates new orders from the 2024/2025 fiscal year.

We expect EBIT (IFRS) to range between EUR –45 million and EUR –15 million (2023/2024: EUR –38 million). This includes a stronger gross margin in the AWE business, supported by project-related operations, enabling the AWE gross profit to improve despite declining sales. In contrast, the CA business is expected to see a decline in gross profit due to the execution of some lower-margin orders.

Closing statement of the Dependency Report
We declare the following in accordance with Section 312 AktG: Concerning the legal transactions and measures listed in the report on relationships with affiliated companies, based on the circumstances known at that time, our company received appropriate consideration for each legal transaction carried out and was not placed at any disadvantage based on measures that were taken or not taken.

Statement of profit and loss

In EUR millions	2022/2023	**2023/2024**
Sales	125	302
Increase or decrease in inventories for work-in-progress	273	309
Other operating income	11	17
Cost of materials	(345)	(534)
Personnel expenses	(39)	(58)
Write-downs of financial assets and marketable securities	(8)	(9)
Other operating expenses	(46)	(57)
Income from investments	17	17
Interest result	7	21
Income tax expense	(3)	2
Net profit	**(8)**	**12**

Condensed statement of financial position and statement of profit and loss of thyssenkrupp nucera AG & Co. KGaA

Statement of Financial Position

In EUR millions	Sept. 30, 2023	Sept. 30, 2024
Assets		
Fixed assets	**184**	**191**
Intangible assets	47	45
Property, plant and equipment	6	8
Financial assets	131	138
Current Assets	**740**	**759**
Inventories	52	105
Receivables and other assets	24	34
Cash, cash equivalents and time deposits	664	621
Prepaid expenses	**3**	**4**
Total assets	**927**	**955**

In EUR millions	Sept. 30, 2023	Sept. 30, 2024
Equity and liabilities		
Equity	**749**	**761**
Subscribed capital	126	126
Additional paid in capital	630	630
Other retained earnings	6	6
Accumulated deficit	(14)	(2)
Provisions	**66**	**76**
Provisions for pensions and similar obligations	5	6
Tax provisions	3	0
Other provisions	58	69
Liabilities	**112**	**118**
Trade accounts payable	54	62
Other liabilities	58	57
Prepaid expenses	**0**	**0**
Total equity and liabilities	**927**	**955**

2.6 Segment reporting

The Group has five reporting segments, which are described in more detail below. These reporting segments reflect the Group's internal organizational and management structures, as well as the reporting lines to the Management Board. The Group's reporting segments are Germany, Italy, Japan, China and Rest of World (RoW).

Each segment is responsible for its own activities and operates largely independently within the Group. The segments are fully responsible for their own operating business. The managing directors of the legally independent units report directly to the Management Board of thyssenkrupp nucera. The Management Board of thyssenkrupp nucera regularly monitors the segments' results in order to assess their business performance and make decisions as to the resources to be allocated to each segment.

Segment Germany

The segment Germany serves mainly customers located in Europe and the Middle East and offers the entire product portfolio, from New Build CA as well as services and New Build AWE. It is responsible for expanding the product group New Build CA, research and development activities, identifying business opportunities in various markets and industries, and launching new products and product groups in the other segments. This segment also has the lead function for BM2.7 single-element technology and centrally procures technology-related parts for other segments.

Segment Germany in figures

In EUR millions	2022/2023[1]	**2023/2024**	% change
Order intake	181	300	66%
External sales	393	554	41%
Internal sales	30	34	13%
Earnings before interest and taxes (EBIT)	(6)	(38)	--

[1]The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Order intake

The order intake for segment Germany in the 2023/2024 fiscal year amounted to EUR 300 million, exceeding the prior year's level (2022/2023: EUR 181 million). A large portion of the recorded volume related to the Stegra project in the AWE business. Order intake for CA technology totaled EUR 83 million (2022/2023: EUR 59 million), while order intake for AWE technology reached EUR 217 million (2022/2023: EUR 122 million).

Sales

Sales (external) for segment Germany increased substantially by 41% to EUR 554 million (2022/2023: EUR 393 million). Sales (external) by electrolysis technology for segment Germany were as follows:

In EUR millions	2022/2023	**2023/2024**
Chlor-alkali electrolysis (CA)	96	81
Alkaline water electrolysis (AWE)	296	473

The key driver of the strong sales growth in the AWE business was the progress in executing the NEOM project in Saudi Arabia. The Stegra project also contributed to sales growth. In the CA business, however, sales in both the Service and New Build businesses declined after comparatively low order intake in the 2022/2023 fiscal year.

Earnings before interest and taxes (EBIT)

Earnings before interest and taxes (EBIT) of segment Germany amounted to EUR –38 million, which was below the prior year's level of EUR –6 million. The lower EBIT was primarily attributable to the expansion of the lower-margin AWE segment, planned increases in research and development expenses and higher administrative and selling costs associated with the execution of the growth strategy and organizational scaling. Partially offsetting this was a higher earnings contribution from the CA business and one-time effects, including those related to inventory valuation.

Segment Italy

Segment Italy offers its New Build CA and Service products to a diverse customer base across various geographic regions. Outside of Italy, its primary markets include the Middle East, Africa, South America, and parts of Asia. The segment predominantly utilizes BM2.7 single-element technology. The New Build AWE business is in the development phase and experienced significant growth during the 2023/2024 fiscal year, driven in part by projects in Brazil and Sweden.

Segment Italy in figures

In EUR millions	2022/2023[1]	**2023/2024**	% change
Order intake	173	188	9%
External sales	80	122	52%
Internal sales	2	2	5%
Earnings before interest and taxes (EBIT)	11	16	42%

[1]The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Order intake

The order intake of segment Italy increased 9% in the 2023/2024 fiscal year to EUR 188 million (2022/2023: EUR 173 million). Order intake for CA technology reached EUR 54 million (2022/2023: EUR 100 million), while the order intake for AWE technology was EUR 134 million (2022/2023: EUR 73 million). Growth in the AWE business was supported primarily by the Stegra project in Sweden.

Sales

Sales (external) for segment Italy rose 52% to EUR 122 million (2022/2023: EUR 80 million). This increase was driven by improvements in both the CA business, fueled by growth in New Build activities and the AWE business. Sales (external) by electrolysis technology for segment Italy were as follows:

In EUR millions	2022/2023	**2023/2024**
Chlor-alkali electrolysis (CA)	63	79
Alkaline water electrolysis (AWE)	17	42

Earnings before interest and taxes (EBIT)

Earnings before interest and taxes (EBIT) for segment Italy rose from EUR 11 million in the prior year to EUR 16 million in the 2023/2024 fiscal year, driven by a significantly higher sales volume.

Segment Japan

Segment Japan offers its New Build CA and Service products primarily to customers based in Japan and the Asia-Pacific region (APAC). This segment holds the ownership rights to the BiTAC® filter press technology and centrally sources technology-related components for other segments. The New Build AWE business is currently under development.

Segment Japan in figures

In EUR millions	2022/2023	**2023/2024**	% change
Order intake	52	25	(52)%
External sales	41	43	4%
Internal sales	32	55	75%
Earnings before interest and taxes (EBIT)	11	11	0%

Order intake

Order intake for segment Japan totaled EUR 25 million, a significant drop of –52% compared to the previous year (2022/2023: EUR 52 million) and was fully attributable to the CA business. During the reporting period, fewer New Build projects in the CA business and fewer service orders were secured.

Sales

Sales (external) for segment Japan in the 2023/2024 reporting year reached EUR 43 million, exceeding the prior year's figure (2022/2023: EUR 41 million). Sales (external) by electrolysis technology for segment Japan were as follows:

In EUR millions	2022/2023	**2023/2024**
Chlor-alkali electrolysis (CA)	41	42
Alkaline water electrolysis (AWE)	0	0

Earnings before interest and taxes (EBIT)

Earnings before interest and taxes (EBIT) for segment Japan amounted to EUR 11 million, as in the previous year (2022/2023: EUR 11 million).

Segment China

Segment China places a clear focus on customers in the local Chinese market and offers them New Build CA as well as services, whereby the focus is primarily on BiTAC® filter press technology. The New Build AWE business is currently in development.

The Chinese government's "Carbon Peak" and "Carbon Neutral" targets fueled the rapid development of the Chinese hydrogen market in the AWE sector. So far, several gigawatt projects have been announced in our addressable market.

Segment China in figures

In EUR millions	2022/2023	**2023/2024**	% change
Order intake	87	78	(10)%
External sales	89	87	(2)%
Internal sales	2	8	++
Earnings before interest and taxes (EBIT)	7	9	25%

Order intake

Order intake for segment China declined –10% to EUR 78 million (2022/2023: EUR 87 million), with the entire order intake attributable to the CA business. Although fewer New Build projects were secured in the CA sector, the volume of service orders increased.

Sales

Sales (external) for segment China fell to EUR 87 million (2022/2023: EUR 89 million). Sales (external) by electrolysis technology for segment China were as follows:

In EUR millions	2022/2023	**2023/2024**
Chlor-alkali electrolysis (CA)	89	87
Alkaline water electrolysis (AWE)	0	0

The slight decrease was mainly attributable to a reduction in CA service projects, resulting from lower order intake in this area during the 2022/2023 fiscal year. Sales in the New Build business on the other hand benefited from the realization of sales related to the prior year's higher order intake.

Earnings before interest and taxes (EBIT)

Earnings before interest and taxes (EBIT) for segment China rose to EUR 9 million (2022/2023: EUR 7 million) supported by an improved gross margin, despite the decrease in sales.

Segment RoW

The Rest of World (RoW) segment consolidates financial information from all of the Group's operating segments that, due to their size, are not individually reportable. This includes entities in the US, Australia, Saudi Arabia, and India, as well as the Germany-based thyssenkrupp nucera Participations GmbH and HTE GmbH, which was established in 2024. HTE GmbH, still in its early stages, was established with the purpose of developing an additional product for hydrogen production. It operates as a separate legal entity, independent of the KGaA. For internal reporting purposes, HTE GmbH is also assigned to the RoW segment. The entities in Australia and Saudi Arabia, established in 2022, are still in their setup phases and had no significant business activities as of September 30, 2024, and September 30, 2023, respectively. Similarly, the entity founded in India in the previous year remains in development and reported no significant activities as of September 30, 2024. The segment RoW primarily reflects business activities in the US, which target the US market as well as other regions in the Americas, particularly Canada and Mexico. The segment focuses mainly on service products, utilizing BiTAC filter press technology and BM2.7 single-element technology. Additionally, the AWE business is undergoing a prioritized development phase. The consolidation of segment sales and earnings includes the elimination of intra-group sales and profits.

Segment RoW in figures

In EUR millions	2022/2023[1]	**2023/2024**	% change
Order intake	122	46	(62)%
External sales	58	56	(2)%
Internal sales	0	8	++
Earnings before interest and taxes (EBIT)	2	(11)	––

[1]The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Order intake

Order intake in the segment RoW declined –62% to EUR 46 million (2022/2023: EUR 122 million). Of this, order intake for CA technology totaled EUR 40 million (2022/2023: EUR 111 million), while order intake for AWE technology amounted to EUR 6 million (2022/2023: EUR 10 million). The year-on-year decrease was largely due to the large CA New Build project secured in the prior year with partner OxyChem.

Sales

Sales (external) for segment RoW totaled EUR 56 million, remaining consistent with the prior year's level (2022/2023: EUR 58 million). Sales (external) by electrolysis technology for segment RoW were as follows:

In EUR millions	2022/2023	**2023/2024**
Chlor-alkali electrolysis (CA)	44	48
Alkaline water electrolysis (AWE)	14	8

Earnings before interest and taxes (EBIT)

Earnings before interest and taxes (EBIT) for segment RoW equaled EUR –11 million, for a year-on-year decline of EUR –14 million (2022/2023: EUR 3 million). This decrease was attributable primarily to the expansion of the US organization and the research and development cost associated with the SOEC technology of tk nucera HTE GmbH.

3. Employees

thyssenkrupp nucera is a global, innovative high-tech company. Our success is founded on our employees, who are distinguished by their expertise and ingenuity, their personal commitment and social competence. Each employee plays a role in the company's success and has both the freedom and the obligation to contribute in line with our corporate culture, goals and values.

We believe it is our duty as an employer to give special attention to all human resources management (HRM) issues. This commitment includes continuously developing and offering an attractive work environment for our employees and providing the best talent in the industry. We want to empower our employees to perform at their very best, enabling us to achieve the growth targets we have set ourselves with a highly qualified, motivated, and healthy workforce.

Global realignment of the corporate structure – New Organizational Shape

During the 2023/2024 fiscal year, thyssenkrupp nucera prepared a new management framework under the initiative NOS – New Organizational Shape – which took effect on October 1, 2024.

Extensive preparations for implementing the framework were carried out between May and September 2024 and included roadshows, a video series, a buzzword decoder, and a scrollytelling page. The rollout of the new structure included the introduction of updated functional and regional organizational charts developed to provide a clear and transparent overview of functional and regional responsibilities.

Various communication tools were added to keep employees informed during the transition. Among these tools was a Q&A section addressing common questions as well as a guide to the new structure detailing the changes and their effect on employees. These tools were designed to ensure employees are kept well-informed and able to navigate the new structure with ease.

Continued growth in workforce

During the 2023/2024 reporting year, HR efforts continued to focus on recruiting, onboarding, empowering, and retaining employees and new talent.

The success of these initiatives was evident in the growth of the workforce. As of September 30, 2024, the end of the 2023/2024 reporting year, thyssenkrupp nucera employed 1,012 people worldwide – an increase of 337 employees compared to the previous year (September 30, 2023).

Employees by country

	2023[1]	**2024[1]**
Total	**675**	**1,012**
Germany	386	585
China	83	95
Italy	82	97
Japan	75	80
US	37	59
Australia	3	3
Saudi Arabia	9	24
India	-	69

[1] Figures as of September 30.

Hybrid work – also internationally

We view the constantly evolving work world as an opportunity to attract new talent. To continue providing attractive work opportunities, we further advanced collaboration, processes, and work models in alignment with our business model during the 2023/2024 fiscal year. A key driver in this effort remains the acceleration of the digital transformation of the workplace. Hybrid work – alternating between remote and office-based work – has become a firmly established element of our flexible employment and working time models.

We offer employees the flexibility to alternate regularly between mobile and office-based work, provided their roles meet the necessary operational requirements. We have also put a framework in place enabling our employees in Germany to adopt a hybrid work model when working from other European countries. This initiative continues to support a better balance between work and personal life or leisure.

New alignment of HR tools for leadership

During the 2023/2024 reporting year, we made progress on our realignment of HR tools for leadership. Key initiatives centered, among others, on continually expanding our technical and cross-functional training programs, advancing our HR performance management system, and standardizing bonus structures on a global scale.

The offers and HR tools provided are designed to drive the changes and improvements necessary for the company's growth while strengthening the identification of employees and leadership with thyssenkrupp nucera. Employees and their leaders actively agree on optimization opportunities and development measures during annual employee reviews held outside regular operations. They use a portfolio of internal and external learning opportunities and development measures – such as e-learning, leadership training, 360° feedback, and mentoring – to identify and plan for development needs. To better forecast future qualitative personnel needs, we introduced new workshop formats alongside strategic workforce planning. These workshops help teams identify competencies critical for future success and actively drive their development. In the process, we have expanded the portfolio of training and development offers.

Diversity in leadership

Building diversity in leadership roles has become a defining and transformative aspect of our organization. Through our continued efforts to break down traditional barriers, we significantly increased the share of women in departmental and team leadership positions during the past fiscal year. This change reflects our strategic response to the understanding that a diverse leadership structure drives innovation, adaptability, and sustainable success. In our effort to create an inclusive work environment, we will continue to actively identify, promote, and support talented women within the company. Further information about the current percentage of women and the targets for different management levels is available in the Corporate Governance Statement.

Strategic initiatives for attracting and retaining employees

Our goal remains to further strengthen our position as an attractive employer for highly qualified professionals in the technology sector worldwide. To achieve this, we launched an Instagram page in 2023/2024 to enhance our employer brand and broaden our reach. Visually engaging content captures the attention of our target audience and sparks interest in thyssenkrupp nucera as an employer. By interacting regularly with potential applicants and responding to their comments and messages, we build strong relationships with future talent. Our Instagram page showcases our company's values and culture, establishing a distinctive brand identity and drawing in top candidates. Through analyzing engagement and interactions, we gain valuable insights into our audience's preferences and behavior. These insights help us continuously refine our marketing strategies and secure our position as an employer of choice in the job market.

The employee profit-sharing program introduced in the previous fiscal year was successfully continued in the 2023/2024 fiscal year. The "Employee Referral Program" remains successful, generating a quarter of all applications in the 2023/2024 fiscal year. The onboarding program was further enhanced with pre-boarding measures, enabling new employees to connect with future colleagues and establish relationships before they arrive. This strengthens their sense of belonging and fosters a positive workplace atmosphere. We also provide new employees with opportunities to familiarize themselves with the company's organization and culture before their first day. This proactive approach reduces their initial uncertainty and makes their transition much easier. By sharing relevant information and resources in advance, new employees can begin their roles better prepared and more motivated. Additionally, we divided our Welcome Day into local and global components. The local Welcome Day encourages personal networking on-site and provides direct access to key information, making it easier for new employees to settle in. Through face-to-face interactions with local colleagues and managers, we facilitate faster integration and create a welcoming environment that helps employees feel comfortable in their new roles. The global Welcome Day, by comparison, connects new employees digitally with colleagues from various international locations. This provides invaluable opportunities to build a global network and deepen their understanding of the company's international scope. By accommodating different time zones, we ensure that all new employees, no matter where they are located, receive equal access to information and networking opportunities.

Together, the local and global Welcome Days strengthen the spirit of networking from the very start, promoting cross-location collaboration. This approach not only enhances the personal and professional growth of new employees but also supports the implementation of our global corporate strategy.

These measures proved successful in the 2023/2024 reporting year, which is also evident by the low employee-initiated fluctuation rate of 3%, down from 4% the previous year. The overall fluctuation rate also fell to 5% (previous year: 6%). At the same time, the average tenure within the Group decreased to 8 years from 9, largely due to an increase in new hires.

Key employee retention indicators

	2022/2023	**2023/2024**
Fluctuation rate in %	6%	5%
Employee initiated fluctuation rate in %	4%	3%
Average employee tenure in years[1]	9	8

[1] As of September 30.

Creation of a new business unit – SOEC

In March 2024, thyssenkrupp nucera established a strategic partnership with the Fraunhofer Institute for Ceramic Technologies and Systems (IKTS) to industrialize SOEC technology.

To support this initiative, the HR team launched several targeted recruitment campaigns to attract highly qualified professionals for SOEC activities at our Dortmund and Arnstadt locations. These efforts during the fiscal year have laid a strong foundation for future growth.

Working closely with Fraunhofer IKTS in Dresden, the HRM team is also developing specialized training programs to drive knowledge and technology transfer and enhance employees' skills and expertise in SOEC technology. Regular meetings and exchange formats were held to foster collaboration between various teams and departments. These included weekly progress meetings and strategic exchange sessions to ensure all participants stay informed and collaborate effectively.

Healthy employees – a management topic

thyssenkrupp nucera continues to make no compromises when it comes to occupational safety and health. We take a long-term, holistic approach to managing health protection and promotion and continuously refine it. In the 2023/2024 reporting year, we prioritized creating a safe working environment, emphasizing our preventive safety culture. Management actively engaged in health discussions ("Health Talks") and safety inspections ("Safety Walks") to detect and resolve potential deficiencies at an early stage.

Health promotion continued to be a central focus of our efforts, as it was in the previous fiscal year. Our voluntary programs in the 2023/2024 fiscal year continued to cover topics like nutrition, exercise, stress management, addiction prevention, and avoiding other non-work-related health risks.

We also continue to offer voluntary employee medical screenings, which was launched last year.

HSE learning map

Our "Health, Safety and Environment" (HSE) division provides focused training for all leaders and employees in roles with specific risk profiles. Participants regularly complete HSE courses such as "HSE Basics", "Last Minute Risk Assessment," and "HSE Leadership". We actively update the HSE learning map to ensure it aligns with current safety standards.

4. Outlook

General conditions and key assumptions

The key macroeconomic assumptions and expected economic conditions for the 2024/2025 fiscal year, particularly regarding growth in the green hydrogen business, are detailed in the sections “Economic Environment” and “Sector Environment", which can be found in the chapter entitled “Economic Situation”. For a description of the associated opportunities and risks, see the chapter "Opportunity and risk report" below.

Overall, we anticipate a persistently challenging market environment shaped by uncertainty surrounding the future development of the global economy. This makes forecasting future business development more difficult and can result in fluctuations in the development of both sales and EBIT.

At thyssenkrupp nucera, we will continue to focus in the 2024/2025 fiscal year on the consistent execution of our order backlog and the implementation of our growth strategy. To support this, we will manage our organizational and operational expansion in line with market developments. We will also strengthen customer relationships and partnerships in key regions while intensifying market activities to secure a steady order intake driven by large-scale projects. At the same time, we will expand our R&D efforts in the technology sector to sustain and enhance our competitive position.

The following expectations for the 2024/2025 fiscal year are presented in alignment with thyssenkrupp nucera's new segmentation, which organizes activities according to technological application. Until September 30, 2024, the company’s activities were divided among the segments Germany, Italy, Japan, China, and RoW (Rest of World). Since October 2024, activities have been managed based on two segments: Chlor-Alkali Electrolysis (CA) and Green Hydrogen (gH_2). The gH_2 segment includes alkaline water electrolysis (AWE) and solid oxide electrolysis (SOEC).

Expectations for 2024/2025

Given the anticipated economic conditions at the time of the forecast and underlying assumptions, we consider the outlook for the 2024/2025 fiscal year detailed below to be appropriate.

Sales

We anticipate sales to range between EUR 850 million and EUR 950 million (2023/2024: EUR 862 million). The sales performance is expected to be driven largely by contractually secured projects.

At the segment level, we expect sales in the green hydrogen (gH_2) segment to range from EUR 450 million to EUR 550 million (2023/2024: EUR 524 million). The lower end of the forecast range can be achieved solely through the execution of the existing order backlog, while reaching the upper end will depend on securing additional projects.

In the chlor-alkali (CA) segment, sales are expected to increase and range between EUR 380 million and EUR 420 million (2023/2024: EUR 338 million). Both the New Build and Service businesses are expected to contribute to this growth. The forecasted sales development is largely derived from the existing order backlog but also factors in new orders expected in the 2024/2025 fiscal year, particularly in the Service business.

EBIT

We expect EBIT to range between EUR –30 million and EUR 5 million (2023/2024: EUR –14 million). The expected EBIT development is largely contingent on the execution and invoicing of the existing order backlog. The upper end of the EBIT range reflects optimal plant deliveries and sales at the higher end of expectations, whereas the lower end factors in a greater occurrence of project business risks and lower sales.

In the gH_2 segment, EBIT is forecasted to improve to a negative mid-double-digit million-euro range (2023/2024: EUR –76 million). A higher gross margin in the AWE segment, driven by a more profitable project mix, is a key assumption underlying this projected increase. This should offset the rising research and development cost in the SOEC business, which is also part of this segment.

In the CA segment, we expect EBIT to be in the positive mid-double-digit million-euro range. However, the result will likely fall below the level of the past fiscal year (2023/2024: EUR 62 million), primarily due to lower gross margins in the execution of existing projects. Furthermore, the EBIT development in the 2023/2024 fiscal year had benefited from one-off effects in the single-digit-million euro range.

For the 2024/2025 fiscal year, we anticipate Group sales to range between EUR 850 million and EUR 950 million, with EBIT between EUR –30 million and EUR 5 million. Both sales and EBIT development will be largely dependent on the execution of the existing contractually agreed projects.

5. Opportunity and risk report

5.1 Objectives of governance systems

thyssenkrupp nucera is integrated into the thyssenkrupp AG risk management system (RMS). This system encompasses all measures required to handle risks in a systematic, transparent manner. The objective and, simultaneously, the sub-processes of the RMS are the early identification, assessment, communication and management of risks and opportunities relevant to the achievement of company objectives. Through its integration with the controlling processes, the RMS forms an integral part of value-oriented corporate management and corporate governance that takes a holistic view of opportunities and risks.

The internal control system (ICS) comprises all principles, procedures and measures introduced to ensure process security and efficiency, compliance with laws and guidelines and, ultimately, financial reporting reliability. To maintain this system, thyssenkrupp nucera draws on the continuously evolving processes and systems of thyssenkrupp AG. For the conception and design of the RMS and ICS, the company adhered to the generally accepted framework for the documentation, analysis and design of an appropriate governance system of the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

thyssenkrupp nucera has continued to implement process-related measures to further enhance the RMS and ICS on an ongoing basis. These efforts include, among other initiatives, an external evaluation of the established system maturity levels.

5.2 Risk management system according to Section 91 AktG

At thyssenkrupp nucera, we define risks as potential negative deviations from forecasts or targets resulting from future events or developments. The key overall risks within the thyssenkrupp nucera Group are efficiently managed with the support of our comprehensive, systematic risk management system and its structured processes.

Functional structure

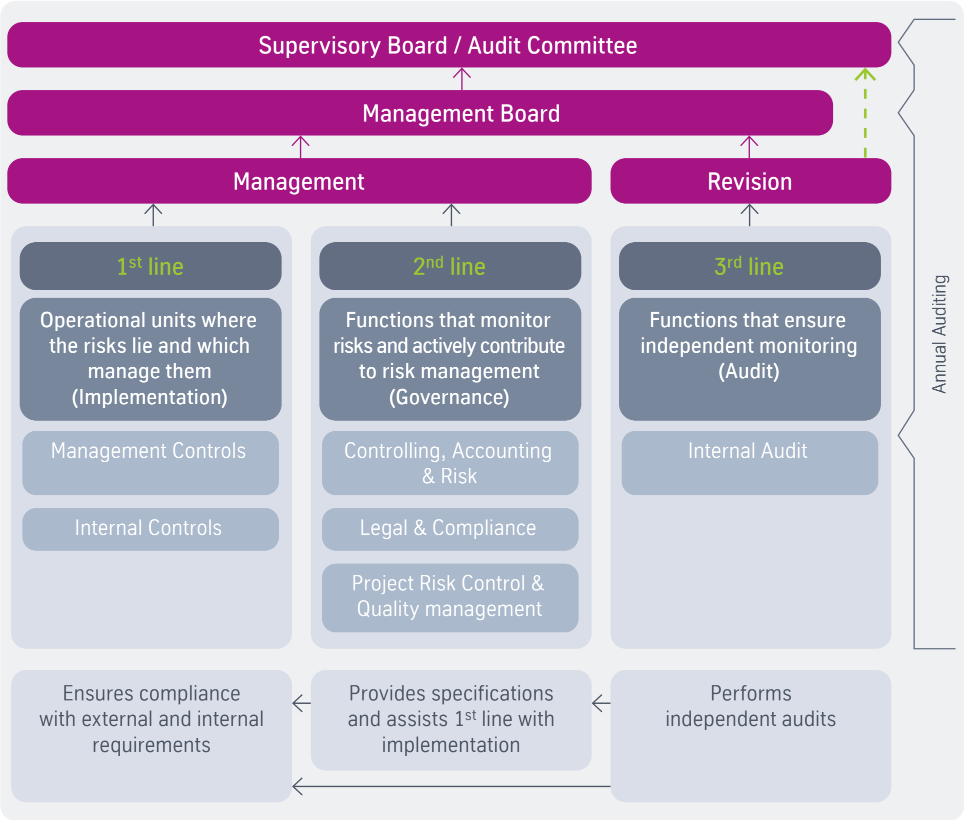
As a conceptual framework, thyssenkrupp nucera uses what is known as “the three lines of defense model”, which is widely used internationally and has been adapted to the Group’s organization. This model illustrates the responsibilities for managing risks at thyssenkrupp nucera within each line of defense and how these are differentiated from each other within the GRC model.

Risks must be identified in the first line of defense and managed where they arise. Various risk management measures are available to reduce risks to an appropriate level. Systematic risk management in the operating units of the first line of defense should be strengthened as far as possible by automated internal controls in the business processes. As this is not fully possible in every case, management must ensure the effectiveness of the internal control system through additional control measures.

The second line of defense encompasses functions such as Controlling, Accounting & Risk, Legal & Compliance and Project Risk Control & Quality Management (QM). These assume Group-wide governance tasks and set the framework for the design of the internal control system, the risk management system and compliance through binding internal regulations, among others, and support the first line of defense in managing risks. At the same time, these functions monitor and manage the Group’s risks from an overarching perspective. The close integration of the internal control system with the risk management system and compliance ensures the highest possible degree of effective prevention and management of risks.

As the third line of defense, the Internal Audit function conducts independent audits to monitor the regularity, reliability, appropriateness and efficiency of the processes and systems, as well as the effectiveness of the control systems of the other two lines of defense. Internal audits were carried out by the Corporate Internal Auditing function of thyssenkrupp AG based on a service contract and reported directly to the responsible member of the Management Board as well as regularly or, if required, via the audit function to the Audit Committee.

GRC policy: Compliance with three lines of defense model



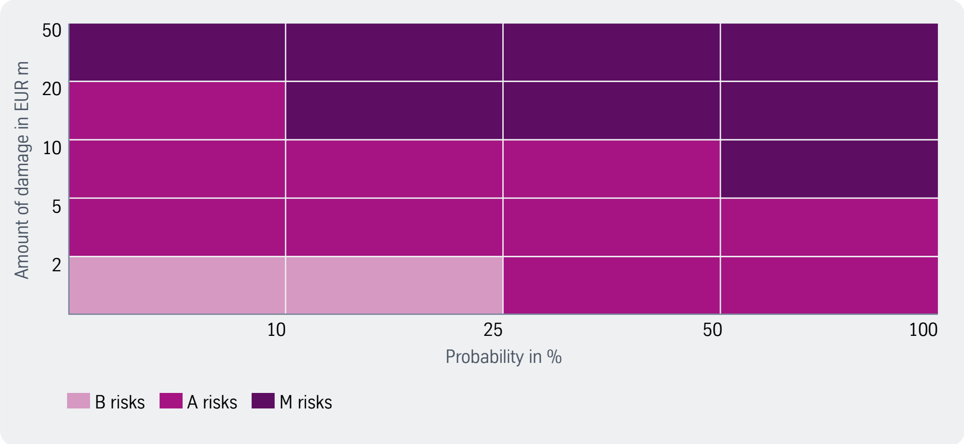
Risk identification

The identification of risks is aligned to organizational and operational responsibilities. The respective process owners and their subordinate teams are responsible for identifying risks and opportunities in their areas, supported by all-encompassing process expertise in quality and risk management.

Assessment method

For risk assessment, one of three risk classes (low or B risks; moderate or A risks; or material or M risks) is determined using defined threshold values and materiality limits for the probability of occurrence and loss amounts. The risks are each considered after taking risk mitigation measures into account.

Risk classes



From a regulatory standpoint, a material risk is defined as “a specific risk of such significance that it must be managed according to certain minimum criteria”. In addition to a quantitative assessment, the qualitative dimensions of each potential risk are also determined.

Measures

Measures in operational risk management are established in such a way that they have either an avoidance or a mitigating effect in order to reduce the extent of damage and/or the probability of occurrence. Risk is transferred to insurers, if necessary, by the thyssenkrupp AG Risk and Insurance function in compliance with the Group's policy and the binding standards laid down therein.

Monitoring

The effectiveness of risk mitigation measures taken is also reviewed as part of the quarterly risk assessment. If measures are deemed insufficient or do not have the intended effect, additional measures are defined and then implemented. thyssenkrupp nucera also ensures objective monitoring through thyssenkrupp AG's Internal Audit function, which it commissions for internal audits, as well as through independent project and process audits.

Reporting

Individual earnings-related risks are updated and processed on a quarterly basis as part of the rolling risk inventory and reported to the Risk Committee, the Management Board and the Audit Committee. Background information is prepared and discussed as needed, particularly for significant risks.

5.3 Internal accounting-related control system

The ICS serves as an aggregate of all systematically defined controls and monitoring activities designed to ensure the security and efficiency of business processes, the compliance of all activities with laws and guidelines and, ultimately, the reliability of financial reporting. An effective and efficient ICS is critical for successfully managing the risks in our business processes.

Functional structure

thyssenkrupp nucera uses a standardized risk control matrix, detailed sub-process descriptions, and a structured self-assessment process to ensure the successful management of risks. Among the controls are key controls, which are performed at least annually due to the criticalness of the processes they protect. To secure less critical processes, the controls of other standardized activities follow cycles, ensuring completion within a three-year timeframe. Controls and monitoring activities are regularly refined and adjusted by thyssenkrupp nucera to keep pace with evolving processes and systems.

Risk identification

The ICS identifies potential process risks in a similar manner to the RMS via the respective process owners and their teams. These risks are then recorded systematically and mapped against a reference model or a risk catalog of the risk control matrix.

Measures

In accordance with the processes and IT systems, measures are defined, for example, by means of semi-automated reporting and spot checks, in order to determine whether these business processes are set up and used in a robust, secure and efficient manner.

Control implementation

The controls are recorded, documented and evaluated in an ICS system used throughout the thyssenkrupp nucera Group. The results of the assessments are archived.

Monitoring and risk mitigation

If inaccuracies or potential weaknesses are identified during the ongoing monitoring of a business process, an evaluation and, if necessary, an escalation process is initiated in order to intensify the control measures and eliminate the weaknesses.

Reporting

The effectiveness of these process controls is reported to the Management Board and the Audit Committee once annually.

A variety of monitoring measures and controls in the accounting process help to ensure that the annual financial statement under commercial law and the Consolidated Financial Statements are prepared in full compliance with regulations. A system based on standard software is used for consolidation to ensure a uniform approach, which at the same time minimizes the risk of misstatements in accounting and external reporting. By appropriately segregating duties and applying the double-checking principle, the risk of fraudulent behavior and misstatements due to errors is reduced.

thyssenkrupp nucera has clearly defined the financial reporting sub-processes and assigned clear responsibilities. The central Controlling, Accounting & Reporting function is responsible for preparing the Consolidated Financial Statements and specifying the binding content and deadline requirements for the subsidiaries. All employees involved in the accounting process receive regular training.

As part of the consolidation process, we routinely back up our critical IT systems centrally to minimize data loss and system downtimes. Our backup approach also includes technical system checks, manual spot checks by experienced employees and tailored authorizations and access restrictions.

The effectiveness of these systems is regularly reviewed through internal assessments and audits. Furthermore, thyssenkrupp nucera has established an internal risk committee to ensure balanced risk assessment and management across locations and functions.

5.4 Overview of the risk landscape

The risks relevant to thyssenkrupp nucera can be summarized in the following categories, whereby the order of the risks does not reflect their level of materiality.

Strategic and market risks

Business environment risks and general external risks concern primarily those risks associated with future macroeconomic developments. Economic risks for our business arise when negative influences from the global economy, markets or industries of relevance for thyssenkrupp nucera occur, resulting in insufficient growth rates.

Recessionary concerns and slowing economic growth in many regions will continue to be accompanied by comparatively low sales and production levels in fiscal 2023/2024. Energy-intensive chemical companies and existing customers in Germany remain affected by high electricity prices, prompting them to scale back or relocate production, which has direct implications for the service and spare parts business.

The wars in Ukraine and the Middle East add to geopolitical uncertainties and an unpredictable trajectory for energy prices. The future of these and other global crisis hotspots, particularly following the elections in the US, remains unclear.

While supply chain bottlenecks for precious metals, raw materials, and intermediate products in the industry have been resolved, geopolitical risks could bring them back into focus.

Climate risks and natural disasters, including storms and floods driven by global warming, also threaten growth prospects. The same applies to a potential medium-term slowdown in the Chinese economy and escalating tensions in Asia.

The timely recruitment and integration of skilled workers for future order execution could also limit growth. We are actively countering this through targeted hiring initiatives and focused training programs.

Financial risks also exist on a broader scale, as debt levels have risen in recent years in numerous industrialized countries and many emerging markets. This limits governments' ability to respond to further crises and market volatility with fiscal countermeasures. These restrictions also affect the funding measures for climate protection.

As of the September 30, 2024 reporting date, we assess the risks arising from the aforementioned external environment as significant overall for the market dynamics of our business model. The operational planning has been adjusted accordingly.

A potential restriction or ban on per- and polyfluoroalkyl substances (PFAS) could significantly affect business operations for hydrogen and chlor-alkali plants within the EU. This is regarded as a moderate risk to the industry and our business model, as possible extensions of deadlines and exemptions for core European technologies and certain PFAS groups (e.g., polymers of low concern) seem likely but remain unresolved. The formal PFAS banning process continues to be managed by the European Chemicals Agency.

Financial risks

Financial risks are systematically reviewed and reduced in line with the thyssenkrupp nucera financial guidelines. The financial risks relevant to the thyssenkrupp nucera Group include default risks. In order to minimize default risks from operating activities and financial instruments, such transactions are concluded only with contractual partners who meet our internal minimum requirements. The minimum requirements for selecting contractual partners are defined by the credit risk management department. The creditworthiness information determined is subject to systematic ongoing monitoring, which enables credit risk management to act at an early stage to minimize risk.

Outstanding receivables and default risks in the delivery and service business are monitored on an ongoing basis. In the plant construction and project business, it is also customary for customers to partially pre-finance projects. As of the reporting date, the default risk for thyssenkrupp nucera is considered to be moderate overall.

We use derivative financial instruments to limit market risks, particularly foreign exchange risks. To limit the risks arising from our numerous cash flows in different currencies, particularly in US dollars, we have standardized Group-wide guidelines for foreign exchange management and the use of financial instruments. All Group companies are generally required to hedge their foreign currency positions when they arise. For this purpose, they use derivative financial instruments entered into with the thyssenkrupp Group's central hedging platform and with external banks. Translation risks, including valuation risks for balance sheet items resulting from the translation of foreign currency items, are generally not hedged. The economic foreign exchange risk is considered to be moderate due to the management policies adopted.

In addition, a downgrade of the thyssenkrupp Group’s rating or an increase in the overall level of interest rates could increase the costs for guarantees that we regularly need to issue as part of our operating activities. This risk is considered to be moderate for thyssenkrupp nucera.

Operating and technology risks

Operating risks for thyssenkrupp nucera arise primarily from procurement and supply chain activities. On the procurement side, volatile raw material prices pose a risk. When price adjustment clauses are not included in agreements, potential price increases may not be fully passed on to customers or only passed on with a delay. We actively address this risk for precious metals and raw materials by appropriately structuring customer contracts and optimizing our production processes through targeted measures.

In cases where thyssenkrupp nucera depends on the supply of a precious metal, raw material, intermediate products, or a service from a single or small number of suppliers, the risk to supply continuity increases. In addition to the risk of supply disruptions, the supplier of a key product or service may potentially exert significant bargaining power over price, quality, warranty, or other conditions, thereby affecting ongoing projects.

Procurement risks for critical trades and components are actively managed through countermeasures as part of business continuity planning. These measures also address potential risks related to material availability, sustainability, and cybersecurity within the supply chain, which could adversely affect operational activities.

Operationally, there are additional risks related to the availability of transport capacities, which could increase costs due to higher freight rates. To mitigate these risks, we rely on systematic supplier and logistics management. Compared to the previous year, the risk of supply disruptions and price volatility for intermediate products overall remains unchanged.

To prevent or minimize cost overruns and/or schedule delays for what, in some cases, are complex large-scale projects with extended timelines, we have implemented clearly defined process and approval steps from initiation to final contract fulfillment. These steps are accompanied by a multitude of extensive and regular reporting obligations. We address the potential over- or underutilization of critical suppliers in our supply chain by implementing long-term framework agreements and ensuring transparency in sales and operations planning. These operational risks in procurement, supplier management, and the supply chain are individually classified as low to moderate.

Execution risks are factored into project calculations, taking into account the specific complexity of each project, the technology used, and lessons learned from past experiences. These risks are continuously monitored throughout project execution. Experienced project managers, chosen according to the complexity of the projects, oversee the execution process.

In executing ongoing large-scale projects with new electrolysis technology, we must continue to prove that thyssenkrupp nucera's plants and product technology can be delivered on time, at the specified quality, and profitably. Project-specific execution risks, such as delays in project implementation, are tracked, continuously evaluated, and communicated on a project-specific basis alongside the RMS. These risks are part of regular project reviews and generally assessed as moderate.

For a company undergoing transformation, risks arise from data migration and user acceptance during the transition of IT systems. The implementation of these systems is carried out with realistic timelines and ongoing progress reporting, and system training is planned or in progress. These information technology risks are individually assessed as moderate.

As a technology developer, thyssenkrupp nucera faces risks associated with research and industrial development and with respect to the performance, quality, and long-term durability of its products. While long-term data is available for chlor-alkali technologies, similar data for alkaline water electrolysis is not yet available to the same extent due to its recent market introduction.

Although, at thyssenkrupp nucera, we regularly test our products at test facilities, such field tests can lead to delays, including those due to the failure of technological components. Long-term effects cannot always be fully simulated or tested. Technological risks particularly exist for orders that are the first of their kind ("first-of-its-kind orders"). In addition to new developments in chlor-alkali electrolysis, technological risks and the resulting cross-project risks of series failures to individual components, warranty and potential reputational risks primarily relate to alkaline water electrolysis. thyssenkrupp nucera takes extensive measures, particularly as part of its comprehensive research and development activities and ongoing quality assurance processes, to largely avoid or limit such risks. As of the reporting date, technological risks, particularly from "first-of-its-kind orders", were assessed as a significant risk.

For the ramp-up of our SOEC high-temperature electrolysis pilot plant, there is a moderate risk that the expectations concerning quality requirements or the timeline may be fully met. Here, we are also working on systematically expanding and validating our quality management system for manufacturing in Germany.

Legal and compliance risks

We mitigate the risk of potential legal violations using a compliance management system (CMS) that considers the core aspects of antitrust law, anti-corruption, data protection, money laundering prevention and foreign trade law (including sanctions law). The commitment to the compliance culture at thyssenkrupp nucera is anchored in the Code of Conduct and the Compliance Commitment. The thyssenkrupp nucera CMS comprises a separate compliance organization. In addition to comprehensive advice on the abovementioned core topics, guidelines, training (in person and as eLearning), other guidelines and communications are central elements of prevention. Compliance is a key component of business processes. A whistleblowing system is available for employees and external third parties. Included in the CMS is the monitoring and addressing of compliance risks through the CMS.

Legal risks may also arise in the course of order processing. In specific cases, a provision is recognized for such risks in accordance with the provisions of the relevant accounting standards. As of the reporting date, the legal and compliance risks are considered to be low overall.

5.5 Overview of opportunities

At thyssenkrupp nucera, we define an opportunity as a possible positive deviation from the forecast or target as a result of future events or developments. Opportunity management encompasses all measures relating to the systematic and transparent handling of opportunities. Through its link to the strategy, planning and reporting processes, opportunity management is an important component of strategic and value-based corporate management. From our technologies in the area of alkaline water electrolysis, we continue to see major opportunities to benefit from the strong demand for green hydrogen production processes.

thyssenkrupp nucera's modular, standardized 20 megawatt scalum® module is also advantageous in terms of economic aspects and climate protection. Essential for this ramp-up to series production is the core relationship with the co-shareholder Industrie De Nora, a globally recognized specialist in electrochemistry and high-quality supplier for cell manufacturing and coatings. This constellation creates opportunities for a sustainably successful positioning in the growing market for green hydrogen.

EU and US funding programs, such as the Renewable Energy Directive (RED III) and the Inflation Reduction Act (IRA), could have a further positive impact on our technology for the climate-neutral use of green hydrogen for industrial applications, such as refinery processes, direct reduction processes for green steel and ammonia and methanol production. These programs can accelerate upstream approval processes for customers and possibly offset some of the current elevated market launch costs and initial investments faced by our customers.

Through the H2Giga innovation pool – a collaboration of institutions, universities, and specialized companies offering scientific and technical expertise in large-scale production – studies are conducted on advanced research and development topics that also drive our own development forward and for which we receive funding. The H2Giga project "Install AWE", focused on the industrialization of alkaline water electrolysis primarily used for large-scale industrial applications, is nearing completion. The findings will be incorporated into the industrialization of scalum® 1.x and scalum® 2.0.

Market studies highlight substantial growth opportunities for green hydrogen through 2050, especially for the thyssenkrupp nucera Group, driven by global climate targets and funding for climate-friendly technologies. With decades of global experience in supplying large-scale electrolysis plants and a robust, expanded supply chain, the company is well-positioned to capitalize on this growth.

Investments in technology development and leadership offer thyssenkrupp nucera an opportunity to position itself as a pioneer and innovator in plant engineering for sustainable energy production. Expanding and potentially diversifying our technology portfolio creates further opportunities to actively shape and profit from the hydrogen market. In Germany, for example, the Federal Ministry for Economic Affairs and Climate Action is spearheading the "Hydrogen Technologies Standardization Roadmap," which unites various standardization initiatives from industry, academia, and society. This effort aims to organize and strengthen these initiatives within the European and international context along the value chain. Predictable, transparent technical regulations to further standardize electrolysis technologies for green hydrogen production, thereby enhancing its scalability, present international competitive opportunities for thyssenkrupp nucera. Such regulations can also encourage more rapid and more reliable investments by customers.

Opportunities also arise from further conversion and modernization projects for existing chlor-alkali electrolysis plants in South and North America. These plants still rely on mercury for parts of certain processes, which will be banned in the future under the Minamata Convention.

The Indian company thyssenkrupp nucera India Private Limited, based in Mumbai, will add further sales and execution capacities in the future, including for the commissioning of electrolyzers, extending beyond the emerging Indian market. This spin-off from the former thyssenkrupp Industrial Solutions India will strengthen the focus on the electrolysis business, which is expected to drive medium-term growth in the service business. thyssenkrupp nucera India will support the global green hydrogen and chlor-alkali business of the entire Group.

Additional opportunities arise from continuously optimizing our business processes, business systems, order execution methods, and quality assurance, as well as from standardizing and certifying our products. The resulting sustainable improvement in our cost structures and economies of scale open up opportunities to sustainably improve both our competitiveness and profitability and enhance our resilience to exogenous price fluctuations, particularly on the procurement side.

As an advocate for the energy transition and climate protection, our corporate purpose and clearly communicated sustainability strategy also present thyssenkrupp nucera an opportunity to better address the growing shortage of skilled workers in Germany, as well as in other regions, at least compared to other industries.

5.6 Overall risk assessment

In the 2023/2024 fiscal year, a scheduled risk inventory was carried out on a quarterly basis. The risk reporting was submitted to the Management Board and the Audit Committee. No unscheduled ad hoc risk reports occurred. As of the reporting date, the aggregate of all individual risks identified throughout the Group, taking into account the effective measures planned and already taken, did not have any effect on thyssenkrupp nucera, either individually or in combination, that could jeopardize its continued existence. Specifically, the risk-bearing capacity was in line with operational planning and stable at all times.

6. Takeover-related disclosures

This section contains the takeover-related disclosures as of September 30, 2024 that are required by sections 289a and 315a HGB.

1. **Composition of the subscribed capital, showing the rights and obligations associated with each class of shares and their proportion of the share capital**

   The subscribed capital (share capital) of thyssenkrupp nucera AG & Co. KGaA amounts to EUR 126,315,000.00 and is divided into 126,315,000 no-par value bearer shares.

   Each share grants the same rights as well as one vote at the Annual General Meeting.

2. **Restrictions affecting voting rights or the transfer of shares, even if they result from agreements between shareholders, insofar as the restrictions are known to the company's Management Board**

   thyssenkrupp AG and Industrie De Nora S.p.A. have agreed that, for a period of three years as of the date of July 7, 2023 (the first day the company’s shares traded on the stock exchange), the two shareholders will not sell, transfer, pledge, assign or otherwise dispose of or encumber their shares in the company, with the exception of over-the-counter transactions and transactions with the consent of the other party to the agreement.

3. **Direct or indirect shareholdings in capital that exceed 10 percent of the voting rights**

   As of September 30, 2024 and according to shareholders' voting rights notifications, thyssenkrupp AG, Duisburg and Essen, held an indirect interest of around 50.19%, and Industrie De Nora S.p.A., Milan, Italy, held a direct interest of around 25.85%.

4. **Holders of shares with special rights conferring powers of control and a description of these special rights**

   No shares with special rights conferring powers of control were issued.

5. **The type of voting right control if employees hold an interest in the capital and do not exercise their control rights directly**

   There is no control of voting rights in the event that employees hold an interest in the capital of thyssenkrupp nucera AG & Co. KGaA and do not exercise their control rights directly.

6. **Statutory requirements and provisions of the Articles of Association on the appointment and dismissal of members of the Management Board and on amendments to the Articles of Association**

   The appointment and dismissal of members of the Management Board of the General Partner thyssenkrupp nucera Management AG is the responsibility of its Supervisory Board and governed by sections 84 and 85 AktG. In accordance with Article 7 (1) of the Articles of Association of thyssenkrupp nucera Management AG, the Management Board of thyssenkrupp nucera Management AG consists of at least three members.

7. **Authorization of the Management Board to issue or buy back shares**

   By resolution of the Annual General Meeting of thyssenkrupp nucera AG & Co. KGaA on June 9, 2023, the General Partner was authorized, with the approval of the Supervisory Board, to increase the share capital by up to EUR 50,000,000.00 by issuing up to 50,000,000 new no-par value bearer shares against cash and/or non-cash contributions on one or more occasions until June 9, 2028 (Authorized Capital).

   The dividend entitlement of new shares can be determined in deviation from Section 60 (2) AktG.

   Shareholders are generally entitled to subscription rights. The new shares may also be acquired by a credit institution to be determined by the General Partner or a company operating in accordance with Section 53 (1) sentence 1 or Section 53b (1) sentence 1 or (7) of the German Banking Act (KWG) (financial institution) or a syndicate of such credit or financial institutions with the obligation to offer them to the company's shareholders for subscription.

With the approval of the Supervisory Board, the General Partner is authorized to exclude shareholders' subscription rights in the following cases:

- to offset any fractional amounts that result from the subscription ratio;
- in the case of capital increases against contributions in kind, particularly within the scope of business combinations or to acquire companies (also indirectly), operations, parts of companies, participations or other assets, including claims to the acquisition of assets and receivables against the company or its Group companies;
- to the extent this is necessary to grant the holders or, in the case of registered securities, the creditors of the option or conversion rights or option or conversion obligations issued by the company or its group companies a subscription right to new shares to the extent to which they would be entitled as shareholders after exercising the option or conversion rights or after fulfilling an option or conversion obligation;
- in the case of cash capital increases, if the issue price of the new shares is not significantly lower than the stock market price of the shares already listed at the time of the final determination of the issue price – which should take place as close as possible to the placement of the shares – and the notional interest in the share capital attributable to the shares issued with the exclusion of subscription rights in accordance with Section 186 (3) sentence 4 AktG does not exceed a total of 10% of the share capital, either at the time this authorization becomes effective or at the time it is exercised. Insofar as other authorizations to issue or sell shares or to issue rights that enable or oblige the subscription of shares are exercised during the term of this authorization until it is exercised and the subscription right is excluded in accordance with or pursuant to Section 186 (3) sentence 4 AktG, this must be offset against the aforementioned 10% limit.

The total of the shares issued on the basis of the above authorizations with the exclusion of subscription rights in the event of capital increases against cash and/or non-cash contributions may not exceed a total of 10% of the share capital either at the time the respective authorization takes effect or at the time it is exercised. If other authorizations to issue or sell shares or to issue rights that enable or obligate the subscription of shares are exercised during the term of these authorizations until they are exercised and subscription rights are excluded, this must be offset against the aforementioned limit.

With the approval of the Supervisory Board, the General Partner is authorized to determine the further content of the share rights and the conditions of the share issue. The Supervisory Board is authorized to amend the wording of Article 5 (1) and (3) of the Articles of Association of thyssenkrupp nucera AG Co. KGaA in accordance with the respective utilization of the Authorized Capital and, if the Authorized Capital has not been utilized or not fully utilized by June 9, 2028, after the expiry of the authorization.

In addition, the share capital is conditionally increased by up to EUR 20,000,000.00 divided into up to 20,000,000 no-par value bearer shares (conditional capital). The conditional capital increase will only be exercised to the extent that the holders or creditors of option or conversion rights or those obliged to convert or exercise options from convertible bonds and/or bonds with warrants or combinations of these instruments issued or guaranteed by the company or a Group company on the basis of the authorization of the General Partner by resolution of the Annual General Meeting on June 9, 2023 until June 8, 2028, exercise their option or conversion rights or fulfills conversion or option obligations or to the extent that the company exercises an option to grant shares in the company in whole or in part instead of paying the cash amount due, unless a cash settlement is granted or treasury shares or shares in another listed company are used to service them. The new shares will be issued at the option or conversion price to be determined in accordance with the aforementioned authorization resolution. The new shares participate in profits from the beginning of the financial year in which they are created. To the extent permitted by law, the General Partner may, with the approval of the Supervisory Board, determine the profit participation of new shares in deviation from Section 60 (2) AktG.

With the approval of the Supervisory Board, the General Partner is authorized to determine the further details of the implementation of the conditional capital increase. The Supervisory Board is authorized to amend the wording of Article 5 (1) and (4) of the Articles of Association of thyssenkrupp nucera AG & Co. KGaA in accordance with the respective utilization of the conditional capital and to amend it after the expiry of all option or conversion periods and to make all other related amendments to the Articles of Association that only affect the wording.

8. Material agreements that are subject to the condition of a change of control following a takeover bid and the resulting effects

- Certain brands of thyssenkrupp nucera are legally owned by thyssenkrupp AG. thyssenkrupp AG has a right of termination in the event of a change of control (this includes (1) a sale of all or substantially all of the assets of thyssenkrupp nucera, (2) a merger, consolidation, takeover or (3) any other event that causes thyssenkrupp AG to lose sole control of the company).

- thyssenkrupp nucera is dependent on the availability of sureties, bank guarantees, bonds or letters of credit for its projects as beneficiary. The total volume of these bilateral guarantee facilities exceeds EUR 700 million. These loan agreements contain a change of control clause which, after a discussion period, may entitle the bank concerned to terminate the agreements for the bilateral guarantee facilities if a change of control occurs.

9. Compensation agreements concluded with the members of the Management Board or with employees in the event of a takeover bid

The service contracts of the members of the Management Board of the General Partner neither contain any commitments to benefits in the event of the premature termination of Management Board activities due to a change of control, nor have any such agreements been made with employees.

7. Corporate governance statement

At thyssenkrupp nucera, corporate governance stands for responsible corporate management and supervision geared toward long-term value creation. Good corporate governance embraces all areas of the thyssenkrupp nucera Group. Both national regulations, such as the recommendations of the Government Commission on the German Corporate Governance Code, and international standards are complied with. In line with Principle 23 of the German Corporate Governance Code, the corporate governance statement, in accordance with sections 289 f (1) sentence 2 and 315 d of the German Commercial Code (HGB), is the central instrument of corporate governance reporting. The Management Board and Supervisory Board jointly submit the corporate governance statement, and each is responsible for the sections of the statement corresponding to them.

Declaration of conformity in accordance with Section 161 of the German Stock Corporation Act (AktG)

The Management Board of the General Partner and the Supervisory Board of thyssenkrupp nucera AG & Co. KGaA issued the following declaration in accordance with Section 161 (1) AktG, which was published on the company's website on October 2, 2024. https://www.thyssenkrupp-nucera.com/corporate-governance/#declaration-of-conformity

Declaration by the Management Board of the General Partner of thyssenkrupp nucera AG & Co. KGaA, thyssenkrupp nucera Management AG, and the Supervisory Board of thyssenkrupp nucera AG & Co. KGaA on the German Corporate Governance Code pursuant to Section 161 AktG

The Management Board of the General Partner of thyssenkrupp nucera AG & Co. KGaA (the "Company"), thyssenkrupp nucera Management AG, and the Supervisory Board of the Company declare in accordance with Section 161 of the German Stock Corporation Act (AktG) that the recommendations of the German Corporate Governance Code issued by the "Government Commission on the German Corporate Governance Code" in its version dated April 28, 2022 (the "Code"), as published in the official section of the German Federal Gazette by the Federal Ministry of Justice on June 27, 2022, are complied with and have been complied with since the last declaration of compliance in September 2023. The Company will also continue to comply with all recommendations of the Code in the future.

Dortmund, September 2024

On behalf of the Management Board of the General Partner	On behalf of the Supervisory Board
Dr. Werner Ponikwar	Dr. Volkmar Dinstuhl

Specific features of legal form of thyssenkrupp nucera AG & Co. KGaA

The Company is a partnership limited by shares (KGaA). A KGaA is a company with its own legal identity (legal entity) in which at least one partner has unlimited liability to the Company's creditors (General Partner), and the other partners participate in the share capital divided into shares without being personally liable for the Company's liabilities (limited shareholders, Section 278 [1] AktG).

In contrast to the procedure at an AG, the duties of the Management Board are performed by the sole General Partner, thyssenkrupp nucera Management AG, acting through its Management Board (sections 278 [2], 283 AktG in conjunction with Article 8 of the Articles of Association). Where this statement refers to the Management Board, it is a reference to the Management Board of the General Partner.

The Annual General Meeting of a KGaA generally has the same rights as the Annual General Meeting of an AG. This means that, among other things, it decides on the appropriation of profits, the election and discharge of the members of the Supervisory Board, the election of the auditor, amendments to the Articles of Association, changes to the capital, as well as, depending on the legal form, the adoption of the Company's annual financial statements and the discharge of the General Partner.

Remuneration system and remuneration of the Management and Supervisory Board members

The current remuneration system for the Management Board members of thyssenkrupp nucera Management AG was adopted by the Supervisory Board of thyssenkrupp nucera Management AG on February 25, 2022, in accordance with sections 87 (1), 87a (1) AktG and was applied without restrictions to all Management Board members in office in the 2023/2024 fiscal year. This remuneration system was approved by the Annual General Meeting of thyssenkrupp nucera AG & Co. KGaA on February 7, 2024, in accordance with Section 120a (1) AktG with purely editorial adjustments and one adjustment to the maximum remuneration.

The remuneration report, including the auditor's report, is available on our website.
https://thyssenkrupp-nucera.com/corporate-governance/#compensation-system

The remuneration report in accordance with Section 162 AktG can be found in the chapter “Remuneration Report” in this Annual Report. The remuneration of Supervisory Board members is regulated in the Articles of Association of thyssenkrupp nucera AG & Co. KGaA and was approved by the Annual General Meeting of thyssenkrupp nucera AG & Co. KGaA on February 7, 2024 in accordance with Section 113 (1) AktG.

Key corporate governance principles and practices

thyssenkrupp nucera Code of Conduct

The thyssenkrupp nucera Code of Conduct sets out the concrete principles and fundamental rules for our actions, including our behavior towards business partners and the public. It provides employees, managers and the Management Board all with a framework for guidance on topics such as requirements for complying with the law, equal treatment and non-discrimination, cooperation with employee representatives, occupational health and safety, environmental and climate protection, data protection and information security. Requirements for suppliers are set out in the thyssenkrupp Supplier Code of Conduct.

The thyssenkrupp nucera Code of Conduct is available on our website. https://www.thyssenkrupp-nucera.com/compliance/

All of these principles are implemented with the help of existing programs and management systems. thyssenkrupp nucera also pursues a strategy of sustainable and responsible business practices. We provide information on our all-encompassing sustainability agenda, among others, in the chapter “About us” contained in our Annual Report.

NOS – New Organizational Shape

During the 2023/2024 fiscal year, thyssenkrupp nucera developed a new governance framework as part of the “NOS – New Organizational Shape” initiative, which became effective on October 1, 2024.

The green hydrogen (gH_2) business unit will be managed globally as a functional organization going forward. The chlor-alkali business unit will continue to be managed regionally.

To ensure continued synergies between the two segments during project execution, key operating functions have been centralized within the Operations division. This organizational framework allows for management tailored to the needs of the business units while also enabling synergies through Operations and the Management & Support functions.

Implementing a clear governance framework enables efficient decision-making, optimal resource allocation, and a foundation for further scaling the green hydrogen business.

Integrated governance, risk and compliance approach

Responsible risk management is part of corporate governance at thyssenkrupp nucera, as continuous and systematic management of business risks and opportunities is of fundamental importance for professional corporate governance. Group-wide risk management is based on an integrated governance, risk and compliance model (GRC model), which is anchored in the GRC policy and applies to the entire thyssenkrupp nucera Group.

thyssenkrupp nucera continues to apply the thyssenkrupp AG "three lines of defense" risk management model. This model regulates the interaction between operational risk management (first line), risk management methods and guidelines in corporate management (second line) and internal audit (third line). Compliance, tax and legal risks are fed centrally into the RMS by the corresponding Group functions of thyssenkrupp AG and updated by thyssenkrupp nucera. As part of the quarterly risk inventory and in line with standard risk management models, thyssenkrupp nucera is required to formulate risk management measures for the individual risks identified and assessed and to track their implementation on an ongoing basis.

Key features of our internal risk management and internal control system for the areas of governance, other risks and compliance correspond to the those for accounting-related areas and are schematically presented in Chapter 5 “Opportunity and risk report” of the management report.

Compliance, as the entirety of Group-wide measures for adhering to the law and binding internal regulations, is an important management and monitoring task at thyssenkrupp nucera.

The Management Board of the General Partner of thyssenkrupp nucera AG & Co. KGaA has unequivocally expressed in the thyssenkrupp nucera Compliance Commitment that violations, particularly those related to the core compliance topics of antitrust law, anti-corruption, data protection, money laundering prevention and foreign trade law, will be met with “zero tolerance”. thyssenkrupp nucera would rather forgo a business opportunity than violate regulations. At the same time, the Compliance Commitment also expresses the positive underlying attitude of the Management Board towards compliance: for thyssenkrupp nucera, compliance is a question of mindset.

The Senior Director of Legal & Compliance, who is responsible for managing the compliance program, reports to the Management Board member responsible for compliance.

More information on compliance risks at thyssenkrupp nucera can be found in the management report under Chapter 5 “Opportunity and risk report”.

The Internal Audit function of thyssenkrupp AG, commissioned by thyssenkrupp nucera for internal audits, is subjected to an external quality assessment every five years. The last quality assessment was successfully completed in the first quarter of the 2020/2021 fiscal year. As of the 2024/2025 fiscal year, thyssenkrupp nucera plans to establish its own internal audit department, which will initially be supported by the Internal Audit function of thyssenkrupp AG.

The three lines of defense model related to the material parts of financial reporting is enhanced by the work of the external auditor (Chapter 5 “Opportunity and risk report” of the management report).

Statement of the Management Board on the effectiveness of the governance systems

Taking into account the external and internal audits of the ICS, the RMS and the compliance management system conducted in the 2023/2024 fiscal year, no matters have arisen that would lead the thyssenkrupp nucera Management Board to conclude that these systems are not overall adequate and effective in all material respects. Based on findings made during external and internal audits and in order to meet the requirements from constant growth and a changing process landscape and to optimally utilize the supporting IT systems of the thyssenkrupp nucera Group, we make continuous improvements to our ICS, RMS and compliance management systems.

Quality management system

To supplement the RMS and ICS, thyssenkrupp nucera once again successfully demonstrated the functionality of a holistically integrated quality management, occupational health and safety, environmental and energy management system by obtaining certification from TÜV Nord in the 2023/2024 fiscal year. The realignment and revision of the integrated management system in accordance with the ISO 9001, 14001 and 45001 standards were achieved with the Group’s certification according to those standards. The Group certificate was successively extended in the 2023/2024 fiscal year to other companies within the thyssenkrupp nucera Group following additional local management system audits.

The business units of the thyssenkrupp nucera Group are aligned with global sustainability and energy objectives. Alongside the energy management system certified under ISO 50001, the information security management system under ISO 27001 was initially audited as an individual certificate in Germany to validate the effectiveness of information management processes against cybersecurity and ransomware risks. In the 2023/2024 fiscal year, TÜV Rheinland granted the provisional type certificate for our 20 MW AWE Master Module based on ISO 22734 as part of product certification for safety and integrity. This certification enables us to align our quality management system proactively with criteria such as those set by the European Hydrogen Bank, supporting project financing for our customers.

Shareholders and the Annual General Meeting

The shareholders of thyssenkrupp nucera AG & Co. KGaA exercise their rights at the Company’s Annual General Meeting. In contrast to a stock corporation, however, the General Partner of the KGaA has a de facto veto right on key resolutions. The General Partner must also approve certain matters to be resolved by the Annual General Meeting, such as amendments to the Articles of Association, the dissolution of the Company, mergers, a change in the Company’s legal form, intercompany agreements (e.g., control agreements or profit and loss transfer agreements) and other fundamental changes, including the adoption of the Company’s annual financial statements.

At the Annual General Meeting, shareholders resolve on the appropriation of net retained profit, the discharge of the personally liable partner and the Supervisory Board, and the election of the external auditor.

Shareholders can generally exercise their voting rights at the Annual General Meeting either themselves, through an authorized representative of their choice, or through a proxy appointed by the Company who is bound by instructions. Depending on whether the Annual General Meeting is held virtually or in person, shareholders also have the option to cast their votes online on the Internet or to vote by mail. The entire Annual General Meeting can be followed live on the Company's website. All legally required documents and information on the Annual General Meeting are also promptly available to shareholders on the website.

Accounting and auditing policies

thyssenkrupp nucera prepares the financial statements of the thyssenkrupp nucera Group and the interim reports in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. The separate financial statements of thyssenkrupp nucera AG & Co. KGaA, which are relevant for the dividend payment, are prepared in accordance with the provisions of the German Commercial Code (HGB).

In accordance with statutory regulations, the auditor is elected by the Annual General Meeting for one fiscal year at a time. At the Annual General Meeting on February 7, 2024, as proposed by the Supervisory Board, the Annual General Meeting elected KPMG Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Berlin, (KPMG) as the auditor for the 2023/2024 fiscal year, including for the audit review of interim reports for the 2024/2025 fiscal year and for the audit of those interim reports for the 2024/2025 fiscal year that are prepared before the 2025 Annual General Meeting.

KPMG has been the auditor and Group auditor of thyssenkrupp nucera AG & Co. KGaA since the 2022/2023 fiscal year. The appointment was made in 2023 following an external tender in accordance with the legal requirements. The obligation to externally rotate the auditor of the financial statements and Consolidated Financial Statements in accordance with EU Regulation 537/2014 has applied to thyssenkrupp nucera AG & Co. KGaA since the IPO in the 2022/2023 fiscal year. Further information on this can be found in the Report of the Supervisory Board.

Since the 2022/2023 fiscal year, the signatory auditors for the separate financial statements of thyssenkrupp nucera AG & Co. KGaA and the financial statements of the thyssenkrupp nucera Group have been Charlotte Salzmann and Jan Georgi. The legal requirements and rotation obligations are fulfilled.

Management Board

Composition and working practices of the Management Board

The Management Board of the General Partner manages the Company within the organizational structure it has resolved on under its own responsibility and in the interests of the Company, i.e., taking into account the interests of shareholders, employees and other groups associated with the Company with the aim of sustainable value creation. It ensures compliance with the legal requirements and binding internal Company regulations and works to ensure that they are observed by all companies in the thyssenkrupp nucera Group. The Management Board has established compliance and risk management systems that are appropriate and effective. Significant business transactions require the approval of the Supervisory Board of the General Partner; these are listed in its Articles of Association and Article 6 of the Management Board's Rules of Procedure.

The Management Board of the General Partner thyssenkrupp nucera Management AG must consist of at least three members. The age limit for the members of the Management Board has been set at the relevant statutory retirement age for the respective Management Board member (or alternatively in an occupational pension scheme applicable to the Management Board member). The members of the Management Board are jointly responsible for the overall management of the Company; they decide on key management measures such as corporate strategy and corporate planning. The chair of the Management Board is responsible for coordinating all of the Management Board's departments and taking the lead in communication with the Supervisory Board; he also represents the Management Board. Further information on the individual members of the Management Board and their areas of responsibility (departments) can be found on the Company's website. https://thyssenkrupp-nucera.com/management/

Supervisory Board

Composition and working practices of the Supervisory Board

The Supervisory Board of thyssenkrupp nucera AG & Co. KGaA advises the General Partner and supervises its Management Board in the management of the Company. The Supervisory Board of the General Partner decides on business transactions requiring its approval, determines the number of members of the Management Board in excess of the minimum number, appoints and dismisses the members of the Management Board and defines their areas of responsibility. As part of its activities, it deals with succession planning, which is also discussed by the chair of the Supervisory Board with the Management Board. This is how the Supervisory Board and the Management Board jointly ensure long-term succession planning. The Supervisory Board also regulates the remuneration of the members of the Management Board. Details on Management Board remuneration can be found in the remuneration report.

The Supervisory Board of thyssenkrupp nucera AG & Co. KGaA examines the annual financial statements and Consolidated Financial Statements prepared by the Management Board together with the combined management report of thyssenkrupp nucera AG & Co. KGaA, approves the annual financial statements and the Consolidated Financial Statements, the combined management report and the dependency report. It examines the proposal on the appropriation of net retained profits and, together with the Management Board, submits it to the Annual General Meeting for approval. The Supervisory Board proposes the auditor for election at the Annual General Meeting based on the Audit Committee's reasoned recommendation. Following the corresponding resolution by the Annual General Meeting, the Audit Committee issues the audit mandate to the auditor and monitors the audit, including the independence, qualifications, rotation and efficiency of the auditor. Details on the activities of the Supervisory Board in the 2023/2024 financial year can be found in the Report of the Supervisory Board. The remuneration of the members of the Supervisory Board of thyssenkrupp nucera AG & Co. KGaA is regulated in Article 15 of the Articles of Association. It was approved by the Annual General Meeting on February 7, 2024. The remuneration attributable to the individual members is presented in the remuneration report.

The composition of the Supervisory Board is determined in accordance with the German Stock Corporation Act.

The chair of the Supervisory Board is elected from among the members of the Supervisory Board in accordance with sections 107 (1) and 278 (3) AktG and Article 10 (1) of the Articles of Association. The chair of the Supervisory Board is responsible for coordinating the work of the Supervisory Board and chairing the Supervisory Board meetings. Statements made by the Supervisory Board to the public are made by the chair of the Supervisory Board. At thyssenkrupp nucera AG & Co. KGaA, at least one member of the Supervisory Board or the Audit Committee must have expertise in the field of accounting and another member in the field of auditing. All members of the Supervisory Board are subject to a statutory duty of confidentiality. Further information on the individual members of the Supervisory Board and its three committees can be found on the Company's website at
https://thyssenkrupp-nucera.com/management/#supervisory-board.

Composition and working practices of the Supervisory Board committees

The Supervisory Board of thyssenkrupp nucera AG & Co. KGaA has formed a total of three committees. In accordance with recommendation D3 of the German Corporate Governance Code (GCGC), the chairpersons of the Supervisory Board and the Audit Committee are not identical.

The Audit Committee has four members: Prof. Dr. Franca Ruhwedel (chair), Dr. Volkmar Dinstuhl, Jennifer Cooper, and Luca Oglialoro.

The Nomination Committee has four members: Dr. Volkmar Dinstuhl (chair), Miguel Ángel López Borrego, Paolo Dellachà, and Markus Fuhrmann.

The Related-Party Transactions Committee consists of four members: Prof. Dr. Franca Ruhwedel (chair), Dr. Arndt Köfler, Dr. Robert Scannell, and Markus Fuhrmann.

Details of their duties can be found in the Supervisory Board's Rules of Procedure. These, along with the current members, are published on the Company's website
https://thyssenkrupp-nucera.com/management/#supervisory-board.

The chairs of the committees report regularly on the meetings of the committees and their activities at the Supervisory Board meetings. These activities consist mainly of the preparation of certain topics for discussion and resolution by the full Supervisory Board, unless the Supervisory Board has assigned the tasks to the committees conclusively. Preparatory and final tasks are regulated in the Supervisory Board's Rules of Procedure. Details on the activities of the committees and their working practices in the reporting year can be found in the Report of the Supervisory Board.

The Supervisory Board routinely assesses how effectively the Supervisory Board as a whole and its committees perform their duties. In addition to qualitative criteria that are determined by the Supervisory Board, the assessment focuses above all on the procedures within the Supervisory Board and the flow of information between the committees and the full Supervisory Board and the timely and sufficient provision of information to the Supervisory Board and its committees. The last self-assessment was carried out in September 2023.

Avoidance of conflicts of interest

During the past fiscal year, there were no conflicts of interest involving members of the Management Board or Supervisory Board that would be required to be immediately disclosed to the Supervisory Board.

The rules on conflicts of interest are set out in Section 9 of the Rules of Procedure of the Supervisory Board and Section 3 of the Rules of Procedure of the Management Board and were complied with in full.

Mandates in statutory supervisory boards or comparable domestic and foreign supervisory bodies of commercial enterprises held by members of the Management Board and Supervisory Board are listed in the annual report in the chapter of the same name under “Further information”.

Related-party disclosures are presented in the notes to the financial statements of the thyssenkrupp nucera Group.

Directors’ dealings

Members of the Management Board and Supervisory Board and persons closely related to them are obliged to disclose transactions in shares and debt instruments of thyssenkrupp nucera AG & Co. KGaA or related financial instruments if the value of the transactions reaches or exceeds EUR 20,000 within a calendar year. In the 2023/2024 fiscal year, a total of ten transactions were reported to the Company. These transactions were published on the website and can be viewed there.

https://investors.thyssenkrupp-nucera.com/investors/legal-notices#dd

The total number of shares in thyssenkrupp nucera AG & Co. KGaA held by members of the Management Board and Supervisory Board amounted to less than 1% of the shares issued by the Company as of September 30, 2024.

Act on the equal participation of women and men in executive positions

In September 2023, the Supervisory Board of thyssenkrupp nucera AG & Co. KGaA set a Board composition target of 33% women on the Supervisory Board, to be achieved by September 30, 2027.

In December 2022, the Supervisory Board of thyssenkrupp nucera Management AG set a Board composition target of 28% women on the Supervisory Board and a target of 25% women for the Management Board of thyssenkrupp nucera Management AG, to be achieved by September 30, 2027.

The Management Board of the General Partner has set the target for the proportion of women at the first and second management levels below the Management Board of the German entity at 25% in each case, to be achieved by September 30, 2028. Leadership positions are defined as roles at levels 1 and 2 below the Management Board that encompass disciplinary management responsibilities. As of September 30, 2024, women made up 7.1% of the first leadership level in Germany (September 30, 2023: 7.8%) and 23.8% of the second leadership level (September 30, 2023: 12.5%). We remain focused on achieving our 25% target to ensure that the proportion of women in the overall workforce (26.6%) is also represented at leadership levels.

Diversity criteria for the composition of the Management Board and Supervisory Board of thyssenkrupp nucera AG & Co. KGaA

As a listed Company, thyssenkrupp nucera AG & Co. KGaA meets the diversity requirements, particularly those set out in the German Stock Corporation Act, the German Corporate Governance Code, and the applicable accounting regulations. These include different requirements for the composition of the Management Board and Supervisory Board and are also taken into account by the diversity criteria adopted by the Supervisory Board. They also include the Supervisory Board’s objectives for its composition and the skills profile of the Supervisory Board as a whole. For the proportion of women and the defined target figures, please refer to the previous section.

Management Board

The diversity criteria are geared towards achieving a sufficient diversity of opinion and knowledge on the Management Board. The evaluation, selection and appointment of candidates are carried out in accordance with the rules and generally accepted principles of non-discrimination. When selecting candidates for the Management Board, the Supervisory Board also takes other diversity criteria into account, such as the candidate’s personality, expertise and experience, internationality, training and professional background, age, and gender.

Supervisory Board

The diversity criteria for the Supervisory Board are intended to ensure that its members have the necessary knowledge, skills and professional experience to properly perform their duties.

Diversity criteria such as age, gender, training and professional background were taken into account in the targets for the composition of the Supervisory Board and in the skills profile for the entire Supervisory Board.

The diversity criteria are implemented through the election of the members of the Supervisory Board. The election proposals to the Annual General Meeting of thyssenkrupp nucera AG & Co. KGaA should take into account the self-imposed targets and, at the same time, strive to fulfill the competence profile for the Board as a whole. This also applies to the reappointment of candidates to the

Supervisory Board. The Nomination Committee takes diversity criteria into account when seeking candidates for the Supervisory Board.

In September 2022, the Supervisory Board adopted the existing objectives regarding its composition and the skills profile in accordance with the requirements of the currently valid version of the GCGC. The Supervisory Board also discussed the skills matrix associated with the skills profile in advance at its meeting in December 2022 and approved it at the meeting in February 2023. The last update to the skills matrix was in October 2024.

The competence profile includes the following qualifications:

- Sufficient members on the Supervisory Board with general international management experience
- Special expertise in the specific industry/sector environment relevant to thyssenkrupp nucera and beyond the specific industry/sector environment relevant to thyssenkrupp nucera
- Corporate management/governance of listed companies
- Corporate strategy and development, growth/scaling, M&A and portfolio management
- Change management, transformation
- IT, innovation and digitalization
- Financial and capital market experience
- Accounting and auditing
- Legal, compliance and corporate governance
- Sales and marketing
- Talent management, personnel development and leadership
- Sustainability/ESG
- Maximum term of office for Supervisory Board members of three terms and an age limit of 75 years (i.e., resignation from the Supervisory Board at the end of the Annual General Meeting after the Supervisory Board member has reached the age of 75). The maximum term of office for Supervisory Board members should not exceed twelve years (until the end of the Annual General Meeting that regularly decides on the discharge for the eleventh year of office of the Supervisory Board member)

The current composition of the Supervisory Board aligns with its objectives and competency profile. The Supervisory Board's objectives for its composition are reflected in the election proposals to the Annual General Meeting, with the aim of fulfilling the competency profile for the entire body, most recently with the court-appointed new Supervisory Board members Luca Oglialoro and Dr. Cord Landsmann in September 2024.

Supervisory Board members have the professional and personal qualifications set out in the profile of skills and expertise. In the opinion of the Supervisory Board, members Prof. Dr. Franca Ruhwedel and Markus Fuhrmann represent a sufficient number of independent Supervisory Board members. As an independent member of the Supervisory Board with expertise in the field of accounting and auditing, Prof. Dr. Franca Ruhwedel is also the Chair of the Audit Committee. Luca Oglialoro also has expertise in the field of accounting. The Supervisory Board members as a group are familiar with the sector in which thyssenkrupp nucera AG & Co. KGaA operates.

As of September 30, 2024, the allocation of competencies, as outlined in the competency profile resolved by the Supervisory Board, was as follows:

Competency profile & qualifications matrix

Experience & Qualifications	Cooper	Dellachá	Dinstuhl	Fuhrmann	Höllermann	Köfler	Landsmann	Lochen	López	Oglialoro	Ruhwedel	Scannell
General international management		■			■	■	■		■	■		■
Industry-/sector-specific expertise of thyssenkrupp nucera							■					■
Industry-/sector-specific expertise beyond thyssenkrupp nucera			■	■	■	■	■		■			■
Leadership/governance of listed companies						■			■	■	■	■
Corporate strategy/development, growth/scale-up, M&A and portfolio management	■	■	■		■			■			■	■
Change management, transformation		■	■		■		■			■	■	
IT, innovation and digitalization				■					■			
Financial and capital markets experience			■	■					■	■	■	
Accounting and auditing	■		■							■	■	
Legal, compliance and corporate governance								■			■	
Marketing and sales		■		■								
Talent management, HR development and leadership		■			■							
Sustainability/ESG				■		■		■			■	

8. Non-financial statement and non-financial Group statement

thyssenkrupp nucera AG & Co. KGaA makes use of the option pursuant to Section 289b (2) HGB and Section 315b (2) HGB to exempt itself from the requirement to submit a non-financial statement and a non-financial Group statement and refers to the combined management report of thyssenkrupp AG, Duisburg and Essen, for the 2023/2024 fiscal year, which is available on the website in English at https://www.thyssenkrupp.com/en/investors/reporting-and-publications and in German at https://www.thyssenkrupp.com/de/investoren/berichterstattung-und-publikationen.

Consolidated Financial Statements

Consolidated Statement of Financial Position

Assets

In EUR millions	Note	Oct. 1, 2022[1]	Sept. 30, 2023[1]	**Sept. 30, 2024**
Property, plant and equipment	5	8	10	14
Goodwill	4	57	55	55
Intangible assets other than goodwill	4	1	1	7
Other financial assets	9	1	0	0
Other non-financial assets	10	2	3	3
Deferred tax assets	27	12	21	29
Total non-current assets		**81**	**90**	**108**
Inventories	6	77	106	147
Trade accounts receivable	7	36	49	63
Contract assets	8	13	34	122
Other financial assets	9	256	3	3
Other non-financial assets	10	55	100	132
Current income tax assets		0	1	6
Cash and cash equivalents	30	27	767	680
Total current assets		**464**	**1,060**	**1,153**
Total assets		**545**	**1,150**	**1,261**

Equity and liabilities

In EUR millions	Note	Oct. 1, 2022[1]	Sept. 30, 2023[1]	**Sept. 30, 2024**
Capital stock	11	100	126	126
Additional paid-in capital		17	510	506
Retained earnings		90	114	126
Cumulative other comprehensive income		6	(3)	(4)
Equity attributable to thyssenkrupp nucera Group equity holders	**11**	**213**	**747**	**754**
Provisions for pensions and similar obligations	12	7	7	9
Provisions for other non-current employee benefits	13	0	1	0
Other provisions	13	2	1	1
Deferred tax liabilities	27	10	14	13
Lease liabilities, non-current	17	2	2	3
Other financial liabilities	15	–	1	1
Total non-current liabilities		**21**	**26**	**27**
Provisions for current employee benefits	13	3	4	5
Other provisions	13	38	45	56
Current income tax liabilities		3	7	5
Lease liabilities, current	17	2	3	2
Trade accounts payable	14	43	128	163
Other financial liabilities	15	4	4	4
Contract liabilities	8	205	174	225
Other non-financial liabilities	16	13	12	20
Total current liabilities		**311**	**377**	**480**
Total liabilities		**332**	**403**	**507**
Total equity and liabilities		**545**	**1,150**	**1,261**

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Consolidated Statement of Profit and Loss

In EUR millions	Note	2022/2023[1]	2023/2024
Sales	22, 21	661	862
Cost of sales		(565)	(771)
Gross margin		**96**	**91**
Research and development cost	23	(19)	(36)
Selling expenses	23	(20)	(22)
General and administrative expenses	23	(37)	(55)
Other income	24	7	12
Other expenses	25	(2)	(4)
Income from operations (EBIT)		**25**	**(14)**
Finance income	26	14	29
Finance expenses	26	(3)	(3)
Financial income/(expense), net		**11**	**26**
Earnings before taxes		**36**	**12**
Income tax expense	27	(12)	(1)
Net income		**24**	**11**
Thereof: thyssenkrupp nucera KGaA’s equity holders		24	11
Earnings per share (in EUR) (basic = diluted)		0.22	0.09
Weighted average of shares outstanding (in millions)	11	106	126

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Consolidated Statement of Comprehensive Income

In EUR millions	2022/2023[1]	2023/2024
Net income	**24**	**11**
Items that will not be reclassified to profit or loss in future periods:		
Remeasurements of pensions and similar obligations	1	(1)
Thereof: tax effect	0	0
Items of other comprehensive income that could be reclassified to profit or loss in future periods:		
Cash flow hedges	(1)	1
Thereof: tax effect	0	0
Foreign currency translation adjustment	(8)	(1)
Thereof: tax effect	0	0
Other comprehensive income	**(8)**	**(1)**
Total comprehensive income for the period	**16**	**10**
Thereof: attributable to equity holders of thyssenkrupp nucera Group	16	10

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Consolidated Statement of Changes in Equity

				Other comprehensive income			
In EUR millions	Subscribed capital	Capital reserve	Retained earnings	Remeasurements of pensions and similar obligations	Foreign currency translation adjustment	Cash flow hedges	**Total equity attributable to equity holders[4]**
Balance as of Oct. 1, 2022 (as previously reported)	**100**	**17**	**89**	**0**	**5**	**0**	**211**
Adjustment in accordance with IAS 8.41	**–**	**–**	**1**	**–**	**0**	**–**	**1**
Balance as of Oct. 1, 2022 (adjusted)[3]	**100**	**17**	**90**	**0**	**5**	**0**	**212**
Net income	–	–	24	–	–	–	24
Other comprehensive income	–	–	–	1	(8)	(1)	(8)
Total comprehensive income	**–**	**–**	**24**	**1**	**(8)**	**(1)**	**16**
Contributions from shareholder[1]	26	493	–	–	–	–	519
Balance as of Sept. 30, 2023[3]	**126**	**510**	**114**	**1**	**(3)**	**(1)**	**747**
Net income	–	–	11	–	–	–	11
Other comprehensive income	–	–	–	(1)	(1)	1	(1)
Total comprehensive income	**–**	**–**	**11**	**(1)**	**(1)**	**1**	**10**
Contributions from shareholder[2]	–	–	–	–	–	–	–
Other changes[5]	–	(4)	–	–	–	–	(4)
Balance as of Sept. 30, 2024	**126**	**506**	**125**	**0**	**(4)**	**0**	**754**

[1] Thereof contribution in-kind amounting to EUR 2.4 million recognized in connection with a waiver regarding “thyssenkrupp” trademark license fees (cf. Note 20).
[2] In addition to the transaction described above, there was an increase in capital reserves from an equity-settled share based payment in the amount of EUR 0.3 million. Since the same amount was charged by thyssenkrupp nucera Management AG, these two offsetting transactions are not shown separately.
[3] The comparative figures for FY 2022/2023 were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in section 33 of the notes.
[4] See the explanation in chapter 11.
[5] Other changes relate to the asset deal in India with thyssenkrupp Industrial Solutions (India) Private Limited. As the transaction is a combination of entities under common control, differences between the purchase price and the carrying amount of the acquired assets and liabilities are recognized directly in equity.

Consolidated Statement of Cash Flows

In EUR millions	2022/2023[3]	2023/2024
Net income	**24**	**11**
Adjustments to reconcile net income/(loss) to operating cash flows:		
Deferred income taxes, net	(1)	(8)
Depreciation, amortization and impairment of non-current assets	6	6
(Gain)/loss on disposal of non-current assets	0	0
Changes in assets and liabilities, net of non-cash effects:		
- Inventories	(32)	(42)
- Trade accounts receivable	(14)	(15)
- Contract assets	(21)	(89)
- Accrued pension and similar obligations	1	1
- Other provisions	7	11
- Trade accounts payable	88	36
- Contract liabilities	(24)	52
- Other assets/liabilities not related to investing or financing activities	(47)	(25)
Cash flow from operating activities	**(13)**	**(62)**
Expenditures for acquisitions of consolidated companies net of cash acquired	–	(3)
Capital expenditures from property, plant and equipment (inclusive of advance payments)	(4)	(6)
Capital expenditures for intangible assets (inclusive of advance payments)	0	(7)
Proceeds from disposals of property, plant and equipment, intangible assets and other non-current assets	0	0
Cash pool withdrawals (deposits)[1]	247	0
Cash flow from investing activities	**243**	**(16)**
Cash flows from redemption of lease liabilities	(3)	(3)
Contributions from shareholder[2]	532	–
Cost of capital procurement	(14)	(4)
Cash flow from financing activities	**515**	**(7)**

In EUR millions	2022/2023[3]	2023/2024
Net increase/(decrease) in cash and cash equivalents	**745**	**(85)**
Effect of exchange rate changes on cash and cash equivalents	(5)	(2)
Cash and cash equivalents at beginning of year	27	767
Cash and cash equivalents at end of year	767	680
Additional information regarding income tax amounts included in operating cash flows:		
Income tax paid	(10)	(16)
Interest received	11	26
Interest paid	0	0

[1] Cf. Note 2 regarding the change in presentation of cash pooling activities.
[2] The prior year figure includes reimbursed expenses for services relating to the preparation of the IPO by tk Group amounting to EUR 2.2 million.
[3] The comparative figures for FY 2022/2023 were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in section 33 of the notes.

Notes to the Consolidated Financial Statements

1 General information

1.1 Background

thyssenkrupp nucera AG & Co. KGaA (hereinafter referred to as “Parent” or “Company”) is a partnership limited by shares (Kommanditgesellschaft auf Aktien) incorporated under the laws of the Federal Republic of Germany, with its registered office and headquarter in Dortmund, Freie-Vogel-Straße 385a, Germany. The Company was registered in the commercial register (Handelsregister) of the local court (Amtsgericht) of Dortmund, Germany, on February 18, 2022, with its new legal form under HRB 33774. thyssenkrupp nucera Management AG, a stock corporation (Aktiengesellschaft) governed by German law, is the general partner (Komplementär) of the Company (“General Partner”) and has no interest in the issued and outstanding share capital of the Company.The General Partner is solely responsible for managing the Company, which includes all extraordinary management decisions. As the General Partner, it operates exclusively through its Management Board, which is tasked with managing and representing the General Partner and, indirectly, of thyssenkrupp nucera AG & Co. KGaA in its dealings with third parties. The Supervisory Board of the General Partner is responsible for appointing the members of the Management Board.

Pursuant to Article 7 (2) of the Articles of Association of the Company, the General Partner has not made a capital contribution to the Company, does not hold any shares in the Company, and therefore, will not participate in its assets or its profits and losses. The Company, together with its wholly owned subsidiaries, collectively conducts the operations of thyssenkrupp nucera Group (hereinafter referred to as “thyssenkrupp nucera Group” or “the Group”). thyssenkrupp nucera Management AG is not part of the scope of consolidation. The Company’s fiscal year ends on September 30 of each calendar year.

The German-based, publicly traded thyssenkrupp AG, headquartered in Duisburg and Essen (“tk AG”, and including its subsidiaries, “tk Group”), is the Company’s ultimate parent company and, as of September 30, 2024, continued to hold a 50.2% stake in the Company’s capital. The tk Group’s stake is held through thyssenkrupp Projekt 1 GmbH. The Company and its subsidiaries are included in tk AG’s consolidated financial statements, published in the German Federal Gazette. As of September 30, 2024, 25.9% of the Company’s capital was continued to be held by Industrie De Nora S.p.A., Milan, Italy (hereinafter “IDN”). thyssenkrupp nucera Management AG is owned by tk AG (66%) and IDN (34%). Further information about the Group structure is provided in Note 3 of the Notes to the Consolidated Financial Statements.

The shares of thyssenkrupp nucera AG & Co. KGaA have been listed for trading on the Regulated Market of the Frankfurt Stock Exchange (the "Frankfurt Stock Exchange") since July 7, 2023 and at the same time in the sub-segment of the Regulated Market with additional post-admission obligations (Prime Standard).

The Consolidated Financial Statements consist of the Consolidated Statement of Financial Position as of September 30, 2024 and September 30, 2023, as well as the Consolidated Statement of Profit and Loss, the Consolidated Statement of Comprehensive Income, the Consolidated Statement of Changes in Equity and the Consolidated Statement of Cash Flows for the fiscal years ended September 30, 2024 and September 30, 2023, respectively (collectively referred to hereafter as the “Consolidated Financial Statements”).

The Management Board of thyssenkrupp nucera Management AG (hereinafter referred to as “Management Board”) compiled these Consolidated Financial Statements on December 12, 2024.

This set of Consolidated Financial Statements was authorized for issue in accordance with a resolution of the Supervisory Board on December 17, 2024.

1.2 Basis of preparation

General

These Consolidated Financial Statements were prepared in accordance with Section 315e of the German Commercial Code (HGB) (“Consolidated Financial Statements in Accordance with International Accounting Standards”) and in compliance with the International Financial Reporting Standards (IFRS) as adopted by the European Union. The term IFRS also encompasses the International Accounting Standards (IAS), the interpretations issued by the International Financial Reporting Standards Interpretations Committee (IFRS IC) or its predecessor, the International Financial Reporting Interpretations Committee (IFRIC), and those of the former Standing Interpretations Committee (SIC). Further information on the underlying accounting policies can be found in Note 2.

The Consolidated Financial Statements have been prepared on a historical cost basis, except for derivative financial instruments, financial assets, and financial liabilities, as well as plan assets from defined benefit plans, that have been measured at fair value.

The annual financial statements of companies included in the Consolidated Financial Statements have been prepared using uniform accounting policies summarized in Note 2. The reporting date for the separate financial statements of Group companies is the same as the reporting date for the Consolidated Financial Statements.

The Consolidated Financial Statements have been prepared in euros and are presented in millions of euros, unless otherwise specified. For improved clarity and readability, decimal places have been omitted in the annual report beginning with the 2024 fiscal year. The presentation of prior-year figures has been adjusted accordingly. Values ranging from EUR -0.5 million to EUR +0.5 million are reported as EUR 0. A dash signifies that the respective item is not applicable. Due to rounding, the numbers presented may not add up precisely to the stated totals.

The Group has prepared the Consolidated Financial Statements based on the “going concern” assumption.

1.3 Business activities

thyssenkrupp nucera provides companies with technologies for electrolysis plants. The Group’s operations encompass the development, engineering, procurement, commissioning, and licensing of high-performance electrolysis technologies. Additionally, the Group, in collaboration with selected partner companies, offers construction and specific installation services for electrolysis plants. Its technology service further supports customers throughout the entire lifecycle of the installed systems.

Electrolysis technologies are categorized into chlor-alkali electrolysis ("CA") and alkaline water electrolysis ("AWE") based on the underlying technology employed.

In CA electrolysis technology, thyssenkrupp nucera is engaged in nearly all aspects of the value chain for industrial-scale electrolysis. The thyssenkrupp nucera Group supplies materials to its strategic partner Industrie De Nora S.p.A. for the contract manufacturing of CA electrolysis bipolar elements and half-shells.

The Group’s chlor-alkali electrolysis technologies include the BM2.7 single-element family (“BM2.7”), the bipolar filter press ion exchange membrane process electrolyzer (“BiTAC”), and the sodium chloride oxygen-depolarized cathode electrolysis (“NaCl-ODC”). The Group’s HCl electrolysis technologies encompass the HCl diaphragm electrolysis and HCl oxygen-depolarized cathode (ODC) electrolysis.

thyssenkrupp nucera supports its customers not only with on-site plant assembly and commissioning but also through consulting services on the handling and application of CA products. Additionally, the Group assists in upgrading existing facilities with more environmentally friendly and efficient technologies. Through its Service business, the Group offers both technological expertise and maintenance services.

In the alkaline water electrolysis (“AWE”) technology segment, thyssenkrupp nucera enables customers to produce green hydrogen on an industrial scale using alkaline water electrolysis technology. By using climate-friendly hydrogen instead of fossil fuels such as coal, companies can reduce their carbon footprint and contribute to the decarbonization of industry. To meet the demand for large-scale green hydrogen production, the Group has developed the standardized 20 MW electrolysis module scalum®. This new product aims to provide a standardized solution for producing green hydrogen on an industrial scale. While previous plants were custom-built, scalum® uses a modular approach that allows for largely standardized production. Although the product is already market-ready and has been sold, series production has not yet begun. Consequently, inventory and material allocation remain aligned to customer-specific requirements rather than general availability.

The thyssenkrupp nucera Group also assists customers with the on-site assembly and commissioning of water electrolysis plants. Its diverse global customer base in the industrial and energy sectors includes refinery operators, utility companies, steel producers, industrial gas manufacturers, and project developers. Green hydrogen is used to replace gray hydrogen produced from natural gas as well as in numerous power-to-x applications in which green hydrogen is converted into other chemical energy carriers, for example, for energy storage, as fuel, or as raw materials for the chemical industry.

As part of its “one-stop-shop” strategy, the Group also provides sales and service solutions for a plant’s entire lifecycle. This includes the maintenance of elements, such as reactivation, the replacement of diaphragms, membranes, and seals, as well as assembly and disassembly.

Alongside AWE technology, system solutions from the high-temperature electrolysis segment are set to expand the hydrogen product portfolio in the future, serving as a second high-performance technology for industrial-scale applications. To this end, a strategic partnership with Fraunhofer IKTS was initiated in the 2023/2024 fiscal year.

Further information on the Group's business structure and business segments is included in Note 21.

2 Summary of significant accounting policies and critical accounting estimates

Consolidation
The Consolidated Financial Statements include thyssenkrupp nucera AG & Co. KGaA and all companies controlled, directly or indirectly, by thyssenkrupp nucera AG & Co. KGaA (subsidiaries). Control exists when the Group

- has power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee);
- is exposed to variable returns from its involvement with the investee or has rights to such returns; and
- has the ability to use its power over the investee to affect the investee's returns.

Typically, control is assumed if the Group possesses more than half of the voting rights. Further information on the scope of consolidation is provided in Note 3.

The financial statements of subsidiaries are included in the Consolidated Financial Statements as of the date that control commences until the date that control ceases. As part of the capital consolidation, the carrying amounts of investments are offset against the proportional equity.

In a company acquisition, all identifiable assets, liabilities, and contingent liabilities of the acquired company are generally measured at fair value as of the acquisition date.

Interests held by other shareholders (non-controlling interests) are recognized according to their share of the fair value of identifiable assets, liabilities, and contingent liabilities.

All receivables and liabilities, sales, expenses, and income, as well as intragroup earnings between Group companies, are eliminated as part of the consolidation process.

Goodwill arising upon the acquisition of subsidiaries is presented separately in the Statement of Financial Position.

Consolidated Statement of Profit and Loss
The Consolidated Statement of Profit and Loss is prepared based on the cost-of-sales method by classifying expenses according to their function.

Cost of sales includes the production and acquisition costs incurred to generate sales. In addition to direct material costs, which represent the majority of the cost of sales, the cost of sales consists of procurement and construction service costs, non-staff overheads and personnel expenses. Cost of sales also encompasses project and non-project-related indirect costs, including depreciation and amortization and warranty costs.

Research and development cost includes expenses in connection with research and development activities not eligible for capitalization and other costs related to the functional area of research and development.

Selling expenses include personnel, service and material costs related to the business development and sales process, particularly the preparation of any New Build or Service order proposal. They also include marketing and other costs related to the functional area of sales.

General and administrative expenses include costs incurred in operating and administering the Company and consist primarily of expenses for salaries of non-project-related personnel, headquarters expenses and other costs related to the functional area of general administration.

The subtotal "EBIT" (earnings before interest and taxes) was referred to as "income from operations" in the previous year. In the 2023/2024 fiscal year, the term was standardized throughout the entire annual report as "EBIT".

Consolidated Statement of Cash Flows
The Group uses the indirect method to prepare its Consolidated Statement of Cash Flows. Net income or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows.

In the past fiscal year, cash pooling activities were no longer reported, as the corresponding agreement with tk AG was terminated in June 2023. The proceeds were invested in short-term money market instruments that meet the criteria for classification as cash and cash equivalents.

Current versus non-current classification
The Group presents assets and liabilities in the Consolidated Statement of Financial Position based on current/non-current classification. Assets and liabilities are classified by maturity. An asset is current when it is (i) expected to be realized or intended to be sold or consumed in the normal

operating cycle, (ii) held primarily for the purpose of trading, (iii) expected to be realized within twelve months after the reporting period or (iv) cash or cash equivalents, unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period. All other assets are classified as non-current.

A liability is current when (i) it is expected to be settled in the normal operating cycle, (ii) it is held primarily for the purpose of trading, (iii) it is due to be settled within twelve months after the reporting period or (iv) there is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period. The Group classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

Foreign currency translation

thyssenkrupp nucera Group's Consolidated Financial Statements are prepared in euros (EUR), the Company's functional currency. The Group designates a functional currency for each entity, which is then used to measure all items in the financial statements of the individual entities.

Transactions in foreign currencies are initially recorded by the Group's entities at the spot exchange rate of their respective functional currency on the date the transaction qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates at the reporting date. Differences arising upon the settlement or translation of monetary items are recognized in profit or loss.

Upon consolidation, the assets and liabilities of foreign operations are translated into euros at the rate of exchange prevailing at the reporting date, while their statements of profit and loss are translated using the daily exchange rates at the time of the transactions, approximated by the average exchange rate if appropriate. The exchange differences arising upon consolidation are recognized in other comprehensive income (OCI).

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising upon the acquisition are treated as assets and liabilities of the foreign operation and translated at the spot exchange rate at the reporting date.

The exchange rates of those currencies significant to the Group have developed as follows:

	Exchange rate as of (vs. the euro)		Annual average exchange rate for the year ended (vs. the euro)	
	Sept. 30, 2023	**Sept. 30, 2024**	Sept. 30, 2023	**Sept. 30, 2024**
US dollar	1.06	1.12	1.07	1.08
Chinese renminbi yuan	7.74	7.85	7.56	7.81
Japanese yen	158.10	159.82	149.39	162.92
Saudi riyal	3.97	4.19	4.02	4.07
Australian dollar	1.63	1.62	1.61	1.64
Indian rupee	88.02	93.81	88.04	90.39

Intangible assets, including goodwill

Intangible assets with finite useful lives are capitalized at cost and amortized on a straight-line basis depending on their estimated useful lives. Useful lives are examined on an annual basis and adjusted when applicable on a prospective basis. There were no changes compared to the previous year. The amortization expense of intangible assets is largely recognized in the cost of sales on the Consolidated Statement of Profit and Loss. Except for goodwill, there are no intangible assets with an indefinite useful life.

	Useful lives
Concessions, industrial property rights and similar rights and assets as well as licenses to such rights and assets	3 to 15 years
Intangible assets, internally developed software and the website	3 to 10 years

Property, plant and equipment
Fixtures and equipment are stated at cost, less accumulated depreciation and impairment losses. Capitalized production costs for self-constructed assets include costs of material, direct labor, allocable material and manufacturing overhead. Administrative costs are capitalized only when such costs are directly related to production. Maintenance and repair costs (day-to-day servicing) are expensed as incurred.

Fixtures and equipment are depreciated over the customary useful life using the straight-line method. The following useful lives (unchanged from previous year) are used as a basis for calculating depreciation:

	Useful lives
Buildings	4 to 50 years
Technical machinery and equipment	4 to 25 years
Other equipment, factory and office equipment	3 to 15 years

Impairment of non-financial assets
At each balance sheet date, the Group reviews the carrying amounts of its intangible assets and property, plant and equipment to determine whether there are any indications of impairment. If such an indication exists, the recoverable amount of the asset is estimated to determine the extent of the impairment loss (if any). If it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset is allocated to.

At thyssenkrupp nucera Group, the cash-generating units are represented by the individual legal entities which are located in Germany, Italy, China, Japan, the US, Saudi Arabia, Australia, and India and are operating in different geographical regions. The various legal entities operate with a high degree of autonomy and generate cash flows that are largely independent of other legal entities within the thyssenkrupp nucera Group.

Goodwill arising from acquisitions is allocated to the cash-generating units that are expected to benefit from the synergies of the acquisition. These cash-generating units represent the lowest level within the Group at which goodwill is monitored for internal management purposes. The recoverable amount of the cash-generating unit that carries goodwill is tested for impairment annually as of September 30, or on such other occasions when events or changes in circumstances indicate that it might be impaired. For more details, please refer to Note 4.

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. Impairment losses are recognized as an expense immediately.

In case of impairment losses related to cash-generating units that contain goodwill, the carrying amount of any goodwill allocated to the cash-generating unit is reduced first. If the amount of impairment losses exceeds the carrying amount of goodwill, the difference is generally allocated proportionally to the remaining non-current assets of the cash-generating unit to reduce their carrying amounts accordingly. The carrying amount of an asset is not reduced below the highest of fair value, less costs to sell (if determinable), value in use, and zero. The amount of the impairment loss that would otherwise have been allocated to the asset is proportionately distributed among the other assets of the cash-generating unit.

If the reason for an impairment loss no longer exists at a later date, a reversal of the carrying amount of the asset (or cash-generating unit) is recognized up to the newly estimated recoverable amount. The adjusted amount must not exceed the carrying amount that would have been determined if no impairment had been recognized in previous years. The required reversal is recognized immediately in profit or loss. Reversals of impairment losses on goodwill are not permitted.

Leasing
A contract constitutes a lease if it grants

- the use of an identified asset (the leased asset)
- for a certain time period
- in exchange for payment of consideration.

As a lessee, the Group generally recognizes an asset for the right of use of leased assets and a liability for the payment obligations at present values for all leases on the balance sheet. These mainly include the rental of land and buildings, transport vehicles, technical equipment and machinery, other facilities, and operating and office equipment. The rights of use recognized under property, plant, and equipment are measured at acquisition cost, less accumulated depreciation and impairment losses. Payments for non-lease components are excluded when determining the lease liability. The lease liabilities recognized under financial liabilities correspond to the present value of outstanding lease payments at the time the asset is made available for use. Lease payments are discounted at the interest rate implicit in the lease, if determinable; otherwise, they are discounted at the lessee's incremental borrowing rate. The derivation of the discount rate assumes financing appropriate to the lease term, taking into account the relevant currency area and a deduction for the collateralization of the underlying asset.

Lease liabilities include the following lease payments:

- fixed payments, less any lease incentives provided by the lessor;
- variable lease payments based on an index or interest rate;
- expected amounts to be paid by the lessee under residual value guarantees;
- the exercise price of purchase options when it is reasonably certain that the option will be exercised; and
- the payment of penalties for terminating the lease if the lease term includes an option for the lessee to terminate the lease.

Right-of-use assets are measured at acquisition cost, which consists of the following:

- lease liabilities;
- lease payments made at or before the lease begins, less any lease incentives received;
- initial direct costs; and
- decommissioning obligations.

Subsequent measurement of the right-of-use asset is at amortized cost. Right-of-use assets are depreciated on a straight-line basis over the lease term unless the useful life of the leased asset is shorter. If the lease agreement includes a reasonably certain purchase option, the right-of-use asset is depreciated over the useful life of the underlying asset. The following useful lives (unchanged from previous year) are used as the basis for calculating depreciation:

	Useful lives
Buildings	1 to 5 years
Other equipment, factory and office equipment	1 to 4 years

In subsequent measurements, the lease liability is compounded, and the corresponding interest expense is recognized in the financial income/(expense), net. The lease payments made reduce the carrying amount of the lease liability.

In accordance with the recognition exemptions, payments for low-value leases and short-term leases (up to twelve months) are recognized as expenses in the Statement of Profit and Loss. The Group has identified certain asset classes (e.g., PCs, telephones, printers, copiers) which regularly contain leased assets of low value. Outside these asset classes, only leased assets with a value of up to EUR 5 thousand are classified as low-value leased assets. In general, IFRS 16 regulations are not applied to leases of intangible assets. For contracts including a non-lease component as well as a lease component, each lease component must be accounted for separately from non-lease components as a lease. The lessee must allocate the contractually agreed upon payment to the separate lease components based on the relative standalone selling price of the lease component and the aggregated standalone selling price of the non-lease components.

The lease duration is determined based on the non-cancellable base term of the lease, as well as periods covered by an extension option when exercise is reasonably certain or by a termination option when non-exercise is reasonably certain. Real estate lease agreements, in particular, include extension and termination options to provide the Group with maximum operational flexibility. When determining the lease term, all facts and circumstances that provide an economic incentive to exercise extension options or not to exercise termination options are considered.

Inventories

Inventories are measured at acquisition or production cost, or at the lower net realizable value. Inventories are measured using the weighted average cost method. Production costs include direct material costs, labor costs, and attributable material and production overheads based on normal capacity utilization. Work-in-progress relates to costs incurred (e.g., materials directly sourced from suppliers) for unfinished spare parts and single elements that are still undergoing further processing.

Contract assets and contract liabilities

Contract assets and contract liabilities are recognized in connection with the Group's new construction projects (New Build CA, New Build AWE) and large service projects, where sales are realized over time. If the performance obligations provided by the Group exceed the payments received or are due from customers, contract assets are recognized on a net basis on the balance sheet, provided that the right to payment from the customer is still conditional. Unconditional payment claims are recognized under trade accounts receivable, with maturity occurring automatically over time from that point in time. If the payments received or due from the customer exceed the performance provided, contract liabilities are recognized on the balance sheet for the excess amount.

Since contract assets are related to unbilled ongoing construction contracts and long-term service agreements, they are subject to similar credit risks as trade accounts receivable for the same types of contracts. Therefore, the expected loss rates for trade accounts receivable are applied in determining impairments for contract assets.

Financial instruments

A financial instrument is a contract that gives rise to a financial asset for one entity and a financial liability or an equity instrument for another entity. Financial instruments are recognized when the Group becomes a party to the financial instrument contract. If the trade date and settlement date differ, the settlement date is decisive for the initial recognition or derecognition of primary financial instruments, while derivative financial instruments are recognized on the trade date. Financial instruments recognized as financial assets or financial liabilities are generally presented on a gross basis; they are only offset if a right of offset exists at that time and there is an intention to settle on a net basis.

Financial assets

Financial assets primarily include trade accounts receivable, cash and cash equivalents, term deposits, derivative financial assets, and debt instruments. Trade accounts receivable are initially recognized at the transaction price, while other financial assets are recognized at fair value. For financial assets not subsequently measured at fair value through profit or loss, all directly attributable transaction costs are included. The fair values recognized on the balance sheet generally correspond to the market prices of the financial assets.

The classification and measurement of financial assets are based on the characteristics of the cash flows associated with the financial asset and the business model under which the Group manages the financial assets.

A debt instrument is measured at amortized cost if it is held with the objective of collecting contractual cash flows, and these cash flows consist solely of principal and interest payments. For the Group, such instruments are mainly trade accounts receivable, cash and cash equivalents, and term deposits.

Derivatives that do not meet the requirements for hedge accounting are also measured at fair value through profit or loss.

Debt instruments are initially recognized at fair value and subsequently measured at amortized cost. Trade accounts receivable are measured at amortized cost. The expected credit loss is generally calculated by multiplying the three parameters: carrying amount of the financial asset, probability of default, and loss given default, using forward-looking information. The Group applies the simplified impairment model under IFRS 9 for all trade accounts receivable and contract assets, recognizing expected losses over the entire lifetime.

The Group has implemented a model to determine expected credit losses, particularly to establish expected default rates for trade accounts receivable. Expected default rates are primarily determined based on external credit information and ratings for each counterparty. If no rating information is available at the counterparty level, an assessment is made based on the average probability of default for each segment, with an appropriate risk premium added. The model also takes into account the specific business model, customer group, and the economic environment of the region. The Group does not consider the assumption that credit risk significantly increases after 30 days past due to be valid; the Group assumes that no default has occurred for delays of up to 90 days.

Financial assets are partially or fully impaired based on expected defaults when it is assumed that they can no longer be fully realized, for example, due to a significantly overdue maturity date or insolvency or similar proceedings.

Cash and cash equivalents, as well as term deposits, include cash on hand, demand deposits, and financial assets that can be converted to cash at any time and are subject to only minor value fluctuations. Cash and cash equivalents, as well as term deposits, are measured at amortized cost. Money market funds are measured at fair value.

Financial liabilities
Financial liabilities are obligations to be settled in cash or other financial assets. Financial liabilities are initially recognized at fair value. For financial liabilities not subsequently measured at fair value through profit or loss, all transaction costs directly attributable to their acquisition are included.

Trade accounts payable and other primary financial liabilities are generally measured at amortized cost using the effective interest method. Financing costs, including premiums payable upon repayment or settlement, are accrued periodically using the effective interest method and increase the carrying amount of the liabilities.

Derivative financial instruments
Derivative financial instruments, consisting of foreign exchange forward contracts and commodity forward contracts, are generally used to reduce currency risk and commodity price risk. These derivative financial instruments are accounted for separately and measured at fair value both upon initial recognition and in subsequent periods. If the fair value is positive, they are recognized as financial assets; if the fair value is negative, they are recognized as financial liabilities. In the absence of a designated hedging relationship, they are measured at fair value through profit or loss, with gains or losses from fair value fluctuations recognized immediately in profit or loss.

Hedging relationships are used to manage commodity price risks and currency risks from fixed contractual obligations as well as from anticipated foreign currency receivables and liabilities. In the case of cash flow hedges, a distinction is made between the effective and ineffective portions of fair value fluctuations. The effective portion of the fair value fluctuation, along with the cost of hedging (forward element and currency basis spread) associated with designated foreign currency derivatives, is recognized in other comprehensive income. Reclassification to the Statement and Profit or Loss occurs when the underlying transaction is recognized in profit or loss.

If a hedging relationship does not meet the requirements for hedge accounting under IFRS 9 or if hedge accounting is not economically viable, the derivative financial instrument is classified as a derivative without a hedging relationship. The resulting effects from derivative financial instruments that do not qualify for hedge accounting are recognized in profit or loss, either in other income or other expenses.

The presentation of changes in the fair values of derivative financial instruments that qualify for hedge accounting in the Statement of Profit and Loss aligns with the presentation of the hedged underlying transactions. Foreign exchange forward contracts used to hedge sales risks are reported under sales. Hedges for procurement risks are reported under cost of sales. Hedges for financing risks are reported in financial income (expense) accordingly.

Qualified transaction costs incurred in connection with services relating to the preparation of the IPO
The Group accounted for qualified transaction costs as follows: Upon completion of the IPO in July 2023, the qualified transaction costs, based on the number of new shares issued in the IPO, were offset against equity.

More information about financial instruments is provided in Note 19.

Income taxes
Income taxes include all current and deferred taxes based on taxable profit. Their calculation takes into account the applicable legal regulations in the countries where the Group operates. Interest and other surcharges related to income taxes are not recognized as an income tax expense.

In this context, management judgments are required, which may differ from the interpretations of local tax authorities. If this results in changes to income taxes for prior periods, these changes are recognized in the period when sufficient information for an adjustment becomes available. Income taxes are generally determined based on taxable profits, temporary differences reported for the fiscal year, and tax loss carryforwards. Current income taxes are recognized to the extent that they are expected to be payable to tax authorities in the future. Current income taxes related to items recognized directly in equity are recognized directly in equity. Current taxes related to items recognized in other comprehensive income are recognized in other comprehensive income.

Deferred taxes are recognized based on temporary differences between the carrying amounts of assets or liabilities on the balance sheet and their tax bases. Additionally, deferred tax assets are recognized for unused tax loss carryforwards and tax credits. When deferred tax assets arise, they are assessed for their future realizability, taking into account projected calculations and feasible tax strategies, and adjusted accordingly. Deferred taxes are measured using the tax rates expected to apply at the time the asset is realized or the liability is settled, provided these rates are already enacted or substantially enacted.

Deferred taxes relating to items outside the statement of profit or loss are recognized in a manner that does not affect profit or loss. Depending on the underlying transaction, deferred tax items are recognized either in other comprehensive income or directly in equity.

The Group offsets deferred tax assets and liabilities that are levied by the same tax authority for the same taxable entity according to their maturity.

Cumulative other comprehensive income

This item within equity includes changes in the Group's equity not affecting profit or loss, provided they are not recognized in the Consolidated Statement of Profit and Loss and do not result from capital transactions with shareholders. Cumulative other comprehensive income comprises the foreign currency translation difference, unrealized gains and losses from derivative financial instruments in cash flow hedges, as well as hedging costs related to designated foreign currency derivatives. The remeasurement component of pensions and similar obligations is reported in cumulative other comprehensive income in the period it is recognized as other comprehensive income.

Accrued pension and similar obligation

The accrued pension liability to be recognized for defined benefit pension plans and other post-retirement benefit plans is calculated for each plan using the projected unit credit method as of the reporting date.

In Germany, the Group's parent company provided pension benefits through a pension fund ("Pensionskasse"). This multi-employer benefit plan is a defined benefit plan by nature, however, due to insufficient information on the attributable asset portion, the plan has been accounted for as a defined contribution plan. It is expected, however, that the legally required pension indexation will not be covered by the pension fund but will instead need to be assumed directly by the Company. Accordingly, the proportional pension indexation amount is accounted for as a defined benefit plan. If the fair value of plan assets established to refinance pension liabilities and similar liabilities exceeds the corresponding obligation, the recognition of such a surplus is restricted. If, in connection with plan assets, minimum funding requirements related to past service exist, an additional liability may need to be recognized in case the economic benefit of a surplus – already taking into account the contributions to be made for the minimum funding requirements – is limited. This limitation is determined by the present value of any future refunds from the plan or reductions in future contributions.

When accounting for defined benefit pension plans, all income and expenses are reported within EBIT, except for the net interest expense. The net interest expense included in the net periodic pension cost is recognized in financial income/(expense) net on the Consolidated Statement of Profit and Loss.

The Group's obligations from defined contribution plans are recognized as an expense within EBIT.

Changes in the measurement of pensions and similar obligations are recognized in other comprehensive income and reported in cumulative other comprehensive income. They consist of actuarial gains and losses, the return on plan assets, and changes in the effects of the asset ceiling, excluding amounts already included in net interest expense. Deferred taxes related to remeasurements are also recognized in other comprehensive income.

The Group continues to recognize accrued pension liabilities for plan participants where the pension liability has been legally transferred, but the Group has not been fully released from all risks associated with the defined benefit plans following the legal transfer (relevant only for accrued pension liability for members of the Management Board of thyssenkrupp nucera Management AG; see Note 12). In such cases, any cash payments made in connection with the legal transfer of the defined benefit plans, as well as future compensation payments for current service cost, are recognized as a reimbursement claim. This is initially measured at fair value, provided that the reimbursement claim does not exceed the accrued pension liability (remeasurement within other comprehensive income) and is presented as a (non-current) other non-financial asset. The reimbursement claim does not qualify as plan assets and is therefore shown as a separate asset rather than as a deduction from the accrued pension liability. The reimbursement claim is accounted for similarly to plan assets, meaning that (i) interest arising over time is recognized as interest income, and (ii) any differences from actual returns or changes in the effects of the asset ceiling are recognized in other comprehensive income.

Share-based compensation

Equity-settled transactions

The cost of equity-settled transactions is determined based on the fair value at the grant date using an appropriate valuation model. These costs are recognized in personnel expenses, along with a corresponding increase in equity (capital reserves), over the period during which the service and, where applicable, performance conditions are fulfilled (vesting period). The cumulative expenses recognized for equity-settled transactions at each reporting date up to the date of the first exercise option reflect the extent of the vesting period elapsed and the Group's best estimate of the number of equity instruments that will ultimately vest. The expense or income in the Statement of Profit and Loss for a period represents the change in cumulative expenses recognized at the beginning and end of the period. Service and non-market performance conditions are not considered in determining the fair value of the grant on the grant date. However, the likelihood of meeting these conditions is included as part of the Group's best estimate for the number of equity instruments expected to vest.

Market conditions are factored into the determination of fair value on the grant date. All other conditions attached to a grant that are not related to a service requirement are considered non-vesting conditions. Non-vesting conditions are factored into the determination of the fair value of a grant and lead to immediate expense recognition unless there are also service and/or performance conditions.

Cash-settled transactions

For cash-settled transactions, a liability is recognized at fair value. Fair value is initially measured and then remeasured at each reporting date until settlement, with changes in fair value recognized in personnel expenses. Fair value is expensed over the vesting period, with a corresponding liability recorded. The approach used to account for vesting conditions, excluding market conditions, in equity-settled transactions also applies to cash-settled transactions.

Other provisions

Provisions are recognized when the Group has a present obligation from a past event, it is probable that settling this obligation will lead to an outflow of resources with economic benefits, and the amount can be reliably estimated. The provision amount represents the best estimate of the settlement amount of the present obligation as of the reporting date, with expected reimbursements from third parties not offset but recognized as a separate asset if their realization is virtually certain. If the interest effect is significant, the provision is discounted at the market interest rate.

Provisions for warranties are recognized at the time of sale of the relevant goods or the provision of the respective services. The amount of the provision is based on the historical development of warranty data and an assessment of all possible future warranty cases, weighted by their probabilities of occurrence.

In the current fiscal year, an adjustment was made to the accounting of warranty provisions for construction orders. These are no longer included in the total expected order costs according to IFRS 15 and therefore no longer affect the percentage of completion determined using the “cost-to-cost” method. The provision for warranty and guarantee obligations is now recognized in line with the stage of completion and builds up proportionately over the duration of the contract execution. The prior year figures have been adjusted accordingly; see Section 33 on IAS 8.41f.

Expenses related to the fulfillment of warranty obligations are recognized in cost of sales. Conversely, the reversal of such provisions is also recognized in cost of sales.

Revenue recognition

Revenue from contracts with customers is recognized when the distinct performance obligations, i.e., the goods or services promised in the contract, are transferred to the customer. Transfer occurs when the customer gains control over the promised goods or services, which is generally the case when the customer has the ability to direct the use of the goods or services and derive substantially all remaining benefits. Revenue from contracts with customers corresponds to the transaction price. The transaction price encompasses variable components and modifications contractually agreed upon with the customer. Variable consideration may include volume discounts, penalties for delays, incentives for early completion, or credits related to bonus agreements. The transaction price is not adjusted for a financing component or payment terms, as the period between the transfer of goods or services and the customer's payment is generally less than 12 months. Both the assessment of whether revenue should be recognized over time and the allocation of the transaction price to performance obligations involve a degree of judgment. When standalone selling prices are not directly observable, they are estimated. Adjustments to the transaction price may arise during order execution as a result of negotiations with the customer. Variable components are only included if it is highly probable that they will be invoiced to the customer. These components are always based on a contractual agreement, which limits the scope for judgment in determining the transaction price.

Depending on the nature of the transfer of the underlying good or service, the following revenue recognition methods are applied:

Revenue recognition at a point in time

Revenue recognition is generally applied in the Service product group (see Note 1.3) for the delivery of standard spare parts and single elements (finished goods and merchandise). Additionally, revenue from short-term service contracts is recognized at a point in time.

Revenue from the sale and delivery of goods and short-term services is recognized at the point when control is transferred to the customer. The timing of the transfer of control is partly determined based on the delivery terms agreed upon with the customer, such as FOB (Free on Board), EXW (ExWorks), or FCA (Free Carrier). Additionally, performance guarantees must be met.

Revenue recognition over time

Revenue recognition over time is generally applied to all construction contracts, including the New Build CA and New Build AWE projects (see Note 1.3). This method is also applied to service contracts involving the refurbishment and modification of facilities and other long-term contracts in the Service product group (see Note 1.3). Revenue is recognized over time, with the progress of construction and service contracts measured using the input method based on contract costs. Typically, payments are made in advance for a specific project phase, and performance obligations are met thereafter. Progress is determined by the ratio of costs incurred up to the reporting date to the estimated total contract costs as of the reporting date. The cost-to-cost method is the most appropriate method for ensuring faithful representation in the thyssenkrupp nucera Group, as it accounts for the costs associated with work-in-progress attributable to the customer. Work-in-progress consists primarily of engineering hours and purchased project-specific materials that are directly attributable to the customer and are critical to the Group.

To recognize revenue over time, it must be demonstrated that the transfer of goods occurs incrementally, which requires the cumulative fulfillment of the following criteria:

- the goods sold have no alternative use, and
- in the event of early termination by the customer, there is an enforceable right to payments (for work performed to date, plus a reasonable profit margin) for the work completed so far.

This method is applicable to plant construction projects (design, procurement, construction, and commissioning) as the facilities built are highly customized.

For onerous contracts, the not-yet-realized total expected loss – i.e., the amount of unavoidable costs exceeding the transaction price – is recognized under current other provisions.

Research and development cost
Research costs are expensed as incurred. The results of research activities are used to initiate, plan, and execute development projects.

Development costs are capitalized when the product or process is technically and commercially feasible, there is intent to complete the intangible asset, the intangible asset is expected to generate future economic benefits, attributable expenses can be reliably measured, and the Group has sufficient resources to complete the development. All other development expenses are expensed as incurred. Capitalized development costs of completed projects are recognized at production cost, less accumulated amortization and impairment losses.

Government grants
Government grants are recognized when there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a scheduled basis over the periods that the related costs, for which it is intended to compensate, are expensed.

The Group spends significant amounts on research activities, particularly related to green hydrogen technology, and receives grants from the government for such activities. Grants from the government are recognized at fair value when there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Earnings per share
Basic earnings per share are calculated by dividing the net income attributable to common shareholders by the weighted average number of shares outstanding during the reporting period. The calculation is adjusted for all periods presented to reflect transactions that change the number of outstanding shares without a corresponding change in resources, even if some of these transactions occurred after the fiscal year-end but before the approval of the financial statements. Diluted earnings per share correspond to basic earnings per share, as there are no dilutive instruments.

Segment reporting
Segment reporting is prepared under the management approach based on the internal organizational and management structure as well as reporting to the Management Board as the Chief Operating Decision Maker (CODM) in accordance with IFRS 8. In the thyssenkrupp nucera Group, the operating segments correspond to individual legal entities or the country of their respective headquarters. In Germany, thyssenkrupp nucera HTE GmbH was established to develop an additional product for hydrogen production, resulting in two legal entities in Germany. HTE GmbH is not assigned to the Germany segment, as it is a separate legal entity, managed independently of the KGaA, and is therefore reported internally as part of the "Rest of World" (RoW) segment. Legal entities in the USA, the Germany-based thyssenkrupp nucera Participations GmbH, Saudi Arabia, Australia, and India are also not individually reportable due to their size and are therefore grouped under the RoW segment (see Note 21).

In the 2024/2025 fiscal year, segment reporting will shift to the operating segments gH2 and CA. This change is due to a reorganization that transforms the previous country-oriented structure into a global product organization. The product lines gH2 and CA will now be managed and coordinated separately to enable better resource allocation and performance assessment. The new operating segments take effect on October 1, 2024.

Financial statement classification
Certain line items on the Consolidated Statement of Financial Position and the Consolidated Statement of Profit and Loss have been combined. These items are disclosed separately in the Notes to the Consolidated Financial Statements.

The Group generally classifies assets and liabilities as current if they are expected to be realized or settled within twelve months after the reporting date or are primarily held for trading purposes. Group entities with a business cycle exceeding twelve months classify assets and liabilities as current if they are expected to be realized within the normal business cycle of the entity.

Use of judgments and estimates
In preparing the Consolidated Financial Statements, the Management Board is responsible for making estimates, judgments, and assumptions that influence the application of accounting principles and the reported amounts of assets, liabilities, income, and expenses. These estimates and assumptions are made to the best of the Management Board's knowledge and belief, with the objective of presenting a true and fair view of the Group's net assets, financial position, and results of operations. They are reviewed and updated on an ongoing basis, particularly in light of potential impacts such as the war in Ukraine, tensions in the Middle East, associated risks to maritime transport, and the effects of climate change. Estimates and assumptions are regularly checked for accuracy. Based on current knowledge, it is possible that assumptions could change within the

next fiscal year, requiring a material adjustment to the carrying amounts of the relevant assets and liabilities.

Judgments primarily pertain to the following areas:

- Revenue recognition: Selection of the method for determining the percentage of completion for period-based revenue recognition
- Goodwill impairment test: Definition of cash-generating units and allocating goodwill to them
- Segment reporting: Delineation of segments
- Duration of lease contract: Assessment as to whether the exercise of renewal options is reasonably certain

Estimates and assumptions made by the Management Board in the application of IFRS that have a significant effect on the Consolidated Financial Statements concern primarily the following areas:

Impact of climate change
thyssenkrupp nucera views sustainability as both a societal responsibility and an opportunity to participate in a growing market.

Generally, the effects of climate change on useful lives, recoverability of assets, potential provisions, and markets relevant to thyssenkrupp nucera are continually assessed, taking both risks and opportunities into consideration.

Climate change presents the Group with opportunities in the form of increased sales potential. The Group’s portfolio is specifically designed to align with key decarbonization trends. Climate change also, however, brings a range of risks and uncertainties. Natural disasters driven by global climate change remain a potential threat in many regions, adding to this uncertainty. At present, the precise impact of climate change on the Group’s business development is still highly uncertain. While the Group consistently takes measures to mitigate these risks, it cannot be ruled out that the economic effects of climate change could impact its operations, operating results, cash flow, or financial position.

The valuation of the Group’s goodwill (see Note 4) and deferred tax assets (see Note 27) are particularly sensitive to assumptions about climate change and its potential impacts on the Group’s business.

Recoverability of goodwill
The Group tests the recoverability of goodwill at least annually and whenever there are indications of impairment. If an indication exists, the recoverable amount of the cash-generating unit must be estimated, which is the higher of fair value, less costs to sell, and value in use. Determining the value in use involves estimating the projection and discounting of future cash flows and the estimation of the terminal growth rate (TGR) (see Note 4). The discount rate and TGR are determined using capital market parameters, making them subject to uncertainty in the estimation process. Estimating discounted future cash flows requires key assumptions, especially concerning future sales prices and volumes, costs, and discount rates. The Group's growth strategy depends on the market’s acceptance of its AWE and CA products and their development. The emergence of a mass market for the Group’s AWE products and technologies may take longer than expected or may never materialize, as green hydrogen production is an emerging market, and there is no certainty that the Group will achieve or sustain commercialization of its products and technologies. Although the Management Board considers the assumptions used in calculating the recoverable amount to be reasonable, unforeseen changes in these assumptions could lead to an impairment of goodwill, negatively affecting the Group's future net assets, financial position, and results of operations. The core assumptions regarding volumes, prices, costs, and the resulting profitability for determining the recoverable amount are derived from market analyses, industry trends, external studies, and the planned execution of projects currently in negotiation.

Recoverability of assets
At each reporting date, the Group assesses whether there are indications that the carrying amounts of property, plant, and equipment or intangible assets may be impaired. If such indications exist, the recoverable amount of the asset is estimated. The recoverable amount is the higher of fair value, less costs to sell, and value in use. To determine the value in use, the discounted future cash flows of the relevant assets must be calculated. The recoverable amount is generally determined at the cash-generating unit level, as individual assets typically do not generate independent cash flows. Estimating discounted future cash flows involves significant assumptions, particularly regarding future selling prices and volumes, costs, discount rates, and the determination of the terminal growth rate (see notes 4 and 5). Although the Management Board considers the estimates of relevant expected useful lives, assumptions regarding economic conditions, and developments in the industries in which the Group operates, as well as estimates of discounted future cash flows, to be reasonable, changes in assumptions or circumstances may necessitate revisions to the analysis. This could result in additional impairments or reversals in the future if the trends identified by the Management Board reverse or if assumptions or estimates prove incorrect.

Other provisions

The recognition and measurement of other provisions are based on the assessment of the probability of a future outflow of resources and on past experience and the circumstances known at the reporting date. The actual outflow of resources may differ from the amount of other provisions. Material estimates and assumptions relate particularly to provisions for product warranties; see also the explanations in Note 13.

Revenue recognition from contracts with customers

The Group accounts for contracts in the New Build CA and New Build AWE sectors, as well as certain service contracts, such as those related to the refurbishment or modification of facilities, as construction contracts. Revenue is recognized over time, with progress in fulfilling the performance obligations for construction and service contracts measured using the input method based on the performance provided. Depending on the method used to determine the stage of completion, key estimates include total contract costs, costs to complete, total contract revenues, contract risks, and other assessments. The expected total revenues and costs of a contract reflect the Management Board’s current best estimate of the probable future benefits and obligations associated with the contract. The Management Board continuously reviews all estimates related to such construction contracts and adjusts them as necessary.

In rare cases, the Group enters into contracts that include a minor variable consideration, typically in new construction projects. The estimated amount of variable consideration at the contract’s inception is reviewed at each reporting date and adjusted as necessary.

Income taxes

The recognition and assessment of current and deferred tax assets and liabilities depend on the Management Board's judgments regarding tax uncertainties and future business developments. These include the interpretation of existing tax regulations and the assessment of the recoverability of deferred tax assets. These estimates are revised when there is sufficient evidence that a revision is necessary.

Uncertainties from geopolitical developments

Presently, the precise extent of the indirect effects of the war in Ukraine on the Group's business development – such as supply chain uncertainties, including higher raw material prices, processing costs, and increased energy prices – remains highly uncertain. Although the Group continuously implements risk mitigation measures, such as building inventories of selected materials, focused supplier management, and price adjustment clauses for future projects, it cannot be ruled out that the economic impacts of this crisis may affect the Group's business operations, results of operations, cash flow, or financial position.

The uncertainties regarding the assessment of the impact of the war in Ukraine and numerous other geopolitical and trade conflicts – such as the conflict in the Middle East – on current business development, including earnings prospects, remain unchanged. Further developments, such as sustained high inflation rates, ongoing supply chain disruptions, labor shortages in industrialized countries, risks of instability in the financial sector, including individual bank insolvencies, recurring floods, and other natural disasters due to global climate change, or a possible intensification of debt issues, can have an impact on the business performance.

The valuation of the Group's goodwill (see Note 4), deferred tax assets (see Note 27), trade accounts receivable, and contract assets (see notes 7 and 8) is particularly sensitive to assumptions regarding macroeconomic impacts, geopolitical developments, and the corresponding effects on the Group's business.

Impact of the introduction of a global minimum tax

In December 2021, the OECD released guidelines for a new global minimum tax framework. To facilitate its implementation, EU Member States agreed on an EU directive in December 2022. In Germany, the global minimum tax regulations came into effect on December 28, 2023, under the Minimum Tax Act. Under this law, thyssenkrupp nucera, indirectly through the thyssenkrupp Group, will be subject to the German global minimum tax regulations starting in the 2024/2025 fiscal year. Based on the impact analysis conducted for 2023/2024, no significant effects on the Group's income tax expense are anticipated.

Issued financial reporting standards not yet applied

The IASB has issued the following interpretations and amendments to standards, which are not yet mandatory and do not require EU endorsement. The Management Board currently does not expect the early application of these standards and does not anticipate a material impact on the presentation of the Consolidated Financial Statements from application of these standards, interpretations, and amendments:

- Amendments to IFRS 10 “Consolidated Financial Statements” and IAS 28 “Investments in Associates and Joint Ventures (2011)”: “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture,” issued in September 2014, with the effective date indefinitely postponed.
- Amendments to IAS 1 “Presentation of Financial Statements: Classification of Liabilities as Current or Non-current,” issued in January 2020 and October 2022, with expected initial application in the 2024/2025 fiscal year.
- Amendments to IFRS 16 “Leases: Lease Liability in a Sale and Leaseback,” issued in September 2022, with expected initial application in the 2024/2025 fiscal year.
- Amendments to IAS 7 “Statement of Cash Flows” and IFRS 7 “Financial Instruments: Disclosures: Supplier Finance Arrangements,” issued in May 2023, with expected initial application in the 2024/2025 fiscal year.
- Amendments to IAS 21 “The Effects of Changes in Foreign Exchange Rates: Lack of Exchangeability,” issued in August 2023, not yet endorsed, with expected initial application in the 2025/2026 fiscal year.
- Amendments to IFRS 9 and IFRS 7 “Classification and Measurement of Financial Instruments,” issued in May 2024, not yet endorsed, with expected initial application in the 2026/2027 fiscal year.
- IFRS 18 “Presentation and Disclosure in Financial Statements,” issued in April 2024, not yet endorsed, with expected initial application in the 2027/2028 fiscal year.
- IFRS 19 “Subsidiaries without Public Accountability: Disclosures,” issued in May 2024, not yet endorsed, with expected initial application in the 2027/2028 fiscal year; however, this standard is not relevant.
- Amendments to IFRS 9 and IFRS 7, “Amendments to the Classification and Measurement of Financial Instruments,” published in May 2024, not yet endorsed, with expected initial application in the 2026/2027 fiscal year.
- Amendments to IFRS 1, IFRS 7, IFRS 9, IFRS 10, IAS 7, and IAS 10: “Annual Improvements to IFRS – Volume 11,” published in May 2024, not yet endorsed, with expected initial application in the 2026/2027 fiscal year.

The first-time application of IFRS 18 is expected to have effects, the specific extent is currently being analyzed, although early application is currently not expected.

The following amendments to financial reporting standards were applied for the first time on October 1, 2023. The amendments had no significant impact on the Group’s financial position or results of operations.

- IFRS 17 “Insurance Contracts,” issued in May 2017, including the amendments to IFRS 17 “Amendments to IFRS 17,” issued in June 2020.
- Amendments to IAS 1 “Presentation of Financial Statements” and IFRS Practice Statement 2: Disclosure of Accounting Policies,” issued in February 2021.
- Amendments to IAS 8 “Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates,” issued in February 2021.
- Amendments to IAS 12 “Income Taxes: Deferred Taxes related to Assets and Liabilities arising from a Single Transaction,” issued in May 2021.
- Amendments to IFRS 17 “Insurance Contracts: Initial Application of IFRS 17 and IFRS 9 – Comparative Information,” issued in December 2021.
- Amendments to IAS 12 “Income Taxes: International Tax Reform – Pillar Two Model Rules,” issued in May 2023.

3 Consolidated companies and equity interests

The Group Consolidated Financial Statements encompass the following subsidiaries alongside the parent company:

	Country of incorporation	% equity interest as of	
		Sept. 30, 2023	**Sept. 30, 2024**
thyssenkrupp nucera Italy S.R.L., Milan	Italy	100	100
thyssenkrupp nucera Japan Ltd., Tokyo	Japan	100	100
thyssenkrupp nucera USA Inc., Houston	US	100	100
thyssenkrupp nucera (Shanghai) Co. Ltd, Shanghai	China	100	100
thyssenkrupp nucera Australia Pty. Ltd., Perth	Australia	100	100
thyssenkrupp nucera Arabia for Contracting LLC, Riyadh	Saudi Arabia	100	100
thyssenkrupp nucera Participations GmbH, Dortmund	Germany	100	100
thyssenkrupp nucera India Private Limited, Mumbai	India	100	100
thyssenkrupp nucera HTE GmbH, Dortmund	Germany	–	100

4 Intangible assets, including goodwill

Changes in intangible assets

Changes in the Group's intangible assets were as follows:

In EUR millions	Concessions, industrial property rights and similar rights and assets as well as licenses to such rights and assets	Development costs, internally developed software and website	Goodwill	**Total**
Gross amounts				
Balance as of Sept. 30, 2022	**3**	**4**	**57**	**64**
Currency differences	0	(1)	(2)	(3)
Additions	0	–	–	0
Disposals	0	–	–	0
Balance as of Sept. 30, 2023	**3**	**3**	**55**	**61**
Currency differences	0	0	0	0
Additions	6	1	–	7
Disposals	0	–	–	0
Balance as of Sept. 30, 2024	9	4	55	68
Accumulated depreciation and impairment losses				
Balance as of Sept. 30, 2022	**3**	**2**	**–**	**5**
Currency differences	0	0	–	0
Depreciation expense	0	0	–	0
Disposals	0	–	–	0
Balance as of Sept. 30, 2023	**3**	**2**	**–**	**5**
Currency differences	0	0	–	0
Depreciation expense	0	1	–	1
Disposals	0	–	–	0
Balance as of Sept. 30, 2024	3	3	–	6
Carrying Amount				
Balance as of Sept. 30, 2022	**0**	**2**	**57**	**59**
Balance as of Sept. 30, 2023	**0**	**1**	**55**	**56**
Balance as of Sept. 30, 2024	6	1	55	62

Intangible assets were not pledged as collateral for financial liabilities as of any reporting date. Impairments on intangible assets or goodwill were not recognized in the reporting periods ending September 30, 2024, and September 30, 2023.

Impairment of intangible assets

Goodwill is allocated to the cash-generating units (CGUs) of all segments. According to IFRS, the recoverable amount of a CGU is determined by the higher of its value in use and fair value, less costs to sell. In the annual financial statements, the recoverable amount for each CGU was determined based on the value in use using the discounted cash flow method. Cash flows were derived from financial plans covering a three-year planning period (the "planning period"), prepared by the local management of the legal entities and approved by the Supervisory Board of the thyssenkrupp nucera Group. For cash flows beyond the planning period, two additional forecast periods were extended based on the third budget year, using business-specific assumptions. The final forecast period is used to calculate the terminal value, applying a sustainable growth rate of 1.5% as of September 30, 2024 (September 30, 2023: 1.3%). The weighted average cost of capital (WACC) is based on a risk-free interest rate of 2.5% as of September 30, 2024 (September 30, 2023: 2.5%) and a market risk premium of 6.8% as of September 30, 2024 (September 30, 2023: 7.0%). The cost of debt and capital structure are derived individually from the respective peer group. Additionally, CGU-specific tax rates and country risk premiums are applied. After-tax discount rates are used to discount the cash flows.

Pre-tax discount rates, as shown below, were derived from the after-tax discount rates through an iterative calculation.

	Pre-tax Discount Rate	
in %	Sept. 30, 2023	**Sept. 30, 2024**
Germany	16	16
Japan	19	17
China	16	17
Italy	19	19
US	15	14

The key assumptions for the impairment test shown below also apply to the 2023/2024 fiscal year.

Goodwill as of September 30, 2024

CGU	Carrying amount of goodwill allocated to CGU in EUR million	Proportion of total goodwill in %	Pre-tax discount rate in %	Growth rate in %	Key assumptions for impairment testing
Germany	25.6	47	15.8	1.5	Significant increase in sales volumes as planned due to growth prospects for AWE technology based on market demand and stable sales prices. The increase in costs is comparatively low due to one-off ramp-up costs. The realization of the planned sales volumes and sales prices as well as the amortization of costs will result in significant growth and an improvement in the profitability of the future order portfolio.
Japan	9.7	18	17.3	1.5	Stable sales volumes of CA technology as planned. The realization of the planned sales volumes and unchanged stable sales prices and costs will result in growth and an improvement in the profitability of the projects.
China	11.6	21	16.5	1.5	Stable sales volumes of CA technology as planned. The realization of the planned sales volumes and unchanged stable sales prices and costs will result in growth and an improvement in the profitability of the projects.
Italy	6.6	12	19.2	1.5	Significant increase in sales volumes as planned due to growth prospects for AWE technology based on market demand and stable sales prices. The increase in costs is comparatively low due to one-off ramp-up costs. The realization of the planned sales volumes and sales prices as well as the amortization of costs will result in significant growth and an improvement in the profitability of the future order portfolio.
US	1.1	2	14.3	1.5	Significant increase in sales volumes as planned due to growth prospects for AWE technology based on market demand and stable sales prices. The increase in costs is comparatively low due to one-off ramp-up costs. The realization of the planned sales volumes and sales prices as well as the amortization of costs will result in significant growth and an improvement in the profitability of the future order portfolio.

Goodwill as of September 30, 2023

CGU	Carrying amount of goodwill allocated to CGU in EUR million	Proportion of total goodwill in %	Pre-tax discount rate in %	Growth rate in %	Key assumptions for impairment testing
Germany	25.6	47	16.1	1.3	Significant Order Intake and growth prospects from AWE technology materialize driven by market demand; limited by production capacity and market share; realization of increasing planned order intake for AWE products and profitability of projects
Japan	9.8	18	18.7	1.3	Realization of planned stable order intake CA and profitability of projects
China	11.7	21	16.3	1.3	Significant Order Intake and growth prospects from AWE technology materialize driven by market demand; limited by production capacity and market share; realization of increasing planned order intake for AWE products and profitability of projects
Italy	6.6	12	19.5	1.3	Significant Order Intake and growth prospects from AWE technology materialize driven by market demand; limited by production capacity and market share; realization of increasing planned order intake for AWE products and profitability of projects
US	1.1	2	14.7	1.3	Significant Order Intake and growth prospects from AWE technology materialize driven by market demand; limited by production capacity and market share; realization of increasing planned order intake for AWE products and profitability of projects

5 Property, plant and equipment

Changes in the Group's property, plant and equipment were as follows:

In EUR millions	Technical machinery and equipment	Right-of-use assets	Construction in progress	Total
Gross amounts				
Balance as of Sept. 30, 2022	**10**	**12**	**2**	**24**
Currency differences	(1)	0	–	(1)
Additions	2	4	1	7
Transfers	2	–	(2)	0
Disposals	0	(1)	–	(1)
Balance as of Sept. 30, 2023	**13**	**15**	**1**	**29**
Currency differences	0	0	0	0
Additions	4	4	1	9
Transfers	0	0	0	0
Disposals	0	(5)	–	(5)
Balance as of Sept. 30, 2024	**17**	**14**	**2**	**33**
Accumulated depreciation and impairment losses:				
Balance as of Sept. 30, 2022	**8**	**8**	**–**	**16**
Currency differences	(1)	0	–	(1)
Depreciation expense	1	4	–	5
Disposals	0	(1)	–	(1)
Balance as of Sept. 30, 2023	**8**	**11**	**–**	**19**
Currency differences	0	0	–	0
Depreciation expense	2	3	–	5
Disposals	0	(4)	–	(4)
Balance as of Sept. 30, 2024	**10**	**9**	**–**	**19**
Carrying Amount				
Balance as of Sept. 30, 2022	**2**	**4**	**2**	**8**
Balance as of Sept. 30, 2023	**5**	**4**	**1**	**10**
Balance as of Sept. 30, 2024	**7**	**5**	**2**	**14**

Property, plant and equipment also include right-of-use assets that are presented in Note 17.

No property, plant and equipment assets were pledged as collateral for financial liabilities as of any of the reporting dates. No impairment was recognized for property, plant and equipment as of the reporting periods ended September 30, 2024 and September 30, 2023.

6 Inventories

In EUR millions	Sept. 30, 2023[1]	Sept. 30, 2024
Raw materials	51	90
Work-in-progress	38	26
Finished products, merchandise	17	31
Total	**106**	**147**

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Working capital, including inventories, is driven by the Group's project, spare parts and service businesses. Inventory volatility over time is mainly due to the different types and stages of projects, as most purchases are related to contractually agreed orders. Raw materials are used in both long-term construction contracts, particularly for New Build projects, and short-term service projects. Raw material inventory is primarily influenced by procurement volumes, raw material prices, and consumption, especially for long-term construction projects, and therefore fluctuates over time. The decrease in work-in-progress in the 2023/2024 fiscal year was mainly due to large procurement orders associated with customer contracts involving point-in-time revenue recognition in the previous year.

As at September 30, 2024, inventory write-downs of EUR -4 million (September 30, 2023: EUR -1 million) were recognized as an expense, and write-downs from previous years totaling EUR 0 million (September 30, 2023: EUR 0 million) were reversed due to increased market prices.

In the fiscal year ending September 30, 2024, inventories amounting to EUR 81 million (September 30, 2023: EUR 77 million) were recognized as cost of sales. The amount reported in the prior year's annual report was EUR 510 million; however, this amount was corrected to EUR -433 million, reflecting an adjustment of EUR 77 million due to an error.

At no point during the reporting period were inventories pledged as collateral for financial liabilities.

7 Trade accounts receivable

Working capital, including trade accounts receivable, is driven by the Group's project, spare parts and service businesses. The volatility over time is caused mainly by the nature and status of various projects.

As of September 30, 2024, cumulative impairment losses for doubtful receivables amounted to EUR 0 million (September 30, 2023: EUR 0 million). For further details, please refer to Note 19. The prior-year comparative figure was adjusted due to an immaterial error.

8 Assets and liabilities from contracts with customers

Contract assets and contract liabilities
Contract assets and contract liabilities are reported on the Consolidated Statement of Financial Position at the end of each reporting period as follows:

In EUR millions	Sept. 30, 2023[1]	**Sept. 30, 2024**
Contract assets	34	124
Thereof those having remaining term of more than one year	23	117
Allowance for expected credit losses	0	(2)
Contract assets (net)	**34**	**122**
Contract liabilities	**(174)**	**(225)**
Thereof remaining term of more than one year	(59)	(142)

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

The information regarding the remaining term pertains to the remaining term of the entire customer contract.

The level of contract assets and contract liabilities is driven by the Group's project business. Significant volatility over time is primarily due to different types of projects and their stages. In connection with New Build projects and large-scale Service projects, with an average duration of two to three years, the Group typically receives substantial advance payments at the beginning of the project. The level of contract liabilities reflects new projects in their early stages, which will generate revenue over time.

Contract assets increased by a gross amount of EUR 124 million in the 2023/2024 fiscal year (2022/2023: gross amount EUR 34 million), primarily due to a decrease in unbilled revenue related to the fulfillment of performance obligations, which exceeded the amounts billed to customers for projects recognized as contract assets.

Contract liabilities rose to EUR 225 million in the 2023/2024 fiscal year (2022/2023: EUR 174 million), mainly due to an increase in advance payments related to new large-scale projects.

In the 2023/2024 fiscal year, EUR 114 million (2022/2023: EUR 127 million) , which was included in contract liabilities at the beginning of the fiscal year, was recognized as revenue.

Remaining performance obligations
The portion of the transaction price of a customer contract allocated to the remaining performance obligations represents revenue that has not yet been recognized but is contractually agreed. As of September 30, 2024, the total transaction price allocated to unfulfilled or partially unfulfilled performance obligations amounted to EUR 791 million (September 30, 2023: EUR 1,021 million). This amount primarily included obligations from construction contracts, including those in the New Build CA and New Build AWE sectors. Additionally, it encompassed service contracts for the refurbishment and modification of facilities, as well as other long-term contracts within the Service product group, as these contracts typically have durations of one or more years. The level of remaining performance obligations mainly relates to two large, long-term contracts signed in the 2021/2022 fiscal year. The revenue realized from these two contracts contributed to the operations of alkaline water electrolysis (AWE).

The majority of the remaining performance obligations is expected to be recognized as revenue within the next 12 to 36 months after the respective reporting date. This estimate is based on the best available information, as it must account for expectations of possible future contract modifications.

9 Other financial assets

In EUR millions	Sept. 30, 2023 current	Sept. 30, 2023 non-current	**Sept. 30, 2024** current	**Sept. 30, 2024** non-current
Miscellaneous other financial assets	2	0	2	0
Derivatives not qualifying for hedge accounting	1	–	1	–
Derivatives qualifying for hedge accounting	0	–	0	–
Total	**3**	**0**	**3**	**0**

As of September 30, 2024 and 2023, there were no impairments recognized on other financial assets.

10 Other non-financial assets

In EUR millions	Sept. 30, 2023[1] current	Sept. 30, 2023[1] non-current	**Sept. 30, 2024** current	**Sept. 30, 2024** non-current
Advance payments to suppliers	83	–	109	–
Other prepayments	3	1	5	1
Tax refunds	14	–	18	–
Miscellaneous other non-financial assets		2	0	2
Total	**100**	**3**	**132**	**3**

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Other non-current non-financial assets include a reimbursement claim related to the accrued pension obligation from defined benefit pension plans in Germany for members of the Management Board of thyssenkrupp nucera Management AG (see Note 19).

In the fiscal years ending September 30, 2024 and September 30, 2023, there were no impairments recognized on other non-financial assets.

11 Total equity

Subscribed capital

As of September 30, 2024, the subscribed capital amounted to EUR 126 million and was divided into 126,315,000 shares with a nominal value of EUR 1 each fully paid-up. As of September 30, 2023, the subscribed capital was also EUR 126 million, divided into 126,315,000 shares with a nominal value of EUR 1 each. Common shareholders are entitled to the approved dividend and one vote per share at the Company's Annual General Meeting.

Weighted average number of shares issued

in million shares	Sept. 30, 2023	**Sept. 30, 2024**
Issued shares as of October 1	100	126
Impact of newly issued shares	6	-
Weighted average number of shares issued as of September 30	**106**	**126**

Number of shares issued

in million shares	Sept. 30, 2023	**Sept. 30, 2024**
Issued shares as of October 1	100	126
Newly issued shares	26	-
Number of shares issued as at September 30	126	126

The shares of thyssenkrupp nucera (ticker symbol NCH2) have been traded on the Regulated Market (Prime Standard) of the Frankfurt Stock Exchange since July 7, 2023. The International Securities Identification Number (ISIN) is DE000NCA0001, and the German Securities Code (WKN) is NCA000. Effective September 18, 2023, the shares of thyssenkrupp nucera AG & Co. KGaA were included in the SDAX, the index of the 70 largest and most liquid companies below the MDAX.

Authorized capital
By resolution of the Annual General Meeting of thyssenkrupp nucera AG & Co. KGaA on June 9, 2023, the General Partner was authorized, with the approval of the Supervisory Board, to increase the share capital by up to EUR 50,000,000.00 through the issuance of up to 50,000,000 new bearer shares in exchange for cash and/or contributions in-kind, once or in multiple amounts, until June 9, 2028.

Conditional capital
Additionally, the share capital is conditionally increased (conditional capital) by up to EUR 20,000,000.00, divided into up to 20,000,000 bearer shares. The conditional capital increase will only be implemented to the extent that holders or creditors of option or conversion rights, or those obligated to convert or exercise options from convertible bonds and/or bonds with warrants or combinations of these instruments, issued or guaranteed by the company or a Group company under the authorization granted to the General Partner by resolution of the Annual General Meeting on June 9, 2023, and valid until June 8, 2028, exercise their option or conversion rights, fulfill their conversion or option exercise obligations, or, if the Company exercises its discretion, are granted shares of the Company in whole or in part instead of paying the cash amount due, unless a cash settlement is made or own shares or shares of another publicly listed company are used to satisfy these rights. The new shares will be issued at the option or conversion price determined under the terms of the aforementioned authorizing resolution. They participate in profits as of the beginning of the fiscal year in which they are issued.

To the extent legally permissible, the General Partner may, with the Supervisory Board's approval, define the profit participation of new shares in deviation from Section 60 (2) of the German Stock Corporation Act (AktG).

The General Partner, with the approval of the Supervisory Board, is authorized to determine the further details of implementing the conditional capital increase. The Supervisory Board is authorized to revise the wording of articles 5 (1) and (4) of the Articles of Association of thyssenkrupp nucera AG & Co. KGaA to reflect the respective utilization of the conditional capital and to amend it after the expiration of all option or conversion periods. Additionally, the Supervisory Board may make any other necessary adjustments to the Articles of Association that pertain exclusively to their wording.

Capital reserve
The capital reserve represents payments or contributions made by the Group’s equity holders to the extent they are not reflected in subscribed capital.

Effects from the recognition of the received services of the new granted share-based payments are recognized in the capital reserve.

Retained earnings
Retained earnings include the Group’s undistributed net income from prior years.

Capital management
The key financial goals of thyssenkrupp nucera include the sustainable increase of company value and ensuring liquidity at all times. Therefore, creating sufficient liquidity reserves is of great importance. thyssenkrupp nucera is not subject to any statutory capital requirements.

As of September 30, 2024, the equity ratio was 60% (previous year: 65%).

Dividends and capital transactions
No dividend was distributed in the 2023/2024 fiscal year.

thyssenkrupp nucera AG & Co. KGaA generated net income of EUR 12 million under German GAAP (HGB) in the 2023/2024 fiscal year. As a result of the existing accumulated deficit, no dividend will be proposed to the Annual General Meeting. The dividend policy remains unchanged. thyssenkrupp nucera intends to retain future profits to finance further growth and does not plan to declare or distribute cash dividends in the foreseeable future.

Cumulative other comprehensive income
This item includes the cumulative components of other comprehensive income.

Business acquisition

On October 3, 2023, the newly formed company in India signed a purchase agreement with thyssenkrupp Industrial Solutions (India) Private Limited (“tkIS India”) to acquire assets and expertise in chlor-alkali technology. This acquisition strengthens nucera’s presence in India and the broader region.

The transaction is classified as a business acquisition, with an acquisition date of October 31, 2023.

As both tkIS India and the Group are under the control of thyssenkrupp AG, the acquisition is classified as a transaction under common control.

The Group utilizes the accounting option to recognize the acquisition using the predecessor approach. Consequently, the acquired assets and transferred liabilities are recognized at their carrying amounts, with any difference recognized directly in equity.

The purchase price, equivalent to the fair value of the transferred assets, totaled EUR 3.5 million and was paid entirely in cash.

At the acquisition date, the carrying amount of the transferred assets amounted to zero. Non-current provisions of EUR 0.3 million were transferred along with the personnel, for which the seller made a corresponding cash payment to the Group.

The difference of EUR 3.5 million between the carrying amount of the transferred assets and assumed liabilities and the purchase price was recognized in equity as a reduction in the capital reserve.

12 Provisions for pensions and similar obligations

In EUR millions	Sept. 30, 2023	**Sept. 30, 2024**
Pension obligations	6	8
Partial retirement	0	0
Other accrued pension-related obligations	1	1
Total	**7**	**9**

Pension obligations

The pension obligations relates to the Group’s voluntary retirement benefits under defined benefit plans in Germany and Japan.

Benefits from these plans are funded either by pension assets (“plan assets”) held separately by the employer or by accrued pension liabilities, with the amount recognized in the balance sheet for pension obligations already reflecting the value reduced by the respective plan assets. In Germany, there are also reimbursement claims that do not meet the criteria for plan assets and are therefore reported as a separate asset rather than as a deduction from the accrued pension liability.

In Germany, the parent company provided pension benefits through a commitment to a pension fund (“Hoechster Pensionskasse”). This multi-employer benefit plan is a defined benefit plan by nature; however, due to insufficient information on the attributable share of assets, it was accounted for as a defined contribution plan. It is expected, however, that the legally required pension indexing will not be covered by the pension fund but will need to be assumed directly by the Company. Accordingly, the proportional pension indexing amount is accounted for as a defined benefit plan. The pension fund plan was closed to new entrants at the end of 2014 and replaced by a defined contribution plan (“KombiPakt”) with risk-optimized payout options (lump sum or installment payments). Specifically for newly hired professionals and managers, the “Flexplan” was introduced on January 1, 2017. The “Flexplan” is an equity-based pension plan with an employer-guaranteed minimum return of 1% per year. Before January 1, 2017, specialists and executives received pension benefits through commitments under the Bochum Benefits Plan ("BoLo") or the Essen Association. Existing commitments will continue to be maintained for the employees concerned.

Effective June 1, 2022, the accrued pension liability for voluntary defined benefit pension commitments in Germany for the members of the Management Board of thyssenkrupp nucera Management AG was legally transferred from thyssenkrupp nucera AG & Co. KGaA to thyssenkrupp nucera Management AG in exchange for a cash payment. According to the Company’s Articles of Association, thyssenkrupp nucera AG & Co. KGaA is required to reimburse thyssenkrupp nucera Management AG for all expenses related to managing the Company’s business, including the compensation of its governing bodies. This includes expenses related to the defined benefit plans granted to the Management Board of thyssenkrupp nucera Management AG, covering at least the current service cost for benefits provided after the legal transfer of the defined benefit plan, which is regularly billed to the Company. Should future deficits arise in the plan assets at the level of thyssenkrupp nucera Management AG, the Company is required to make additional payments to cover them. Therefore, thyssenkrupp nucera AG & Co. KGaA remains exposed to certain risks associated with the defined benefit plans, even after the legal transfer effective June 1, 2022. Consequently, the Company continues to recognize accrued pension liability for the members of the Management Board of thyssenkrupp nucera Management AG. The cash payment made to thyssenkrupp nucera Management AG in connection with the legal transfer of the defined benefit plans, as well as future compensation payments for current service costs, are recognized as a reimbursement claim. This is measured at fair value to the extent that the reimbursement claim does not exceed the accrued pension liability (reimbursement asset cap) and is reported as other non-financial (non-current) assets (see Note 10).

In Japan, the company offers a voluntary defined benefit plan in the form of an "End-of-Service" benefit. The benefit amount is defined as the sum of accumulated points upon retirement/termination/death, multiplied by a factor dependent on the length of service and a factor based on conditions for involuntary or voluntary vesting. The multiplier varies depending on the reason for leaving, with the amount being lower in cases of voluntary departure (for each length of service) than upon reaching the statutory retirement age. The plan in Japan includes a corporate pension plan and a retirement benefit plan. The corporate pension plan is regulated by the Japanese Ministry of Health, Labour, and Welfare in accordance with Japan's Defined Benefit Corporate Pension Act. The plan is subject to statutory minimum funding requirements, whereby the company in Japan must make additional contributions if the plan lacks sufficient assets to reach a minimum funding level within a specified period. The Japanese entity is responsible for managing the defined benefit plan as the employer. Further information on the composition and investment strategy of the plan assets can be found in the disclosures on plan assets.

The main risks associated with the various types of pension plans include financial risks, inflation risks, and biometric risks.

Since the plans are salary-based and the annual pension components are directly linked to current salaries (e.g., in defined contribution plans), there are inflation risks that could lead to an increase in defined benefit (DB) plan obligations. An increase in salaries beyond the trend assumptions used in the valuation of the obligation would also directly increase future service costs.

Pension plans paid as annuities in Germany are legally required to provide for inflation adjustments; such adjustments may also be required by collective agreements or may be made voluntarily or at the Company's discretion. Consequently, additional expenses could arise if inflation adjustments during the pension payment phase exceed the current trend assumptions for pensions, leading to an immediate increase in provisions.

Biometric risks may arise from premature benefit claims (such as the risk of sudden impact on the Statement of Profit and Loss due to death or disability) or from underestimating assumed life expectancy (longevity risk), which can lead to unexpected increases in provisions and early cash outflows, resulting in expenses for the Company.

Risks from changes in the discount rate are purely accounting-related. The provisions are offset against other comprehensive income with no cash outflow involved.

In Japan, retirement benefits are typically provided as a lump sum. Employees who leave the company after more than 10 years may opt for a 15-year annuity instead of a one-time lump sum payment, which presents a risk for the company in setting the annuity amount. Due to the conversion factors used to calculate the annuity benefit, employees choosing annuity payments result in a higher liability for the company. If a higher percentage of employees select the annuity option, it could significantly increase the liability. Overall, 60% of plan participants have chosen this option across all reporting dates.

In the pension plans in Germany, individual beneficiaries are counted multiple times in the employee count due to entitlements in different components of the pension systems. The total number of pension commitments is distributed as follows:

	Sept. 30, 2023			**Sept. 30, 2024**		
	Germany	Japan	**Total**	Germany	Japan	**Total**
Active employees	623	73	696	517	76	593
Terminated employees with vested benefits	35	5	40	30	8	38
Pensioners	9	13	22	11	12	23
Total	**667**	**91**	**758**	**558**	**96**	**654**

Changes in defined benefit obligations, plan assets, reimbursement claims and capped reimbursement claims

The reconciliation of the changes in the defined benefit obligations and the fair value of plan assets are as follows:

	Sept. 30, 2023			**Sept. 30, 2024**		
In EUR millions	Germany	Japan	**Total**	Germany	Japan	**Total**
Change in defined benefit obligations (DBO):						
DBO at beginning of fiscal year	**7**	**8**	**15**	**7**	**7**	**14**
Service cost	1	0	1	1	0	1
Interest expense	0	0	0	0	0	0
Remeasurement: Actuarial (gains)/losses from experience adjustments	0	0	0	0	0	0
Remeasurement: Actuarial (gains)/losses from changes in demographic assumptions	–	1	1	–	–	–
Remeasurement: Actuarial (gains)/losses from changes in financial assumptions	(1)	(1)	(2)	1	0	1
Currency differences	–	(1)	(1)	–	0	0
Participant contributions	–	0	0	–	0	0
Benefit payments	0	0	0	0	0	0
Others	0	–	0	0	–	0
DBO at end of fiscal year	**7**	**7**	**14**	**10**	**7**	**17**
Change in plan assets:						
Fair value of plan assets at beginning of fiscal year	**1**	**9**	**10**	**1**	**8**	**9**
Interest income	0	0	0	0	0	0
Remeasurement: Actuarial gains/(losses) on plan assets, excluding amounts included in interest income	0	0	0	0	1	1
Currency differences	–	(1)	(1)	–	0	0
Employer contributions	0	0	0	1	0	1
Participant contributions	–	0	0	–	0	0
Benefit payments	–	0	0	–	0	0
Administration cost	–	0	0	–	0	0
Others	0	–	0	0	–	0
Fair value of plan assets at end of fiscal year	**1**	**8**	**9**	**2**	**9**	**11**

	Sept. 30, 2023			**Sept. 30, 2024**		
In EUR millions	Germany	Japan	**Total**	Germany	Japan	**Total**
Change in reimbursement rights:						
Fair value of reimbursement rights at beginning of fiscal year	**3**	**–**	**3**	**3**	**–**	**3**
Interest income	0	–	0	0		0
Remeasurement: Actuarial gains/(losses) on reimbursement rights, excluding amounts included in interest income	0	–	0	0		0
Employer contributions	0	–	0	0		0
Fair value of reimbursement rights at end of fiscal year	**3**	**–**	**3**	**3**	**–**	**3**

Asset Ceiling

The asset ceiling changed as follows:

	Sept. 30, 2023			**Sept. 30, 2024**		
In EUR millions	Germany	Japan	Total	**Germany**	**Japan**	**Total**
Balance as of the beginning of the financial year	1	–	1	1	–	1
Interest expense/income	0	–	0	0	–	0
Revaluation limitation to the upper limit for the asset value without the amounts included in the interest expense/income	0	–	0	0	–	0
Exchange rate differences	–	–	–	–	–	–
Balance as of the end of the fiscal year	**1**	**–**	**1**	**1**	**–**	**1**

01 _ Global. Successful.
02 _ About us
03 _ Combined Management Report
04 _ Consolidated Financial Statements
05 _ Further information

The present value of entitlements as of September 30, 2024, amounts to EUR 17 million (September 30, 2023: EUR 14 million), consisting entirely of unfunded plans amounting to EUR 6 million (September 30, 2023: EUR 5 million), partially or fully funded plans amounting to EUR 11 million (September 30, 2023: EUR 9 million), and pension provisions for members of the Management Board of thyssenkrupp nucera Management AG totaling EUR 2 million (September 30, 2023: EUR 2 million), backed by reimbursement claims.

Changes in defined benefit net assets and liabilities

The net assets/liabilities of defined benefit plans changed as follows:

	Sept. 30, 2023			**Sept. 30, 2024**		
In EUR millions	Germany	Japan	**Total**	Germany	Japan	**Total**
Defined benefit asset/(liability) at the beginning of fiscal year	6	(1)	5	6	(1)	5
Service cost plus net interest income/(expense)	1	0	1	1	0	1
Remeasurements	(1)	0	(1)	1	0	1
Currency differences	–	0	0	–	0	0
Employer contributions	0	0	0	0	0	0
Participant contributions	–	–	–	–	–	–
Benefit payments	0	0	0	0	0	0
Administration cost	–	0	0	–	0	0
Other	0	–	0	0	0	0
Net defined benefit liability at end of fiscal year	6	(1)	5	8	(2)	6
Thereof: accrued pension liability	6	–	6	8	–	8
Thereof: other non-financial assets	–	(1)	(1)	–	(2)	(2)

Net periodic pension costs

The net periodic pension costs for defined benefit plans were as follows:

	Sept. 30, 2023			**Sept. 30, 2024**		
In EUR millions	Germany	Japan	**Total**	Germany	Japan	**Total**
Service cost	1	0	1	1	0	1
Net interest cost	0	0	0	0	0	0
Administration cost	–	0	0	–	0	0
Net periodic pension cost	1	0	1	1	0	1

Sensitivity analysis and underlying assumptions

The Group applied the following weighted average assumptions to determine benefit obligation:

	Sept. 30, 2023		**Sept. 30, 2024**	
in %	Germany	Japan	Germany	Japan
Discount rate	4	1	3	2
Rate of compensation increase	3	varies by age	3	varies by age

The assumptions for discount rates, rates of compensation increase, and the rate of pension progression on which the calculation of the obligations is based were derived in accordance with standard principles and established for each country based on their respective economic conditions. Discount rates are generally determined based on market yields of AA-rated corporate bonds of appropriate term and currency.

As of September 30, 2024, the rate of compensation increase for plans in Japan vary by age, ranging from 2.2% (September 30, 2023: 2.3%) to 10.8% (September 30, 2023: 11.1%).

The decrease in the rate of pension progression in Germany is due to slightly lower inflation expectations for Germany.

Accrued pension obligations in Germany are recognized on the basis of the “2018 G tables” of Prof. Dr. Klaus Heubeck, adapted to group-specific circumstances. In Japan, the MHLW standard was used to determine the demographic assumptions.

Alternative assumptions would result in the following changes in the defined benefit obligation and the corresponding reverse changes in equity.

The table shows the effects of the change in one assumption, with all other assumptions remaining unchanged for the plans in Germany. The sensitivities do not lead to any significant changes in estimates:

		Increase/(decrease) in defined benefit obligation for plans Germany	
In EUR millions		Sept. 30, 2023	**Sept. 30, 2024**
Discount rate	Increase by 0.5 percentage points	0	(1)
	Decrease by 0.5 percentage points	0	1
Rate of compensation increase	Increase by 0.5 percentage points	0	–
	Decrease by 0.5 percentage points	0	–
Mortality probability	Decrease by 10.0 percentage points	0	0

To test the sensitivity of the defined benefit obligation due to a change in the mortality and life expectancy assumptions, an alternative analysis was carried out using 10% lower mortality probabilities as of the retirement age. For beneficiaries currently aged 63 to 65, this roughly corresponds to a one-year increase in life expectancy upon entering retirement.

A change in the discount rate for the plan in Japan would result in the following increases in the defined benefit obligation and the corresponding decrease in equity. The table below shows the effect of a change in the discount rate while all other assumptions remain unchanged. Changes in other assumptions do not have any material impact on the defined benefit obligation.

		Increase/(decrease) in defined benefit obligation for plan Japan	
In EUR millions		Sept. 30, 2023	**Sept. 30, 2024**
Discount rate	Increase by 0.5 percentage points	0	0
	Decrease by 0.5 percentage points	0	0

Plan assets

The Group's plan assets are invested in diversified portfolios comprising various asset classes to achieve an optimal structure in terms of risk and return. The largest portion of the Group’s plan assets related to funded plans is located in Japan. The asset classes in Japan primarily include investments in insurance contracts and pension funds. The plan assets do not include direct investments in bonds, the Group’s own shares, or real estate used by the Group itself.

The Group employs professional investment managers to manage the plan assets based on specific investment guidelines. The investment committees for each plan consist of senior finance staff and other qualified executives. These committees meet regularly to review the risks and performance of key assets and approve the selection or contract renewal of external fund managers.

Regular asset-liability studies are also conducted for major portions of the Group's plan assets, in which actuaries analyze the structure of pension obligations in detail (particularly regarding age structure, duration, potential interest/inflation risks, etc.). Based on these studies, the investment strategy and target portfolio for the plan assets are developed or updated. For risk management purposes, investment strategies may be employed that align asset allocation with pension obligations.

The processes described above for managing and monitoring plan assets address the typical risks associated with capital market investments – such as counterparty, liquidity/market, and other risks.

As of the respective reporting dates, the portfolio of the main plan assets consisted of the following asset classes:

	Fair value as of Sept. 30, 2024			
In EUR millions	Total	Quoted market price in an active market	No quoted market price in an active market	Portion of major plan assets (in %)
Asset categories				
Equity securities	1	1	–	5
Bonds	1	1	0	12
Others	9	–	9	83
Total	**11**	**2**	**9**	**100**

	Fair value as of Sept. 30, 2023			
In EUR millions	Total	Quoted market price in an active market	No quoted market price in an active market	Portion of major plan assets (in %)
Asset categories				
Equity securities	1	1	–	7
Bonds	0	0	0	5
Others	9	–	9	88
Total	**10**	**1**	**9**	**100**

The line item “others” relates to investments in insurance contracts and pension trust funds in Japan.

According to its funding policy, the Group generally contributes only the amounts necessary to meet the statutory minimum funding requirements of each respective country. From time to time, the Group may make additional contributions at its discretion. The Group’s expected contribution to plan assets for the 2024/2025 fiscal year is EUR 0 million (2023/2024: EUR 1 million).

Pension benefit payments

In the 2023/2024 fiscal year, pension payments for plans in Germany totaling EUR 0 million (2022/2023: EUR 0 million) were made from provisions. In Japan, pension payments of EUR 0 million (2022/2023: EUR 0 million) were primarily made from plan assets.

The following future pension payments are expected from the Group’s defined benefit pension plans in the coming years:

In EUR millions	Germany	Japan	Total
(Fiscal year)			
2024/2025	0	0	0
2025/2026	0	0	0
2026/2027	0	1	1
2027/2028	0	1	1
2028/2029	1	0	1
2029/2030 – 2032/2033	3	2	5
Total	**4**	**4**	**8**

As of September 30, 2023, the Group’s defined benefit pension plans were expected to result in the following future pension payments:

In EUR millions	Germany	Japan	Total
(Fiscal year)			
2023/2024	0	1	1
2024/2025	0	0	0
2025/2026	0	0	0
2026/2027	0	1	1
2027/2028	1	0	1
2028/2029 – 2031/2032	2	2	4
Total	**3**	**4**	**7**

As of September 30, 2024, the weighted average duration of the defined benefit plans was between 14.2 and 15.7 years in Germany (2023: 14.4 to 15.4 years) and 11.7 years in Japan (2023: 11.7 years).

Defined contribution plans
The Group maintains defined contribution plans in the USA and Italy. In the 2023/2024 fiscal year, EUR 0 million (2022/2023: EUR 0 million) was recognized as an expense for contributions to defined contribution plans.

The Group's contribution to the multi-employer defined benefit pension plan in Germany ("Hoechster Pensionskasse"), which is accounted for as a defined contribution plan, amounted to EUR 0 million in the 2023/2024 fiscal year (2022/2023: EUR 0 million) and is expected to be EUR 0 million for 2024/2025. The total contributions received by Hoechster Pensionskasse from all contributing employers amounted to EUR 173 million in the 2023 calendar year (EUR 168 million in 2022). Accordingly, the thyssenkrupp nucera Group's contributions represented approximately 0.1% of the total pension fund contributions. Any potential costs related to the termination of plans administered through Hoechster Pensionskasse are expected to be immaterial for the Group.

Defined contribution plans are funded regularly through mandatory or voluntary contributions (statutory/contractual) by the employer and/or the employee. Contributions are transferred to an entity legally separate from the employer. With this type of plan, the employer bears no risks beyond the payment of contributions. Contributions are reported within personnel expenses.

The employer's contribution to pension insurance totaled EUR 2 million for the 2023/2024 fiscal year (2022/2023: EUR 2 million).

Phased retirement
In the 2022/2023 and 2023/2024 fiscal years, the parent company recognized provisions for obligations arising from phased retirement agreements. Under these agreements, employees perform additional working hours before retirement, which are compensated for in installments after retirement. Additionally, employees receive a supplement to their salary. Provisions for these obligations were recognized in accordance with IAS 19 "Employee Benefits".

Other accrued pension-related obligations
Other accrued pension-related obligations mainly include provisions for severance payments in Italy (September 30, 2024: EUR 0 million, September 30, 2023: EUR 0 million) and provisions for pension payments for managing directors in Japan (September 30, 2024: EUR 0 million, September 30, 2023: EUR 0 million).

13 Provisions for employee benefits and other provisions

In EUR millions	Employee benefits	Product warranties	Litigation	Others	**Total**
Balance as of Sept. 30, 2022	**4**	**29**	**1**	**5**	**39**
Adjustment in accordance with IAS 8.41	–	5	–	–	5
Balance as of Sept. 30, 2022 (adjusted)[1]	4	34	1	5	44
Thereof: non-current	0	2	–	0	2
Currency differences	0	(1)	0	0	(1)
Additions	4	14	0	3	21
Amounts utilized	(4)	(1)	(1)	(4)	(9)
Reversals	0	(9)	–	0	(9)
Balance as of Sept. 30, 2023[1]	4	38	0	4	46
Adjustment in accordance with IAS 8.41	–	5	–	–	5
Balance as of Sept. 30, 2023 (adjusted)[1]	4	43	0	4	51
Thereof: non-current	1	1	0	0	2
Currency differences	0	0	0	0	0
Additions	5	23	–	1	29
Amounts utilized	(4)	(3)	0	(1)	(8)
Reversals	0	(10)	–	0	(10)
Balance as of Sept. 30, 2024	5	53	0	4	62
Thereof: non-current	0	1	0	–	1

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Employee benefits

Management incentive plans
For details regarding management incentive plans, reference is made to Note 28.

Other employee benefits
The remaining balance included in provisions for employee compensation and benefit costs primarily represents employment anniversary bonuses. Pension-related obligations for phased retirement agreements and early retirement programs are part of the provision for pensions and similar obligations (see Note 12).

Other provisions
The provisions for warranty obligations cover both the Group's liability for the proper functionality of sold products (warranty) and the obligation to compensate for damages arising from product use (product liability). The amount of provisions is determined on a case-by-case basis. In assessing warranty provisions, the Group considers past experience with actual warranty claims and technical information on identified product defects.

Provisions for warranties on service contracts and spare parts sales are recognized at the time of sale of the relevant goods or the provision of related services. Provisions for warranties from production contracts are recognized over the period in line with the progress of performance. The amount of the provision is based on historical warranty trends and an assessment of all possible future warranty cases, weighted by their probabilities of occurrence. For construction contracts, the provision is recognized in line with the progress of completion, i.e., proportionally over the contract execution period. Expenses related to fulfilling warranty obligations are recorded in cost of sales, as is the reversal of such provisions.

The warranty arises from contractual obligations. To account for warranty services, the Group must estimate the product failure rate and project material and labor costs, relying on assumptions. Based on past experience and warranty claim data, the Group adjusts its provisions. The Group may be exposed to significant gains or losses if actual results do not align with the assumptions and judgments used to calculate the warranty obligation, as either failure rates or repair costs may differ from the Group's expectations.

The risks arising from legal disputes are estimated at EUR 0 million as of September 30, 2024, and EUR 0 million as of September 30, 2023. The outcome and timing of resource outflows related to legal disputes are inherently uncertain, thereby posing a risk.

The line item "Other" includes provisions for audit fees and various other minor items.

14 Trade accounts payable

Working capital, including trade accounts payable, is driven by the Group's project business. The volatility over time is primarily due to the different types and stages of projects.

Of the trade accounts payable outstanding as of September 30, 2024, payables amounting to EUR – million (September 30, 2023: EUR 0 million) have a remaining term of more than one year.

01 _ Global. Successful.
02 _ About us
03 _ Combined Management Report
04 _ Consolidated Financial Statements
05 _ Further information

15 Other financial liabilities

In EUR millions	Sept. 30, 2023	Sept. 30, 2024
Other liabilities to affiliated companies	1	1
Derivatives not qualifying for hedge accounting	1	2
Derivatives qualifying for hedge accounting	1	0
Other financial liabilities	2	2
Total	**5**	**5**

As of September 30, 2024, other liabilities to affiliated companies primarily related to liabilities to tk nucera Management AG (the General Partner), which is reimbursed for all expenses incurred in fulfilling its duties, as well as to tk AG.

As of September 30, 2024, and September 30, 2023, other financial liabilities with a remaining term of more than one year amounted to EUR 1 million each.

16 Other non-financial liabilities

In EUR millions	Sept. 30, 2023	Sept. 30, 2024
Liabilities to employees	6	9
Tax liabilities (without income taxes)	3	5
Other non-financial liabilities	3	6
Total	**12**	**20**

Liabilities to employees related to wage, salary and compensation.

There were no other non-financial liabilities with a remaining term of more than one year as of September 30, 2024, and 2023.

17 Leases

The Group is primarily a lessee of buildings and other facilities, operating, and office equipment.

The following rights of use have been recognized under property, plant, and equipment:

In EUR millions	Buildings	Other equipment, factory and office equipment	Total
Gross amounts			
Balance as of Sept. 30, 2022	**11**	**1**	**12**
Currency differences	0	0	0
Additions	4	0	4
Transfers	–	–	–
Disposals	(1)	0	(1)
Balance as of Sept. 30, 2023	**14**	**1**	**15**
Currency differences	0	0	0
Additions	4	0	4
Transfers	0	–	0
Disposals	(5)	0	(5)
Balance as of Sept. 30, 2024	**13**	**1**	**14**

In EUR millions	Buildings	Other equipment, factory and office equipment	Total
Accumulated amortization and impairment losses			
Balance as of Sept. 30, 2022	**7**	**1**	**8**
Currency differences	0	0	0
Depreciation expense	4	0	4
Impairment losses	–	–	–
Reversals of impairment losses	–	–	–
Transfers	–	–	–
Disposals	(1)	0	(1)
Balance as of Sept. 30, 2023	**10**	**1**	**11**
Currency differences	0	0	0
Depreciation expense	3	0	3
Impairment losses	–	–	–
Reversals of impairment losses	–	–	–
Transfers	0	–	0
Disposals	(5)	0	(5)
Balance as of Sept. 30, 2024	**8**	**1**	**9**
Net amounts			
Balance as of Sept. 30, 2022	**4**	**0**	**4**
Balance as of Sept. 30, 2023	**4**	**0**	**4**
Balance as of Sept. 30, 2024	**5**	**0**	**5**

The resulting lease liabilities are recognized in the Consolidated Statement of Financial Position.

The maturities of the outstanding undiscounted lease payments are as follows:

In EUR millions	Sept. 30, 2023	Sept. 30, 2024
Maturing within 1 year	2	3
Maturing in 1–5 years	3	3
Maturing after 5 years	–	0
Total	**5**	**6**

Further details on the lease liabilities can be found in Note 19.

The following table presents the income and expenses resulting from lease arrangements:

In EUR millions	Sept. 30, 2023	Sept. 30, 2024
Expense from short-term leases	0	0
Expense from leases for low-value assets	–	–
Depreciation and amortization expense	4	3
Interest expense from lease liabilities	0	0
Total	**4**	**3**

No expenses from unrecognized variable lease payments were recorded during the reporting period.

No income from sublease agreements or gains or losses from sale-and-leaseback transactions was recognized.

As of September 30, 2024, potential future cash outflows amounting to EUR 0 million (undiscounted) were not included in the lease liabilities, as it is not sufficiently certain that the lease agreements will be extended (or not terminated) (September 30, 2023: EUR 1 million).

In the 2024 fiscal year, the Company extended existing lease agreements and entered into new lease agreements, some of which had not yet commenced as of the September 30, 2024 reporting date. These new, not-yet-commenced leases will result in a cash outflow as of the start of the lease term of EUR 27 million within the next ten years (September 30, 2023: EUR 17 million).

18 Contingent liabilities and other financial obligations

As of September 30, 2024, there were bank guarantees, particularly in favor of the Group's customers, amounting to EUR 274 million (September 30, 2023: EUR 171 million). The prior year reported bank guarantees of EUR 379 million; however, this was adjusted to EUR 171 million, reflecting a correction of EUR –208 million due to an error.

As of 30 September 2024, other financial obligations of EUR 1 million (previous year: EUR 1 million) arise from purchase commitments for inventories.

19 Financial instruments

Financial instruments by category
The following table presents the carrying amounts, measurement categories in accordance with IFRS 9, and fair values of financial assets and liabilities by class. This includes lease liabilities and derivatives that qualify for hedge accounting.

In EUR millions	Measurement category in accordance with IFRS 9			Measurement in accordance with IFRS 16/IFRS 15	
	Carried at amortized cost	Carried at fair value		Carrying amount[1]	Carrying amount in the statement of financial position as of Sept. 30, 2023[1]
	Carrying amount	Fair value recognized in profit or loss	Fair value recognized in equity (with recycling)		
Trade accounts receivable	49	–	–	–	49
Other financial assets	2	1	0	–	3
Miscellaneous other financial assets	2	–	–	–	2
Derivatives not qualifying for hedge accounting	–	1	–	–	1
Derivatives qualifying for hedge accounting	–	–	0	–	0
Cash and cash equivalents	767	–	–	–	767
Total of financial assets[1]	**818**	**1**	**0**	**–**	**819**
Lease liabilities	–	–	–	5	5
Trade accounts payable	128	–	–	–	128
Other financial liabilities	3	1	1	–	5
Miscellaneous other	3	–	–	–	3
Derivatives not qualifying for hedge accounting	–	1	–	–	1
Derivatives qualifying for hedge accounting	–	–	1	–	1
Total of financial liabilities	**131**	**1**	**1**	**5**	**138**

[1]The carrying amount of the previous year in accordance with IFRS 16 / IFRS 15 as reported in the balance sheet was adjusted by EUR –30 million to EUR - for financial assets, as contract assets are not to be included in financial assets. Accordingly, total financial assets decreased by EUR 30 million from EUR 849 million (reported in the previous year) to EUR 819 million.

In EUR millions	Measurement category in accordance with IFRS 9			Measurement in accordance with IFRS 16/IFRS 15	
	Carried at amortized cost	Carried at fair value		Carrying amount	**Carrying amount in the statement of financial position as of Sept. 30, 2024**
	Carrying amount	Fair value recognized in profit or loss	Fair value recognized in equity (with recycling)		
Trade accounts receivable	63	–	–	–	63
Other financial assets	3	0	0	–	3
Miscellaneous other financial assets	3	–	–	–	3
Derivatives not qualifying for hedge accounting	–	0	–	–	0
Derivatives qualifying for hedge accounting	–	–	0	–	0
Cash and cash equivalents	680	–	–	–	680
Total of financial assets	**746**	**0**	**0**	**–**	**746**
Lease liabilities	–	–	–	5	5
Trade accounts payable	163	–	–	–	163
Other financial liabilities	3	2	0	–	5
Miscellaneous other	3	–	–	–	3
Derivatives not qualifying for hedge accounting	–	2	–	–	2
Derivatives qualifying for hedge accounting	–	–	0	–	0
Total of financial liabilities	**166**	**2**	**0**	**5**	**173**

The carrying amounts of trade accounts receivable measured at amortized cost, other current receivables, and cash and cash equivalents correspond to their fair values due to their short remaining maturities.

The fair value of derivatives is calculated based on the spot rate applicable on the reporting date, considering the forward premiums and discounts for the respective remaining term of the contract compared to the contracted forward rate.

The carrying amounts of trade accounts payable and other current liabilities correspond to their fair values due to their short-term nature.

Financial assets and liabilities measured at fair value can be classified into the following three-level valuation hierarchy:

Fair value hierarchy as of September 30, 2023

In EUR millions	Sept. 30, 2023	Level 1	Level 2	Level 3
Financial assets at fair value				
Fair value recognized in profit or loss	–	–	–	–
Derivatives not qualifying for hedge accounting	1	–	1	–
Fair value recognized in equity	–	–	–	–
Derivatives qualifying for hedge accounting	0	–	0	–
Total	**1**	**–**	**1**	**–**
Financial liabilities at fair value				
Fair value recognized in profit or loss	–	–	–	–
Derivatives not qualifying for hedge accounting	1	–	1	–
Fair value recognized in equity	–	–	–	–
Derivatives qualifying for hedge accounting	1	–	1	–
Total	**2**	**–**	**2**	**–**

Fair value hierarchy as of September 30, 2024

In EUR millions	**Sept. 30, 2024**	Level 1	Level 2	Level 3
Financial assets at fair value				
Fair value recognized in profit or loss	–	–	–	–
Derivatives not qualifying for hedge accounting	0	–	0	–
Fair value recognized in equity	–	–	–	–
Derivatives qualifying for hedge accounting	0	–	0	–
Total	**0**	**–**	**0**	**–**
Financial liabilities at fair value				
Fair value recognized in profit or loss	–	–	–	–
Derivatives not qualifying for hedge accounting	2	–	2	–
Fair value recognized in equity	–	–	–	–
Derivatives qualifying for hedge accounting	0	–	0	–
Total	**2**	**–**	**2**	**–**

The fair value hierarchy reflects the significance of the factors considered in determining fair values. Level 1 includes financial instruments whose fair value is determined based on quoted market prices in active markets. Fair values in Level 2 are determined based on observable market data, such as exchange rates. Level 3 includes financial instruments whose fair value is determined using unobservable market data based on recognized valuation models.

In the reporting year, there were no reclassifications between Level 1 and Level 2 or Level 3.

Impairment of financial assets

An impairment for expected losses is recognized for financial assets measured at amortized cost.

The impairment losses on trade accounts receivable recognized at amortized cost and contract assets were as follows:

Impairment of trade accounts receivable recognized at amortized cost as well as contract assets

In EUR millions	Expected credit loss	Individual allowances	**Total impairment**
Balance as of Sept. 30, 2022	**1**	**0**	**1**
Currency differences	0	0	0
Additions	0	–	0
Amounts utilized	0	0	0
Reversals	–	0	0
Balance as of Sept. 30, 2023	**1**	**0**	**1**
Currency differences	0	0	0
Additions	2	0	2
Amounts utilized	0	–	0
Reversals	–	–	–
Balance as of Sept. 30, 2024	**3**	**0**	**3**

In the applied impairment model, expected default rates are primarily derived from external credit information and ratings for each counterparty, allowing for a more precise calculation of the probability of default compared to the formation of rating classes. Customer rating classes assigned by trade credit insurers and credit information from rating agencies are translated into an individual probability of default per customer using a centralized mapping system. This individual probability of default per customer is applied uniformly throughout the entire thyssenkrupp nucera Group. The information is updated quarterly. When no rating information is available at the counterparty level, an assessment is made based on the average probability of default per segment, with an appropriate risk premium added. For the Consolidated Financial Statements as of September 30, 2024 and September 30, 2023, current external credit information and ratings were used. Additionally, the model incorporates forward-looking information derived from the current macroeconomic conditions (e.g., a short-term increase in material and personnel expenses; a medium-term gradual increase in material and personnel expenses). According to this valuation model, no additional adjustment to impairments is required. Overall, this model indicates a moderate but not significant increase in the valuation of individual customers.

The gross carrying amounts, impairment losses and average probabilities of default for each segment are shown below.

Impairments of trade accounts receivable and contract assets by segment

	Sept. 30, 2023				
In EUR millions	Gross carrying amount[1]	Expected credit loss	Individual allowances	Total impairment	Average probability of default
Germany	45	1	–	1	0.8%
Italy	15	0	–	0	1.7%
Japan	4	0	–	0	1.1%
China	15	0	–	0	0.5%
RoW	5	0	–	0	0.9%

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

Impairments of trade accounts receivable and contract assets by segment

	Sept. 30, 2024				
In EUR millions	Gross carrying amount	Expected credit loss	Individual allowances	**Total impairment**	Average probability of default
Germany	111	2	–	2	0.8%
Italy	40	1	0	1	0.9%
Japan	3	0	0	0	0.8%
China	25	0	–	0	0.6%
RoW	10	0	–	0	0.8%

The default risk is derived from the risk profile of the Group's customers. The average probability of default of the individual segments presented in the tables above is primarily determined by the risk profile of customers in the regions where the respective segments operate (see Note 21), meaning they include customer-specific country risk premiums. To minimize default risk related to trade accounts receivable and contract assets, the Group only enters into transactions with counterparties that have good credit ratings or belong to a deposit protection fund. For long-term contracts, additional security in the form of advance payments is provided. The creditworthiness of business partners with whom projects are completed is continuously monitored through creditworthiness assessments (see Credit Risk section). The Group therefore considers the default risk to be low.

The maximum credit risk exposure of the financial assets subject to the impairment models corresponds to the gross carrying amounts, less the recognized impairment losses.

Derivative financial instruments

The Group uses foreign exchange and commodity forward contracts. Derivative financial instruments are generally used to hedge existing or planned underlying transactions and to reduce currency or commodity price risks. In addition, derivatives are designated as hedging instruments under hedge accounting in the Japan segment to protect future cash flows against currency risks from upcoming sales and purchase transactions.

The following table shows the nominal amounts and fair values of derivatives:

Derivative financial instruments

In EUR millions	Nominal Value Sept. 30, 2023	Fair Value Sept. 30, 2023	**Nominal Value Sept. 30, 2024**	**Fair Value Sept. 30, 2024**
Assets				
Derivatives that do not qualify for hedge accounting	73	1	19	0
Foreign currency contracts in USD	0	1	14	0
Foreign currency contracts, other	73	0	5	0
Commodity futures	–	–	–	–
Foreign currency derivatives qualifying as cash flow hedges	2	0	2	0
Foreign currency contracts in USD	–	–	2	0
Foreign currency contracts, other	2	0	0	0
Total	**75**	**1**	**21**	**0**
Liabilities				
Derivatives that do not qualify for hedge accounting	23	1	87	3
Foreign currency contracts in USD	0	0	58	1
Foreign currency contracts, other	23	1	18	1
Commodity futures	–	–	11	1
Foreign currency derivatives qualifying as cash flow hedges	9	1	5	0
Foreign currency contracts in USD	–	–	3	0
Foreign currency contracts, other	9	1	2	0
Total	**32**	**2**	**92**	**3**

Derivatives that qualify for hedge accounting – cash flow hedges
In the Japan segment, cash flow hedges are used to hedge future cash flows against foreign currency risks arising from future sales and purchase transactions. In the case of cash flow hedges, the earnings effect of the hedging instruments is generally also shown in the same profit and loss item as the hedged underlying transaction. The Group did not maintain significant derivatives qualifying as cash flow hedges during the reporting periods.

As of September 30, 2024, the ineffective components of derivative financial instruments classified as cash flow hedges resulted in a net gain of EUR 0 million (September 30, 2023: EUR 0 million).

Derivatives that do not qualify for hedge accounting
The Group uses derivative financial instruments mainly to economically hedge against exchange rate and commodity price risks. If a hedging relationship does not meet the requirements for hedge accounting in accordance with the conditions under IFRS 9 or hedge accounting is not reasonable, the derivative financial instrument is recognized as a derivative that does not qualify for hedge accounting. The resulting impact on profit and loss from derivative financial instruments that do not qualify for hedge accounting is recognized either in other income or other expenses (see notes 24 and 25).

Financial risk
The thyssenkrupp nucera Group is exposed to financial risks in the normal course of business, including credit risk (default risk), liquidity risk, and market risks (currency, interest rate, and commodity price risks). The objective of risk management is to limit risks arising from operating activities and related financing requirements through the use of selected hedging instruments. Within risk management, financial and credit risks are to be largely avoided, offset through a risk portfolio, transferred to third parties, or limited (principle of risk aversion).

For further information, refer to the Risk Report within the Management Report.

Credit risk
Credit risk (default risk) refers to the risk that the Group may incur financial losses due to non-fulfillment or partial fulfillment of existing credit receivables. Credit risk management is governed by Group policies. The segments and Group companies are required to implement credit risk management in accordance with the provisions of these policies.

The creditworthiness of business partners with whom projects are conducted is continuously monitored by tracking their credit ratings.

To minimize default risks (credit risks) associated with the use of financial instruments, such transactions are only conducted with counterparties that meet our internal minimum requirements. The Group has developed a model to determine expected credit losses, specifically for calculating the expected default rates for trade accounts receivable. Expected default rates are primarily determined based on external credit information and ratings for each counterparty. If no rating information is available at the counterparty level, an assessment is made based on the average default probability per segment, plus an appropriate risk premium. The thyssenkrupp nucera Group considers the assumption that default risk significantly increases with payment delays of more than 30 days to be refuted. It assumes that no default has occurred for payment delays of up to 90 days.

Derivative financial instruments are generally concluded on the basis of standard contracts, allowing for the offsetting of open transactions with respective business partners.

Default risks are generally hedged using suitable instruments, including private and public credit insurance, as well as letters of credit and guarantees from banks, insurance companies, and trust companies. For long-term contracts, additional security is provided through advance payments received. To further minimize default risks from operating activities, corporate policies mandate assessing default risk based on the risk profile of the business partner using appropriate internal and, where available, external information, such as ratings and credit reports. Based on this credit rating, a credit limit is assigned for each business partner. The risk profile of business partners is subject to appropriate and ongoing monitoring, allowing the Group to minimize risks at an early stage. To limit maximum default risk, the respective segments establish processes and policies taking their customers' specific characteristics into account to determine the actions to be taken in case of deteriorating credit quality or payment issues.

Transactions exceeding predefined materiality thresholds, particularly in the area of large-scale projects, also require prior approval at the thyssenkrupp nucera Group level. Additionally, the extent and mitigation of default risks are evaluated.

Liquidity risk and maturity analysis

Liquidity risk is the risk that the Group is unable to meet its existing or future obligations due to insufficient availability of cash or cash equivalents. Liquidity risk also takes into account agreements for sureties and guarantees for which covenants exist.

The Group has excess liquidity, which resulted from proceeds from the IPO from the prior year and the repayment of the cash pool balance following the IPO. The excess liquidity was invested in short-term money market instruments.

The following table shows the future undiscounted contractually agreed cash outflows from financial liabilities:

Future undiscounted cash outflows as of September 30, 2023

In EUR millions	Fair Value Sept. 30, 2023	Cash flows within 1 year	Cash flows between 2 and 5 years	Cash flows of more than 5 years
Lease liabilities	5	3	2	–
Trade accounts payable	128	128	–	–
Derivative financial liabilities not qualifying for hedge accounting	1	1	–	–
Derivative financial liabilities qualifying for hedge accounting	1	1	–	–
Other financial liabilities	3	3	–	–

Future undiscounted cash outflows as of September 30, 2024

In EUR millions	**Fair Value Sept. 30, 2024**	Cash flows within 1 year	Cash flows between 2 and 5 years	Cash flows of more than 5 years
Lease liabilities	6	3	3	–
Trade accounts payable	163	163	–	–
Derivative financial liabilities not qualifying for hedge accounting	2	2	0	–
Derivative financial liabilities qualifying for hedge accounting	0	0	0	–
Other financial liabilities	3	3	–	–

The cash flows from derivative financial instruments are offset by cash flows from the hedged underlying transactions, which were not included in the maturity analysis. Including the cash flows from the hedged underlying transactions would result in lower outflows than those shown in the summary.

Sensitivity analysis

Market risk refers to the risk that the fair values or future cash flows of a primary or derivative financial instrument may fluctuate due to changes in risk factors. The market risks relevant to the Group include currency risk and commodity price risk. These are managed through price adjustment clauses in some customer contracts and by entering into currency and commodity forward contracts during the fiscal year. These risks are associated with fluctuations in earnings, equity, and cash flow.

The results and amounts determined through sensitivity analyses represent hypothetical, forward-looking information, which may differ from actual events due to unforeseeable developments in financial markets. Non-financial or non-quantifiable risks, such as business risks, are not considered.

Foreign currency risk exposure
The objective of currency hedging is to lock in prices based on hedging rates to protect against unfavorable future exchange rate fluctuations. The hedging periods generally align with the term of the underlying transaction. The term of the foreign exchange forward contracts entered into typically extends up to 12 months but can reach up to six years in certain exceptional cases.

For the sensitivity analysis in accordance with IFRS 7, only the US dollar is considered as a relevant currency, as the vast majority of foreign currency cash flows are denominated in US dollars. Since hedging transactions are generally used to hedge underlying transactions, the opposing effects of the underlying and hedging transactions nearly offset each other over the total period. The described foreign currency risk thus arises from hedging relationships with off-balance sheet underlying transactions, i.e., hedges of fixed contractual obligations and planned sales. Based on this analysis, the US dollar risk as of September 30, 2024, and 2023 is as follows:

If the euro had been 10% stronger against the US dollar on September 30, 2024, then the result from valuation as of the reporting date would have been EUR –4 million lower (September 30, 2023: EUR 1 million lower).

If the euro had been 10% weaker against the US dollar on September 30, 2024, then the result from valuation as of the reporting date would have been EUR 5 million higher (September 30, 2023: EUR 1 million higher).

Commodity price risks
Commodity price risks mainly arise from price fluctuations and the market availability of raw materials. Starting this fiscal year, the Group has entered into hedging transactions to protect against changes in commodity prices (nickel) for the first time. Commodity price risks are represented through sensitivity analysis, which shows the effect of changes in the risk variables – commodity prices – on profit as of the reporting date.

If nickel prices had been 10% higher as of September 30, 2024, then the result from valuation as of the reporting date would have been EUR 1 million lower (September 30, 2023: No hedging).

If nickel prices had been 10% lower as of September 30, 2024, then the result from valuation as of the reporting date would have been EUR 1 million higher (September 30, 2023: No hedging).

Interest rate risk
The Group is only exposed to a low interest rate risk, arising from variable interest rates and the short maturities of cash and cash equivalents.

20 Related parties

These Consolidated Financial Statements include transactions between the Group and the tk Group (tk AG and its direct and indirect subsidiaries, excluding the Group) as well as with IDN. The tk Group is a related party, as tk AG controls the Group (see Note 1.1). IDN exerts significant influence over the Group.

On August 4, 2022, the tk Group, IDN, and the Group signed an agreement in which the parties set out certain principles for their future relationship and the areas in which they intend to cooperate in their mutual interest and in the interest of the tk Group as a whole.

Transactions with tk Group
Under general service agreements, the tk Group provides general and administrative services to the Group on market-standard terms. These services include internal auditing, corporate housekeeping, data protection, preparation and processing of tax returns, IT support, and occasional controlling and accounting tasks. The service agreements also encompass operating functions such as construction management, engineering, project management, quality management, and research and development.

In connection with the IPO, the terms of the general service contracts between the tk Group and the Group were renegotiated. Since that time, the services for the Group have been reduced in certain areas through insourcing (in terms of type or scope), while additional operational services have been introduced that were not previously included in the general service agreements. These include operating tasks such as procurement (specific IT tools, supply chain compliance, and reporting).

In addition, there are supply and service agreements between the Group and tk AG. Under these agreements, the Group receives supplies from tk AG and, in turn, occasionally provides goods and services to tk AG.

The transactions with the tk Group were as follows:

Service, supply, and delivery agreements

	Sales		Supplies & Services	
In EUR millions	2022/2023	**2023/2024**	2022/2023	**2023/2024**
Service, supply and delivery agreements with tk Group[1]	15	14	35	36

[1]In the notes to the consolidated financial statements of the company as at 30.09.2023, benefits received for the entire financial year 2022/23 were stated as 38.2 million, they actually amounted to 34.8 million euros.

Interest income and expenses

In the 2023/2024 fiscal year, there was no interest income or expenses from cash pooling, as the cash pool agreement was terminated at the end of June 2023. In the previous year, interest income from the cash pool with the tk Group amounted to EUR 5.8 million.

Derivative financial instruments

The Group's hedging transactions for foreign exchange forwards in the Germany, Italy, and USA segments are conducted at market terms through tk AG. The Group's hedging transactions for commodity forwards in segment Germany are conducted at market terms through thyssenkrupp Materials Trading GmbH. The compensation for these transactions is based on market rates. The related receivables and liabilities are reported under “other financial assets” (see Note 9), “other financial liabilities” (see Note 15) and in the lines “derivatives without hedging relationship.”

In EUR millions	2022/2023	**2023/2024**
Net gains (losses) from foreign exchange forward contracts	0	(1)
Net gains (losses) from commodity futures contracts	–	(1)

The following table presents the nominal values and fair values of the derivative financial instruments concluded by the Group with tk AG:

Derivative financial instruments

In EUR millions	Nominal Value Sept. 30, 2023	Fair Value Sept. 30, 2023	**Nominal Value Sept. 30, 2024**	**Fair Value Sept. 30, 2024**
Assets				
Derivatives that do not qualify for hedge accounting				
Foreign currency contracts in USD	63	1	13	0
Foreign currency contracts Other	4	0	2	0
Total	**67**	**1**	**15**	**0**
Liabilities				
Derivatives that do not qualify for hedge accounting				
Foreign currency contracts in USD	3	0	58	1
Foreign currency contracts Other	9	1	4	0
Commodity futures	–	–	11	1
Total	**12**	**1**	**73**	**2**

The volumes of foreign exchange forward contracts concluded in each respective year are as follows:

In EUR millions	Sept. 30, 2023	**Sept. 30, 2024**
Sell amount	3	12
Buy amount	75	66

The volumes of commodity forward contracts concluded in each respective year are as follows:

In EUR millions	Sept. 30, 2023	**Sept. 30, 2024**
Sell amount	–	11
Buy amount	–	–

License fee

Based on a licensing agreement, in the past tk AG granted the Group the non-exclusive right to use the thyssenkrupp corporate brand. For this license, the Group paid a license fee to tk Group on an annual basis ("tk Group trademark fee"). The basis for the fee calculation was the Group's sales, excluding sales to tk Group. The license fee applied was variable and based on the Group's Adjusted EBIT margin. In the 2021/2022 fiscal year, tk Group and the Group signed a new licensing agreement (the "New Licensing Agreement") that allows the Group the royalty-free use of the "thyssenkrupp" and "nucera" trademarks. The New Licensing Agreement was signed on June 29, 2022. The New Licensing Agreement is royalty-free and time-limited for five years with an option to renew for another five years but can be terminated by each party at any time with six months' prior notice. The New Licensing Agreement reflects both parties' expectation of mutual benefits from the combined use of the "thyssenkrupp" and "nucera" trademarks to be balanced over the expected lifetime of the contract: nucera benefits from the use of the trademark thyssenkrupp by continuous association with thyssenkrupp's reputation as an engineering company with a global reach and network. thyssenkrupp benefits from the combined use of the trademark nucera associated with nucera's AWE business, representing a key technology and innovation in the green transformation of the industry. According to the New Licensing Agreement, tk Group is the legal owner, and the Group is the beneficial owner of the trademark "nucera". As the beneficial owner, the Group has to bear all costs in relation to the "nucera" trademark, including but not limited to registration, communicative introduction, maintenance, prosecution, and monitoring. As the "nucera" trademark does not represent an intangible asset in accordance with IAS 38, all related costs will be expensed as incurred. In case of the termination or expiration of the New Licensing Agreement, the Group has the right to acquire the "nucera" trademark free of any consideration.

The New Licensing Agreement does not include any license fees; therefore, no license fees are reported in the Consolidated Financial Statements.

Transactions with thyssenkrupp nucera Management AG

The General Partner is reimbursed for any expenses incurred in connection with the fulfillment of its duties, including the compensation of the General Partner's members of the Management Board and General Partner's Supervisory Board pursuant to Article 8 (4) of the Articles of Association. In addition, in return for assuming the management of the Company and its liability exposure, the General Partner receives annual compensation of EUR 5 thousand, pursuant to Article 8 (5) of the Articles of Association.

As of September 30, 2024, the reimbursed expenses amounted to EUR 2 million (September 30, 2023: EUR 3 million). As of September 30, 2024, the corresponding liability amounted to EUR 0 million (September 30, 2023: EUR 0 million), which is included in the table "Balances due to the tk Group and IDN" under the line "tk Group other transactions."

Guarantees

The tk Group issues guarantees in favor of the Group's customers, particularly in connection with new construction projects and large service projects. These guarantees include Group liability declarations and bank guarantees, issued based on the tk Group's financial policy and specific conditions for guarantee transactions. The terms of the guarantees are variable and are set at market conditions based on the creditworthiness of the tk Group. The guarantees issued by the tk Group amounted to EUR 1,027 million as of September 30, 2024 (September 30, 2023: EUR 1,056 million).

The comparison figure for guarantees issued by the thyssenkrupp Group was adjusted from the previously reported EUR 1,036 million to EUR 1,056 million, reflecting a correction of EUR 20 million.

Transactions with IDN

IDN is an innovative procurer and supplier of electrodes, key components such as electrolysis cells and elements, and electrochemical coating solutions, which are widely used in the Group's products. IDN is therefore an important procurer and supplier for the Group.

The transactions with IDN were as follows:

	Sales		Supplies & Services	
In EUR millions	2022/2023	**2023/2024**	2022/2023	**2023/2024**
Service, supply and delivery agreements with IDN [1]	1	2	209	221

[1]The company's notes to the consolidated financial statements for the 2022/2023 financial year state sales of EUR 0.8 million, which actually amounted to EUR 0.6 million; purchased services were stated at EUR 166 million, but actually exceeded this figure by EUR 43 million and amounted to EUR 209 million

Balances due to/from tk Group and IDN

	Assets		Liabilities	
In EUR millions	Sept. 30, 2023	**Sept. 30, 2024**	Sept. 30, 2023	**Sept. 30, 2024**
Foreign currency derivatives with tk Group	1	0	1	2
tk Group other transactions	2	3	14	6
IDN [1]	14	21	28	29

[1]The value of liabilities to IDN for the 2022/2023 financial year was stated at EUR 21 million in the previous year's notes to the consolidated financial statements. This figure was adjusted by EUR 7 million to EUR 28 million due to an error.

As of September 30, 2024, the other transactions of the tk Group consisted primarily of trade accounts receivable and liabilities associated with contract assets and liabilities related to the Group's projects with the tk Group.

Lease contracts

The Group has entered into lease agreements with the tk Group for office space in Germany and for vehicles. The lease agreements with IDN pertain to office spaces in Italy, Japan, and the USA. The leases are concluded at market terms.

	Right of use assets		Lease liabilities	
In EUR millions	Sept. 30, 2023	**Sept. 30, 2024**	Sept. 30, 2023	**Sept. 30, 2024**
tk Group	0	0	0	0
IDN	1	1	1	1

Transactions with key management personnel

The members of key management include those who are directly or indirectly responsible for planning, directing, and managing the Group’s activities, particularly the members of the Management Board of the Management AG and the Supervisory Board.

The members of the Management Board, consisting of Dr. Werner Ponikwar (Chief Executive Officer), Dr. Arno Pfannschmidt (Chief Financial Officer), and Fulvio Federico (Chief Technology Officer), comprise the Group’s key management personnel.

The compensation of the Management Board members was as follows:

In EUR millions	Sept. 30, 2023	**Sept. 30, 2024**
Short-term benefits[1)]	2	2
Long-term benefits		
LTI program (cf. Note 28)	1	1
Post-employment benefits	0	0
Benefits due to termination of the employment relationship[1]	1	0
Total[1]	**4**	**3**

[1] The company's comparative figures as at Sept. 30, 2023 were adjusted due to an error.

The following are the liabilities payable to the members of the Management Board and consist solely of their compensation:

In EUR millions	Sept. 30, 2023	**Sept. 30, 2024**
Short-term benefits	0	0
Long-term benefits		
LTI program (cf. Note 28)	1	1
Post-employment benefits	2	2
Total	**3**	**3**

Short-term benefits include fixed compensation, an annual bonus, and an allowance for a company car.

Post-employment benefits include pension benefits granted to Management Board members as specified in their individual employment contracts. Dr. Arno Pfannschmidt (Chief Financial Officer) is entitled to pension benefits under the plans established by the Essen Association ("Essener Verband"). These plans are defined benefit plans, structured either as career-average plans or contribution-based plans, and provide benefits in the event of retirement, disability, or death. In the event of an insurance claim, the benefits are paid as annuities.

For the third Management Board member, the Group provides statutory severance benefits ("Trattamento di fine rapporto" – TFR), supplemented by specific severance benefits for executives in Italy. Both plans are managed through external pension funds and are defined contribution plans, with benefits paid out as a lump sum in both cases.

The compensation for the members of the Supervisory Board for the 2023/2024 fiscal year consisted of base compensation and additional compensation for committee activities and amounted to EUR 1 million (2022/2023: EUR 1 million).

No advances or loans were granted to members of key management personnel during the reporting period or in previous years.

21 Segment reporting

Segment reporting is prepared in accordance with IFRS 8 based on the management approach. This approach corresponds to the internal organizational and management structure, as well as to the reporting to the Management Board as the Chief Operating Decision Maker (CODM). At thyssenkrupp nucera Group, the operating segments are represented by the individual legal entities (see Note 3) and their respective country of incorporation:

Legal Entity	Operating Segment	Disclosures in Segment Reporting
thyssenkrupp nucera AG & Co. KGaA, Dortmund	Germany	Germany
thyssenkrupp nucera Italy S.R.L., Milan	Italy	Italy
thyssenkrupp nucera Japan Ltd., Tokyo	Japan	Japan
thyssenkrupp nucera (Shanghai) Co. Ltd, Shanghai	China	China
thyssenkrupp nucera USA Inc., Houston	USA	Rest of World (RoW)
thyssenkrupp nucera Australia Pty. Ltd., Perth	Australia	Rest of World (RoW)
thyssenkrupp nucera Arabia for Contracting LLC, Riyadh	Saudi Arabia	Rest of World (RoW)
thyssenkrupp nucera Participations GmbH, Dortmund	Germany	Rest of World (RoW)
thyssenkrupp nucera HTE GmbH, Dortmund	Germany	Rest of World (RoW)
thyssenkrupp nucera India Private Limited, Mumbai	India	Rest of World (RoW)

While technology-related parts are procured centrally by the Germany segment (BM 2.7 single-element technology) or the Japan segment (BiTAC filter press technology), each segment is responsible for its own activities, operates largely independently within the Group, and has full responsibility for its operations and EBIT. The legal entities' managing directors directly report to the thyssenkrupp nucera Group Management Board. The thyssenkrupp nucera Group Management Board regularly reviews the operating results of the segments to assess their performance and make decisions about resources to be allocated to each segment.

All segments of thyssenkrupp nucera Group generally cover the Group's entire product portfolio and provide comprehensive solutions for electrolysis plants to customers in regions they are responsible for.

The **Germany** segment mainly serves clients located in Europe and the Middle East and offers the entire product group portfolio covering New Build CA, Service, and New Build AWE, which is expected to further grow significantly. The Germany segment is driving the ramp-up of the New Build AWE product group. The Germany segment is also responsible for research and development activities, identifying business opportunities across different markets and industries and rolling out new products and product groups to the other segments. The Germany segment manages the BM 2.7 single-element technology and centrally procures technology-related parts for the other segments.

The **Italy** segment offers its New Build CA and Service products to a wide range of clients located in different geographical areas, primarily in the Middle East and North Africa (MENA), as well as Sub-Saharan Africa, South America, and in the Commonwealth of Independent States (CIS).

The segment is primarily using the BM 2.7 single-element technology. The New Build AWE business is in development.

The **Japan** segment offers its New Build CA and Service products to clients primarily concentrated in the Asia-Pacific (APAC) area. The segment is primarily using the BiTAC filter press technology. The New Build AWE business is developing. The Japan segment owns the BiTAC filter press technology and centrally procures technology-related parts for the other segments.

The **China** segment has established a clear focus on clients in the local Chinese market, offering New Build CA and Service products and predominately applying BiTAC filter press technology.

The "Rest of World" (**RoW**) segment consolidates the financial information of all the Group's operating segments that, due to their size, are not individually reportable. These include the entities in the USA, Australia, Saudi Arabia, and India, the thyssenkrupp nucera Participations GmbH in Germany, as well as HTE GmbH, established in Germany in the 2024 fiscal year. thyssenkrupp nucera Participations GmbH serves as an investment holding company. HTE GmbH is still in the development phase and was founded to develop an additional product for hydrogen production. It operates as a separate legal entity, independent of the KGaA, and is therefore assigned to the RoW segment in internal reporting. The entities in Australia and Saudi Arabia, newly established in 2022, are still in their early stages and had no significant business activities as of September 30, 2024 and September 30, 2023. The unit established in India last year is also still in development and showed no significant activities as of September 30, 2024. Consequently, the RoW segment primarily reflects business activities in the USA, focused on the US market and other regions in the Americas, particularly Canada and Mexico. This segment's primary focus is on service products utilizing both the BiTAC filter press technology and BM 2.7 single-element technology. Additionally, the AWE business is in a prioritized development phase. Consolidation of segment sales and earnings includes the elimination of intercompany sales and profits.

The accounting principles for the segments are consistent with those of the Group and are described in the summary of significant accounting policies. Prices between segments are set at market terms.

Management decisions are primarily based on the performance indicators described below—sales and EBIT:

Sales is a key performance indicator used to measure the performance of the operating segments. Sales helps to measure the viability and the growth potential of the different operating segments while also providing the resources needed to spur continual growth and assess business performance.

thyssenkrupp nucera Group's key earnings performance indicator is **EBIT**. It provides information on the profitability of segments and contains all elements of the Statement of Profit and Loss relating to operating performance.

Adjusted EBIT (earnings before interest and taxes) is income from operations adjusted for special items (e.g., restructuring expenses, impairment losses/impairment reversals, and other non-operating expenses and income), as well as the tk Group trademark fee. It is considered more suitable than income from operations for comparing operating performance over several periods in case there are significant non-recurring items (special items).

Sales and EBIT breakdown by segment:

	2022/2023[1]						
In EUR millions	Germany	Italy	Japan	China	RoW	Consolidation	**Group**
Sales (external)	393	80	41	89	58	–	661
Sales (internal)	30	2	32	2	0	(66)	
Total Sales	**423**	**82**	**73**	**91**	**58**	**(66)**	**661**
EBIT	**(6)**	**11**	**11**	**7**	**2**	**0**	**25**
tk Group trademark fee (cf. Note 20)	–	–	–	–	–	–	–
Expenses incurred in connection with services relating to the preparation of the IPO	(2)	–	–	–	–	–	(2)
Other special items	0	–	0	–	–	–	0
Accretion provision w/o effects from change in discount rate	0	–	0	–	–	0	–
Expense impact other provisions (w/o pension + similar obligations)	0	–	–	–	–	0	–
Gains/losses from the disposal of intangible assets	0	–	–	–	–	–	0
Adjusted EBIT	(4)	11	11	7	2	0	27
Amortization expense	2	1	1	1	0	–	5

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

In EUR millions	2023/2024 Germany	Italy	Japan	China	RoW	Consolidation	Group
Sales (external)	554	122	43	87	56		862
Sales (internal)	34	2	55	8	8	(107)	0
Total Sales	**588**	**124**	**98**	**95**	**65**	**(107)**	**862**
EBIT	**(38)**	**16**	**11**	**9**	**(11)**	**0**	**(14)**
tk Group trademark fee (cf. Note 20)	–	–	–	–	–	–	–
Expenses incurred in connection with services relating to the preparation of the IPO	–	–	–	–	–	–	–
Other special items	0	–	0	–	–	–	0
Accretion provision w/o effects from change in discount rate	0	–	0	–	–	–	0
Expense impact other provisions (w/o pension + similar obligations)	0	–	–	–	–	–	0
Gains/losses from the disposal of intangible assets	–	–	–	–	–	–	–
Adjusted EBIT	(38)	16	11	9	(11)	0	(14)
Amortization expense	3	0	1	1	1	–	5

Reconciliation of adjusted EBIT to earnings before taxes

In EUR millions	2022/2023[1]	**2023/2024**
Total adjusted EBIT of reportable segments	27	(14)
Reconciliation/Consolidation	0	0
Adjusted EBIT as presented in segment reporting	**27**	**(14)**
Special Items:		
Expenses incurred in connection with services relating to the preparation of the IPO	(2)	–
Other special items	0	0
Total special items	**(2)**	
Income from operations	25	(14)
+ Finance income	14	29
– Finance expense	(3)	(3)
Earnings before tax	**36**	**12**

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

In the 2023/2024 fiscal year, 47% (2022/2023: 32%) of the Group's total sales were generated with one major customer. The second and third largest customers accounted for 7% (2022/2023: 12%) and 3% (2022/2023: 3%) of the Group's total sales, respectively, in the 2023/2024 fiscal year. Sales from major customers are entirely included in the Germany segment.

The following table discloses the amount of sales from external customers, broken down by location of the customers:

In EUR millions	2022/2023[1]	**2023/2024**
Saudi Arabia	234	420
China	89	84
US	56	55
Germany	35	31
Other	247	272
Total	**661**	**862**

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33..

External sales by type of electrolysis technology

The Italy and China segments primarily generate their sales from the construction of chlor-alkali plants and, to a somewhat lesser extent, from the service business for chlor-alkali plants. In the Germany segment, sales are mainly generated through the AWE construction business, with chlor-alkali service activities also making a significant contribution to the sales achieved. Sales in the Japan segment are exclusively derived from chlor-alkali activities, with the vast majority coming from service activities. In the RoW segment, sales are primarily generated in the chlor-alkali service business.

Non-current assets by country

In EUR millions	Germany	Italy	Japan	China	Other	**Group**
Non-current assets						
Sept. 30, 2023[1]	35	7	11	13	3	69
Sept. 30, 2024	41	7	11	13	7	79

[1] In the previous year, non-current assets of EUR 50 million were reported for Germany. The previous year's figure was corrected by EUR –15 million to EUR 35 million due to an error. There were further minor corrections to the previous year's figures for Italy, Japan and China. As a result, the previous year's figure for the Group was corrected by EUR –18 million from EUR 87 million (figure reported in the previous year) to EUR 69 million.

22 Sales

Sales, including sales from contracts with customers, are presented below:

In EUR millions Sales category	Revenue recognition method	Germany	Italy	Japan	China	ROW	2022/2023[1]	Germany	Italy	Japan	China	ROW	**2023/2024**
Sales from sale of finished products[2]	Point in time	3	–	31	–	34	69	6	–	27	–	24	57
Sales from sale of merchandise	Point in time	–	–	–	6	–	6	–	–	–	8	–	8
Sales from rendering of services	Over time/Point in time	79	8	–	4	4	94	69	15	–	3	4	91
Sales from construction contracts	Over time	311	72	10	79	20	492	480	107	16	76	28	707
Total		**393**	**80**	**41**	**89**	**58**	**661**	**554**	**122**	**43**	**87**	**56**	**862**

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

[2] Includes revenues from short term service contracts.

The breakdown of sales by product group is as follows:

In EUR millions	Germany	Italy	Japan	China	ROW	2022/2023[1]	Germany	Italy	Japan	China	ROW	**2023/2024**
Alkaline-Water Electrolysis – AWE	296	17	0	0	14	328	473	42	0	0	8	524
Chlor-Alkali Electrolysis – CA	96	63	41	89	44	333	81	79	42	87	48	338
Total	**393**	**80**	**41**	**89**	**58**	**661**	**554**	**122**	**43**	**87**	**56**	**862**

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

In presenting the information for geographic regions, the allocation of sales is based on the construction site location of each project. Segment assets are presented based on the location of the assets.

In the 2023/2024 fiscal year, sales from contracts with customers included EUR 630 million (2022/2023: EUR 433 million) from long-term contracts and EUR 233 million (2022/2023: EUR 228 million) from short-term contracts.

23 Functional costs

Research and development cost

The Group ensures its future competitiveness through the sustainable development of new products, applications, and processes. This is also reflected in the Group's research and development cost, amounting to EUR 36 million in the 2023/2024 fiscal year (2022/2023: EUR 19 million). Research and development are largely centralized, primarily taking place in the segment Germany, which plays a pioneering role in the rapidly growing AWE technology. Research and development cost related to AWE technology rose from EUR 15 million in the 2022/2023 fiscal year to EUR 29 million in the 2023/2024 fiscal year, and this increase was the main driver of the overall rise in research and development cost. Research and development cost related to CA technology remained essentially stable.

Selling expenses

Selling expenses include personnel, service, and material costs related to the business development and sales process, particularly the preparation of any plant projects or service order proposals, including marketing and other costs related to the functional area of sales.

The Group's selling expenses increased from EUR 20 million in the 2022/2023 fiscal year by EUR 2.7 million, or 14%, to EUR 22 million in the 2023/2024 fiscal year. The selling expenses are primarily attributable to AWE project proposals, including proposal and preliminary development costs, which were mainly incurred in Germany.

In accordance with the Group's accounting principles, selling expenses also include impairments and reversals of impairments on trade accounts receivable and contract assets. In the 2023/2024 fiscal year, the change in impairments amounted to an expense of EUR 2 million (2022/2023: expense of EUR 1 million).

General and administrative expenses

General administrative expenses include operating and administrative costs and mainly consist of expenses for salaries of non-project-related personnel, expenses of the central administration, and other costs associated with the general administration function. The Group's general administrative expenses increased from EUR 37 million in the 2022/2023 fiscal year by EUR 18 million, or 49% to EUR 55 million in the 2023/2024 fiscal year. In the 2023/2024 fiscal year, the increase in general administrative expenses was primarily due to higher personnel and consulting costs.

Nature of expenses

For further information on the nature of expenses, including employee benefit expenses (see Note 29) and material expenses (see Note 6), please refer to the relevant disclosures. The expenses for depreciation and amortization were as follows:

In EUR millions	2022/2023	**2023/2024**
Amortization (cf. Note 4)	1	0
Depreciation (cf. Note 5)	4	5
Total	**5**	**5**

24 Other income

Other income includes all operating income that is not included in or attributable to sales and consisted of the following categories:

In EUR millions	2022/2023	**2023/2024**
Government grants	2	3
Insurance compensation		3
Other miscellaneous	2	5
Foreign exchange gains	–	–
Income from derivatives not qualifying for hedge accounting	3	1
Total	**7**	**12**

Government grants relate to research and development projects. They are recognized in profit or loss over the period necessary to match them with the costs that they are intended to compensate. There are no unfulfilled conditions or other contingencies attached to these grants.

25 Other expenses

Other expenses include all operating expenses that are not included in or attributable to the functional categories and consisted of the following categories:

In EUR millions	2022/2023	2023/2024
Foreign exchange losses/ (gains)	0	0
Other miscellaneous	1	2
Expenses from derivatives not qualifying for hedge accounting	1	2
Total	**2**	**4**

26 Financial income/(expense), net

In EUR millions	2022/2023	2023/2024
Interest income from cash pooling with tk Group (cf. Note 20)	6	–
Interest income from other financial receivables	5	26
Other financial income	3	3
Financial income	**14**	**29**
Interest expense from lease liabilities	0	0
Net interest cost of pensions and similar obligations	0	0
Other financial expenses	(3)	(3)
Financial expense	**(3)**	**(3)**
Total	**11**	**26**

Other financing income and expenses were mainly driven by the measurement of overnight deposit accounts held in foreign currencies.

27 Income taxes

Income tax expenses incurred by the Group consisted of the following:

In EUR millions	2022/2023[1]	2023/2024
Current income tax expense/(benefit)	12	8
Deferred income tax expense/(benefit)	(1)	(8)
Withholding tax expenses (direct cash-out)	1	1
Total	**12**	**1**

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

The components of income taxes recognized in total equity were as follows:

In EUR millions	2022/2023[1]	2023/2024
Income tax expense as presented on the statement of profit or loss	12	1
Taxes recorded directly in equity	(5)	0
Income tax effect on other comprehensive income	0	0
Total	**7**	**1**

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

The temporary differences related to investments in the Group's subsidiaries, for which no deferred tax liability has been recognized, amounted to EUR 1.7 million as of September 30, 2024 (2023: EUR 1.7 million). The Group has determined that the undistributed profits of its subsidiaries will not be distributed in the foreseeable future.

The deferred tax assets (DTA) and deferred tax liabilities (DTL) consisted of the following:

In EUR millions	Sept. 30, 2023[1] DTA	Sept. 30, 2023[1] DTL	Sept. 30, 2024 DTA	Sept. 30, 2024 DTL
Deferred income taxes on non-current items				
Intangible assets	0	–	0	0
Property, plant and equipment	0	0	0	0
Financial assets	1	–	1	–
Other assets	–	–	–	–
Provisions for pensions and similar obligations	1	1	2	1
Other provisions	3	4	1	11
Other liabilities	0	–	0	–
Deferred income taxes on current items				
Inventories	1	1	(1)	3
Other assets	–	2	–	4
Other provisions	1	6	15	–
Other liabilities	10	11	18	20
Valuation allowance – temporary differences	–	–	–	–
Subtotal	**18**	**24**	**36**	**39**
Tax loss carried forward	14	–	19	–
Valuation allowance – tax loss carried forward etc.	–	–	–	–
Subtotal	**14**	**–**	**19**	**–**
Gross amount before offsetting	**32**	**24**	**55**	**39**
Offsetting	(11)	(10)	(26)	(26)
Balance sheet amount	**21**	**14**	**29**	**13**

[1] The comparison figures for the 2022/2023 fiscal year were adjusted retrospectively as part of an adjustment in accordance with IAS 8.41. Please refer to our disclosures in Note 33.

As of September 30, 2024, deferred tax assets of EUR 19 million (September 30, 2023: EUR 14 million) were recognized based on existing tax loss carryforwards. Based on the 2023/2024 fiscal year, there is a history of losses within the corporate tax group of thyssenkrupp nucera. Overall, there is sufficient convincing substantive evidence for thyssenkrupp nucera's current business plan indicating that sufficient taxable profit will be available in the future against which unused tax losses can be offset. This primarily results from future positive outcomes from already agreed project volumes with currently higher margin levels and the elimination of ramp-up costs in the future. According to tax legislation as of September 30, 2024, tax losses can be carried forward indefinitely.

The applicable German tax law provides for a tax rate for 2023/2024 of 31.5% (2022/2023: 32.3%). The decrease compared to the previous year resulted from changes in trade tax multipliers. For foreign entities, the applicable tax rates range from 20.0% to 30.6% (2022/2023: 20.0% and 30.6%).

In EUR millions	2022/2023	in %	**2023/2024**	**in %**
Expected income tax expense	11	32	4	32
Tax rate differentials to the German combined income tax rate	2	4	0	(1)
Changes in tax rates or laws	–	0	0	3
Change in valuation allowance	–	0	0	(3)
Permanent items	(1)	(2)	(1)	(11)
Non-creditable withholding taxes	–	–	–	–
Tax expense related to prior periods	0	0	(2)	(13)
Others	0	(1)	0	(3)
Income tax expense as presented on the statement of profit or loss	**12**	**35**	**1**	**4**

The tax expense related to prior periods is largely attributable to the business activities of a Spanish permanent establishment.

28 Variable compensation

The Group currently has the following management incentive plans, comprising plans implemented at the Company level and, exclusively with respect to members of the Management Board, at thyssenkrupp nucera Management AG level.

Long-term incentive plan (LTI)
Under the long-term incentive plan (LTI), rights to the Company's shares are granted to Management Board members of thyssenkrupp nucera Management AG. The LTI is granted in annual tranches at the beginning of the year, vesting over the fiscal year they are granted in, with a performance period of 4 years. The final number of virtual shares at the end of the performance period is determined by the level of target achievement. The level of target achievement depends on the relative Total Shareholder Return (TSR) of thyssenkrupp nucera AG & Co. KGaA compared to a peer group (market condition). Ranking below the 25th percentile results in 0% target achievement. A position in the 50th percentile corresponds to a target achievement of 100%, while a position in the 75th percentile corresponds to a target achievement of 200%. The maximum target achievement of 250% is reached at the 100th percentile. Intermediate values are interpolated linearly.

The fair value of the share rights was estimated at the grant date August 18, 2023 for tranches 1 and 2 and January 10, 2024 for tranche 3, taking into account the conditions under which the share rights were granted.

The LTI is granted by thyssenkrupp nucera Management AG. The transaction qualifies as a share-based payment transaction among Group entities for which the Company accounts for the LTI as an equity-settled transaction with no obligation of settlement.

There were no cancellations or modifications to the awards in 2024.

Development during the reporting year
In the 2023/2024 fiscal year, the third LTI tranche was granted, following the first and second LTI tranches, which were granted in the 2022/2023 fiscal year. The table below details the number and weighted average fair value of equity instruments at the grant date, along with their development, presented separately for each tranche:

Tranche 1 - 2022/2023

	2023	2023
	Number	Fair value
Outstanding as of October 1		
Granted during the year	11,785	22.56
Exercised during the year	-	-
Outstanding as of September 30	**11,785**	**22.56**
Exercisable as of September 30	0	0.00

Tranche 2 - 2022/2023

	2023	2023
	Number	Fair value
Outstanding as of October 1		
Forfeited during the year	26,190	23.06
Exercised during the year	-	-
Outstanding as of September 30	**26,190**	**23.06**
Exercisable as of September 30	0	0.00

Tranche 3 - 2023/2024

	2024	**2024**
	Number	Fair value
Outstanding as of October 1		
Granted during the year	39,707	19.42
Exercised during the year	-	-
Outstanding as of September 30	**39,707**	**19.42**
Exercisable as of September 30	0	0.00

As of September 30, 2024, three tranches of the LTI had been granted. The fair values were determined at the grant date using Monte Carlo simulations, which simulate the expected target achievement and the anticipated stock price of thyssenkrupp nucera AG & Co. KGaA at the end of the performance period. The following table shows the key valuation parameters used for each tranche:

	Tranche 1	Tranche 2	Tranche 3
in EUR	2022/2023	2022/2023	**2023/2024**
Simulation iterations	50,000	50,000	50,000
Expected volatility (%)	31.21	31.21	31.21
Risk-free interest rate (%)	3.50	3.50	3.50
Target achievement (%)	87.14	92.56	106.99
Expected payout	24.30	25.53	21.28
Fair value at grant date	22.56	23.06	19.42

In the 2023/2024 fiscal year, the Group recognized a total expense from the LTI of EUR 1 million (2022/2023: expense of EUR 1 million).

Short-term incentive plan (STI)

The short-term incentive plan (STI) is an annual performance bonus tied to the achievement level of several predefined goals for each executive, composed of corporate and individual objectives. The bonus calculation is based 70% on the Company's financial performance criteria, with 40% depending on order intake and 30% on EBITDA, while the remaining 30% is based on the personal performance of the Management Board members. Financial targets are set by the Supervisory Board based on the annual budget and individual performance criteria for each fiscal year. At the beginning of each fiscal year, the Supervisory Board sets target and threshold values for the financial performance criteria. The target value for each performance criterion is derived from the Company's business plan and corresponds to a 100% target achievement. The lower threshold is 0%, and target achievement is capped at an upper limit of 200%.

As of September 30, 2024, a liability of EUR 0,4 million (September 30, 2023: EUR 0,4 million) from the STI was recognized for the current Management Board members. The entitlement was fully earned based on the performance delivered during the reporting year. The actual payout is calculated based on target achievement as determined by the Supervisory Board under the current remuneration system for the Management Board and is made in December following the end of the respective fiscal year.

29 Additional disclosures on the Statement of Profit and Loss

Personnel expenses in the Statement of Profit and Loss consist of the following:

In EUR millions	2022/2023	**2023/2024**
Wages and salaries	55	75
Net periodic pension costs – defined contribution	2	2
Expenses for social security	8	12
Related fringe benefits	1	3
Total	**65**	**92**

[1] Excluding net interest that is recognized as part of financial expenses.

The annual average number of employees for each local entity was as follows:

	2022/2023	**2023/2024**
thyssenkrupp nucera Italy S.R.L., Milan	75	90
thyssenkrupp nucera AG & Co. KGaA, Dortmund	335	496
thyssenkrupp nucera Japan Ltd., Tokyo[1]	73	78
thyssenkrupp nucera (Shanghai) Co. Ltd, Shanghai	81	90
thyssenkrupp nucera USA Inc., Houston	26	51
thyssenkrupp nucera Australia Pty. Ltd., Perth	3	4
thyssenkrupp nucera Arabia for Contracting LLC, Riyadh	5	15
thyssenkrupp nucera Participations GmbH, Dortmund	–	–
thyssenkrupp nucera HTE GmbH, Dortmund	–	2
thyssenkrupp nucera India Private Limited, Mumbai	–	47
Total[1]	**598**	**873**

[1]In the previous year's annual report, the average number of employees for Japan for the 2022/2023 financial year was stated as 88. The number was corrected by –15 to 73 due to an error. Accordingly, the total number of 613 was also corrected by –15 to 598.

Auditor fees and services

KPMG AG Wirtschaftsprüfungsgesellschaft has been the auditor of the Consolidated Financial Statements since fiscal year 2022/2023. For the services performed in 2023/2024 by KPMG AG, the following fees were recognized as expenses:

In EUR millions	2022/2023	**2023/2024**
Audit-related fees	1	3
Fees for other services	–	0
Total	**1**	**3**

The audit fees include primarily fees for the year-end audit of the Consolidated Financial Statements and the statutory auditing of thyssenkrupp nucera AG & Co. KGaA. A total of EUR 1 million for audit services relates to the previous year.

30 Notes to the Statement of Cash Flows

Cash and cash equivalents

The liquid funds considered in the Consolidated Statement of Cash Flows correspond to the cash and cash equivalents reported in the Consolidated Balance Sheet and include current bank balances and cash on hand. There was no restricted cash or cash collaterals as of September 30, 2024 or 2023.

The maximum exposure to credit risk for cash and cash equivalents is equal to the respective carrying amount.

Non-cash investment activities

In the 2023/2024 fiscal year, a non-cash addition of right-of-use assets under IFRS 16 amounted to EUR 4 million (2022/2023: EUR 4 million).

Changes in liabilities from financing activities

The following tables show the changes in liabilities from financing activities, including the changes in cash flows and non-cash items:

Reconciliation in accordance with IAS 7

		Cash flow from financing activities	Non-cash changes			
In EUR millions	Sept. 30, 2022	Principal portion	Currency differences	Additions	Other changes	Sept. 30, 2023
Cash flows from redemption of lease liabilities	4	(3)	0	3	1	5
Total	**4**	**(3)**	**0**	**3**	**1**	**5**

Reconciliation in accordance with IAS 7

		Cash flow from financing activities	Non-cash changes			
In EUR millions	Sept. 30, 2023	Principal portion	Currency differences	Additions	Other changes	**Sept. 30, 2024**
Cash flows from redemption of lease liabilities	5	(3)	0	4	(1)	5
Total	**5**	**(3)**	**0**	**4**	**(1)**	**5**

Cash flow from financing activities
The IPO in the prior year resulted in a net capital increase of EUR 513 million.

Leases contained in the Statement of Cash Flows
In the Statement of Cash Flows, the interest component of recognized lease liabilities is included in operating cash flow, while the principal component of lease payments is reported in cash flow from financing activities. In the 2023/2024 fiscal year, the Group's total cash outflows as a lessee in the Statement of Cash Flows amounted to EUR 3 million (2022/2023: EUR 2 million). Expenses from short-term leases and leases of low-value assets are included in operating cash flow (see Note 17).

31 Subsequent events

Other subsequent events
No significant events occurred after the reporting date.

32 Other information

Compensation of Management Board members active during the fiscal year
Total compensation paid to active members of the Management Board for their work in the reporting year according to Section 314 (1) no. 6a of the German Commercial Code (HGB) amounted to around EUR 3 million (previous year: EUR 2 million). Alongside fixed salaries, fringe benefits and short-term incentives (STIs), this also includes the long-term incentive (LTI) as a share-based, long-term, performance-related component. In fiscal year 2023/2024, the STI amounted to EUR 0.4 million (previous year: EUR 0.5 million) and is fully vested on the basis of the work performed in the reporting year.

Share rights were issued in the past fiscal year for the LTI with a fair value of EUR 1 million (previous year: EUR 1 million) at grant date. The individual variable compensation was determined taking into account the requirement for appropriateness.

As of September 30, 2024, a liability of EUR 0.4 million (previous year: EUR 0.5 million) was recognized for the STI for the members of the Management Board active in the fiscal year. The entitlement is fully vested on the basis of the work performed in the reporting year, and the actual payout is calculated by reference to the target achievement determined by the Supervisory Board on the basis of the current remuneration system for the Management Board and will be made in January 2025 following the respective fiscal year-end. This fixing is based on financial (70% weighting) and performance criteria (30% weighting). There is an obligation to invest 25% of the net payout from the STI in thyssenkrupp nucera AG & Co. KGaA shares until an individual investment target is achieved and to hold these shares for the duration of the Management Board appointment.

There are post-employment pension commitments for the current members of the Management Board. The plans are described below and organized via outside pension funds and represent defined benefit plans. The defined benefit obligation for the plans amounted to EUR 2 million (previous year: EUR 2 million), of which EUR 0.2 million was attributable to former members of the Management Board (previous year: EUR 0.2 million).

Declaration of Conformity in accordance with the German Corporate Governance Code under Section 161 of the German Stock Corporation Act (AktG)
The Management Board of thyssenkrupp nucera Management AG, as the personally liable partner of thyssenkrupp nucera AG & Co. KGaA, and the Supervisory Board of thyssenkrupp nucera AG & Co. KGaA issued the declaration of conformity in accordance with Section 161 AktG on October 2, 2024, and have made it permanently accessible to shareholders on the Company's website. For further information, please visit https://www.thyssenkrupp-nucera.com/corporate-governance/declaration-of-conformity/.

33 Adjustment pursuant to IAS 8.41f.

In the 2023/2024 fiscal year, adjustments were made to the accounting for contracts with customers under IFRS 15 and provisions under IAS 37.

The changes were driven by a modification in the accounting for customer contracts: costs related to warranty and guarantee obligations are no longer included in the total expected contract costs under IFRS 15 and, therefore, no longer impact the percentage of completion determined using the "cost-to-cost" method. With this change, the recognition of provisions for warranty and guarantee obligations is now aligned with the progress of performance based on the percentage of completion level, accumulating proportionately over the contract execution period.

In addition to the adjustment related to warranty and guarantee obligations under IAS 8.41f, other immaterial matters were adjusted accordingly in the prior year's figures under IAS 8.41f.

These adjustments had the following impacts on the Statement of Profit and Loss for the 2022/2023 fiscal year:

- Increase in sales of EUR 8 million (thereof due to the adjustments described resulting from the recognition of customer contracts and the recognition of warranty and guarantee obligations: EUR 4 million).
- Increase in cost of sales of EUR 7 million (thereof due to the adjustments described resulting from the recognition of customer contracts and the recognition of warranty and guarantee obligations: EUR 5 million).
- Due to the recognition of customer contracts and the recognition of warranty and guarantee obligations, there is a decrease in gross profit, EBIT, and income from continuing operations before taxes of EUR 0.5 million. This effect is overcompensated by the other adjustments, resulting in an overall increase in gross profit, EBIT, and income from continuing operations before taxes of EUR 1 million.
- The line item “income taxes” increased slightly, resulting in an increase in income from continuing operations after taxes of EUR 1 million. The recognition of customer contracts and the recognition of warranty and guarantee obligations led to a decrease in income from continuing operations after taxes of EUR 0.4 million.
- There were no material effects on earnings per share (basic/diluted).

The Statement of Financial Position as of September 30, 2023 was impacted as follows:

- Within non-current assets: increase in deferred tax assets of EUR 3 million, entirely due to the adjustment resulting from the recognition of customer contracts and the recognition of warranty and guarantee obligations.
- Within current assets: increase in contract assets of EUR 4 million (thereof EUR 3 million resulting from the recognition of customer contracts and the recognition of the adjustment in warranty and guarantee obligations), along with a decrease in inventories of EUR 2 million due to other adjustments.
- Retained earnings and equity: increase of EUR 3 million (thereof EUR 0 million due to the recognition of customer contracts and the recognition of warranty and guarantee obligations).
- Within non-current liabilities: increase in deferred tax liabilities of EUR 4 million (thereof EUR 3 million resulting from the recognition of customer contracts and the recognition of the adjustment to warranty and guarantee obligations).
- Within current liabilities: increase in other provisions of EUR 9 million, entirely due to the recognition of customer contracts and the recognition of warranty and guarantee obligations, along with a decrease of contract liabilities of EUR 11 million (thereof EUR 7 million resulting from the recognition of customer contracts and the recognition of the adjustment for warranty and guarantee obligations).
- Increase in total assets of EUR 5 million, with the adjustment resulting from the recognition of customer contracts and the recognition of warranty and guarantee obligations causing an increase in total assets of EUR 6 million and other adjustments resulting in a decrease of EUR 1 million.

The adjustments had the following impacts on the opening Statement of Financial Position as of October 1, 2022:

- Within non-current assets: increase in deferred tax assets of EUR 2 million, entirely resulting from the recognition of customer contracts and the recognition of warranty and guarantee obligations.
- Within current assets: increase in contract assets of EUR 3 million (thereof EUR 2 million resulting from the recognition of customer contracts and the recognition of warranty and guarantee obligations).
- Retained earnings and equity: increase of EUR 1 million (thereof EUR 0.5 million resulting from the recognition of customer contracts and the recognition of warranty and guarantee obligations).
- Within non-current liabilities: increase in deferred tax liabilities of EUR 2 million (thereof EUR 2 million resulting from the recognition of customer contracts and the recognition of warranty and guarantee obligations).
- Within current liabilities: increase in other provisions of EUR 5 million and decrease in contract liabilities of EUR 4 million. Both effects result entirely from the recognition of customer contracts and the recognition of warranty and guarantee obligations.
- Increase in total assets of EUR 5 million, with the recognition of customer contracts and the recognition of warranty and guarantee obligations causing an increase of EUR 3.1 million and the other adjustments resulting in an increase of EUR 1.4 million.

Additionally, on the Statement of Cash Flows for the 2022/2023 fiscal year, the reconciliation of operating cash flow contained the following:

- Increase in income from continuing operations after taxes of EUR 1 million as the starting point for the reconciliation, with the recognition of customer contracts and the recognition of warranty and guarantee obligations alone resulting in a decrease of EUR 0.4 million (see above).
- Decrease in the change in inventories of EUR 2 million (entirely attributable to other adjustments under IAS 8.41f by analogy).
- Increase in the change in contract assets of EUR 1 million, entirely attributable to the recognition of customer contracts and the recognition of warranty and guarantee obligations.
- Increase in the change in other provisions of EUR 5 million, entirely attributable to the recognition of customer contracts and the recognition of warranty and guarantee obligations.
- Increase in the change in contract liabilities of EUR 6 million (thereof EUR 3 million resulting from the recognition of customer contracts and the recognition of warranty and guarantee obligations).

These adjustments had no impact on operating cash flow, cash flow from investing activities, cash flow from financing activities, or the balance of cash and cash equivalents on the Statement of Cash Flows.

In the prior year's Statement of Comprehensive Income, the adjustments under IAS 8.41f. resulted in an increase in income from continuing operations (after taxes) and, consequently, in the total comprehensive income for the period of EUR 1 million (thereof resulting from the recognition of customer contracts and the recognition of warranty and guarantee obligations: decrease of EUR 0.4 million).

In addition, the following adjustments were made to the prior year figures under IAS 8.41f:

- Adjustment to the value of inventories recognized under cost of sales (see Note 6)
- Adjustment to the value of guarantees issued by the thyssenkrupp Group and bank guarantees (see Notes 18 and 20)
- Adjustment to the carrying amounts of financial assets for the presentation of financial instruments by category (see Note 19)
- Adjustment to the value of services received and liabilities vis-a-vis IDN (see Note 20)
- Adjustment to the values of non-current assets by segment (see Note 21)

Dortmund, December 12, 2024

thyssenkrupp nucera Management AG,
General Partner of thyssenkrupp nucera AG & Co. KGaA

The Management Board

Dr. Werner Ponikwar   Dr. Arno Pfannschmidt   Fulvio Federico

The English language text below is a translation provided for information purposes only. The original German text shall prevail in the event of any discrepancies between the English translation and the German original. We do not accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may arise from the translation.

Independent Auditor's Report

To thyssenkrupp nucera AG & Co. KGaA, Dortmund

Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report

Opinions

We have audited the consolidated financial statements of thyssenkrupp nucera AG & Co. KGaA, Dortmund, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 30 September 2024, the consolidated statement of profit and loss, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the financial year from 1 October 2023 to 30 September 2024, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report of thyssenkrupp nucera AG & Co. KGaA for the financial year from 1 October 2023 to 30 September 2024.

In accordance with German legal requirements, we have not audited the content of those components of the combined management report specified in the "Other Information" section of our auditor's report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 30 September 2024, and of its financial performance for the financial year from 1 October 2023 to 30 September 2024, and

- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the combined management report does not cover the content of those components of the combined management report specified in the "Other Information" section of the auditor's report.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and the EU Audit Regulation No 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2)(f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 October 2023 to 30 September 2024. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

Revenue recognition for customized construction contracts

For information on the accounting policies applied please refer to the comments under note 2 to the consolidated financial statements "Revenue recognition" and "Estimates and assessments – revenue recognition from contracts with customers". Disclosures on revenue from construction contracts and the gross amounts due from and to customers for contract work can be found under note 8 "Assets and liabilities from contracts with customers" and note 22 "Revenue" to the consolidated financial statements.

THE FINANCIAL STATEMENT RISK

Revenue in the amount of EUR 707 million was generated from construction contracts in financial year 2023/2024. As at 30 September 2024, the gross amount due from customers for contract work (contract assets) was EUR 122 million and the gross amount due to customers for contract work (contract liabilities) was EUR 225 million.

Revenue is recognized over time by reference to the stage of completion of the transaction at the end of the reporting period. The stage of completion is determined as the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs (cost to cost method). If an overall loss is expected from the construction contract, this loss is to be recognized as a provision for onerous contracts.

The calculation of realizable revenue from customized construction contracts is complex and based on estimates. The main estimates made by management in this context concern:

- Estimation of the total contract costs including projected cost increases
- Determination of stage of completion

There is a financial statement risk for thyssenkrupp nucera AG & Co. KGaA that the recognition of the incurred costs and the estimation of the total costs as initial values for estimating the stage of completion (cost-to-cost) for customized construction contracts include elements that cannot be recognized or have not been incurred, and onerous contracts from manufacturing contracts are not recognized.

OUR AUDIT APPROACH

We assessed the procedure for recognizing already incurred contract costs and estimating expected contract costs as well as the method for determining the respective stages of completion and the ability to recognize the cost components included.

We performed the following audit procedures (among others) for construction contracts specifically selected on the basis of risk:

- Analysis of the agreements underlying the selected construction contracts
- Enquiries of employees involved in the project, including questions regarding estimates of total contract costs, existing risks and the status of the projects
- Audit of assumptions used for estimates of total contract costs, including analyses of current project progress and any deviations from budget
- Consultation with specialists to assess the total contract costs still to be incurred
- Assessment of computational accuracy of the determined stage of completion as well as any anticipated losses and the proper accounting presentation of construction contracts and any provisions for onerous contracts under IAS 37

In addition, we performed the following audit procedures, among others:

- Reconciliation of the actual costs recorded with internal cost statements and external evidence, in particular for costs incurred in temporal proximity before the reporting date on the basis of a representative selection with an increased sample size
- Audit of actual costs incurred in temporal proximity after the reporting date on the basis of a deliberate selection with an increased sample size.

OUR OBSERVATIONS

The approach taken for recognizing and measuring revenue from customized construction contracts is appropriate. The assumptions and methods are overall appropriate.

Other Information

Management and/or the Supervisory Board are/is responsible for the other information. The other information comprises the following components of the combined management report, whose content was not audited:

- the integrated combined non-financial statement in the combined management report of thyssenkrupp AG, Duisburg and Essen, which is referred to in the combined management report
- the combined corporate governance statement for the Company and Group, which is included in section 7 of the combined management report, and
- information extraneous to management reports and marked as unaudited.

The other information also include the remaining parts of the annual report. The other information does not include the consolidated financial statements, the combined management report information audited for content and our auditor's report thereon.

Our opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the combined management report information audited for content or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

Management is responsible for the preparation of consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.

- Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group’s position it provides.

- Perform audit procedures on the prospective information presented by management in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the actions taken or safeguards applied to eliminate independence threats.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor’s report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Declaration of Non-issuance of an Assurance Opinion on the Electronic Rendering of the Consolidated Financial Statements and the Combined Management Report prepared for Publication Purposes in Accordance with Section 317 (3a) HGB

We were engaged to perform assurance work in accordance with Section 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the combined management report (hereinafter the “ESEF documents”) prepared for publication purposes complies, in all material respects, with the requirements of Section 328 (1) HGB for the electronic reporting format (“ESEF format”).

We do not express an opinion on the ESEF documents. As a result of the significance of the circumstances described below, we have not been able to obtain sufficient appropriate assurance evidence as a basis for an opinion on the ESEF documents.

As management has not provided us with any ESEF documents for examination by the date of the issuance of the independent auditor’s report, we do not express an assurance opinion on the ESEF documents.

The Company’s management is responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the combined management report in accordance with Section 328 (1) sentence 4 item 1 HGB and for the tagging of the consolidated financial statements in accordance with Section 328 (1) sentence 4 item 2 HGB.

In addition, the Company’s management is responsible for the internal controls they consider necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB for the electronic reporting format.

The supervisory board is responsible for overseeing the process of preparing the ESEF documents as part of the financial reporting process.

It is our responsibility to perform assurance work on the ESEF documents in accordance with Section 317 (3a) HGB and the IDW Assurance Standard: Assurance Work on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB (IDW AsS 410 (06.2022)). As a result of the above circumstances, we have not been able to obtain sufficient appropriate assurance evidence as a basis for an assurance opinion on the ESEF documents.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor at the annual general meeting on 7 February 2024. We were engaged by the supervisory board on 27 June 2024. We have been the group auditor of thyssenkrupp nucera AG & Co. KGaA without interruption since financial year 2022/2023.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Charlotte Salzmann.

Essen, 17 December 2024

KPMG AG
Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

Salzmann	Georgi
Wirtschaftsprüferin	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the Consolidated financial Statements give a true and fair view of the assets, liabilities, financial position and profit and loss of the group, and the combined management report includes a fair review of the development and performance of the business and the Position of the group, together with a description of the principal opportunities and risks associated with the expected development of the group.

Dortmund, December 12, 2024

thyssenkrupp nucera Management AG,
General Partner of thyssenkrupp nucera AG & Co. KGaA

Management Board

Dr. Werner Ponikwar   Dr. Arno Pfannschmidt   Fulvio Federico

Further information

Management Board and Supervisory Board

Management Board

Dr. Werner Ponikwar

- Born 1969
- CEO since 2022
- Appointed until 2025 // German

Responsible for the Corporate Functions Business Development/Sales, Communications/ESG & Governmental Affairs, Engineering, Human Resources & HSE, Internal Audit, Legal & Compliance/Board Office, Module & Cell Fabrication, Strategy & M&A

In addition, Dr. Ponikwar is responsible for the business activities of the subsidiaries in Germany, Italy and in the US.

Current external Board Seats: none

Dr. Arno Pfannschmidt

- Born 1961
- CFO, Member of the Board since 2022
- Appointed until 2025 // German

Responsible for the Corporate Functions Commercial Operations/Tax, Controlling, Accounting & Risk, Finance, Information Technology, Investor Relations, Project Execution/Procurement, Project Risk Control & QM

In addition, Dr. Pfannschmidt is responsible for the business activities of the subsidiaries in Australia, India and Saudi Arabia.

Current external Board Seats: none

Fulvio Federico

- Born 1966
- CTO, Member of the Board since 2022
- Appointed until 2025 // Italian

Responsible for the Corporate Functions Innovation Center, IP Management, Product Management, Technology Service

In addition, Fulvio Federico is responsible for the business activities of the subsidiaries in China and Japan.

Current external Board Seats: none

Supervisory Board

Jennifer Cooper

- Position: Member of the Supervisory Board
- Principal occupation: Senior Project Manager, Group Function Mergers & Acquisitions, thyssenkrupp AG

Current Board Seats:
Since 2022: Member of the Supervisory Board of thyssenkrupp Marine Systems GmbH

Paolo Dellachà

- Position: Deputy Chair of the Supervisory Board
- Principal occupation: CEO, De Nora

Current Board Seats:
Since 2023: Independent Director of Technoprobe S.p.A.
Since 2022: Director of Ekon Capital S.r.l.
Since 2020: Advisory Board Member of De Nora Deutschland GmbH
Since 2012: Director of Soppa Srl
Since 2009: CEO, Industrie De Nora S.p.A.

Dr. Volkmar Dinstuhl

- Position: Chairman of the Supervisory Board
- Principal occupation: Member of the Executive Board, thyssenkrupp AG

Current Board Seats:
Since 2020: Chairperson of the Supervisory Board of thyssenkrupp Industrial Solutions AG
Since 2020: Board Member of Vertical Topco S.à r.l.
Since 2024: Chairman of the Board of Directors, thyssenkrupp (China) Ltd.
Since 2024: Member of the Supervisory Board, thyssenkrupp Steel Europe AG

Markus Fuhrmann

- Position: Member of the Supervisory Board
- Principal occupation: CEO of GROPYUS AG

Current Board Seats:
Since 2020: Managing director, GROPYUS Project Properties GmbH

Michael Höllermann

- Position: Member of the Supervisory Board
- Principal occupation: Member of the Executive Board and Chief Human Resources Officer of the Decarbon Technologies business segment of the thyssenkrupp Group

Current Board Seats:
Since 2024: President of the Board of Directors, Uhde Inventa Fischer AG
Since 2024: Member of the Supervisory Board, thyssenkrupp Rothe Erde Germany GmbH
Since 2023: Chairman of the Supervisory Board, thyssenkrupp Polysius GmbH
Since 2021: Chief Executive Officer and CHRO (since 2016) of thyssenkrupp Industrial Solutions AG

Dr. Arnd Köfler

- Position: Member of the Supervisory Board
- Principal occupation: Consultant

Current Board Seats:
Since 2021: Chair of the Supervisory Board of Hüttenwerke Krupp Mannesmann GmbH, Duisburg

Dr. Cord Landsmann

- Position: Member of the Supervisory Board
- Principal occupation: CEO of Energy Solutions Company

Current Board Seats: None

Dr. Sebastian Lochen

- Position: Member of the Supervisory Board
- Principal occupation: Group General Counsel, Chief Compliance Officer of thyssenkrupp AG

Current Board Seats:
Since 2020: Member of the Board of Managers of thyssenkrupp North America, LLC
Since 2020: Member of the Board of Directors of thyssenkrupp (China) Ltd.
Since 2020: Member of the Supervisory Board of thyssenkrupp Materials Services GmbH
Since 2019: Member of the Supervisory Board of thyssenkrupp Industrial Solutions AG
Since 2019: Member of the Supervisory Board of thyssenkrupp Marine Systems GmbH

Miguel Ángel López Borrego

- Position: Member of the Supervisory Board
- Principal occupation: CEO of thyssenkrupp AG

Current Board Seats:
Since 2023: Chief Executive Officer of thyssenkrupp AG
Since 2023: Member of the Supervisory Board of thyssenkrupp Steel Europe AG

Luca Oglialoro

- Position: Member of the Supervisory Board
- Principal occupation: CFO, De Nora

Current Board Seats:
Since 2024: Chief Financial Officer, Industrie De Nora S.p.A.

Prof. Dr. Franca Ruhwedel

- Position: Member of the Supervisory Board
- Principal occupation: Professor for Finance & Accounting at Rhine-Waal University

Current Board Seats:
Since 2023: Member of the Supervisory Board of United Internet AG, Montabaur
Since 2022: Member of the Board of Directors (non-executive) of Verve Group SE, Stockholm
Since 2013: Member of the Supervisory Board of National-Bank AG, Essen

Dr. Robert Scannell

- Position: Member of the Supervisory Board
- Principal occupation: Regional Chief Officer for EMEA & India region of De Nora / Managing Director of De Nora Deutschland

Current Board Seats:
Since 2023: Managing Director for shotec GmbH, Hanau
Since 2021: President for De Nora Italy S.p.A. Milano
Since 2014: Director (Non- Executive) of De Nora India Plc, Goa
Since 2010: De Nora Regional Chief Officer EMEA & India region
Since 2003: Managing Director, De Nora Deutschland GmbH

Glossary

Alkaline water electrolysis → Alkaline water electrolysis (AWE) is the process used to produce hydrogen from water using electricity. When electricity from renewable energy sources is used, it is referred to as green hydrogen.

Ammonia (green) → Green ammonia is produced using electricity from renewable energy sources as part of the water electrolysis process. The resulting hydrogen is then catalytically reacted with atmospheric nitrogen to form ammonia (NH_3). Ammonia is a chemical compound with significant technical importance, among other things, for the production of nitrogen fertilizers, purification of exhaust gas in power plants, and as a refrigerant.

AWE → Abbreviation for alkaline water electrolysis.

BiTAC® → Product name of the electrolysis technology marketed by thyssenkrupp nucera in the form of a filter press.

Blue hydrogen → Hydrogen generated from natural gas (steam reforming), in which the resulting CO_2 is not emitted into the atmosphere but instead stored or further processed industrially (carbon capture and storage [CCS]; carbon capture and utilization [CCU]; in combined processes also referred to as CCUS).

BM → The product name of the single-element bipolar membrane electrolysis technology marketed by thyssenkrupp nucera.

CA → Abbreviation for chlor-alkali electrolysis.

Chlor-alkali electrolysis (CA) → Process for producing the important basic chemicals chlorine, hydrogen, and sodium hydroxide (caustic) soda from sodium chloride and water.

CO_2 emission → Emissions of carbon dioxide (CO_2), which consists of carbon and oxygen. CO_2 emissions are considered one of the driving forces of global warming.

Decarbonization → Decarbonization involves the reduction of carbon dioxide to the greatest extent possible. Complete industrial decarbonization is not possible because carbon in bound form is an important element for many basic chemical products, such as methanol.

Defossilization → Defossilization involves replacing fossil fuels such as oil and natural gas with renewable energy sources such as green hydrogen and avoiding carbon dioxide emissions (defossil- ized).

Diaphragm method → An important chlor-alkali electrolysis process. This process prevents the mixing of reaction products in the electrolysis cell using a porous diaphragm.

EBIT → Earnings before interest and taxes.

EBIT margin → The ratio of EBIT to sales.

EBITDA → Earnings before deduction of interest, taxes, depreciation and amortization on property, plant and equipment and intangible assets.

EBITDA margin → The ratio of EBITDA to sales.

Electrolysis → A process in which a chemical compound is decomposed using electrical current. In water electrolysis, water is split into its elementary components – hydrogen (H_2) and oxygen (O) – in an electrolysis cell using electrical energy.

Electrolyzer → An electrolyzer consists of several electrolysis cells arranged in a series, within which a redox reaction is forced by supplied electrical energy in order to break down water into its basic components, hydrogen and oxygen, for example.

Equity ratio → The ratio of equity to total capital.

Free cash flow → The liquid funds available to a company to distribute dividends or repay debt capital.

Gray hydrogen → Hydrogen generated from fossil fuels (natural gas, oil, coal). Currently, a common process is the generation from natural gas through the process of steam reforming. The production of one ton of hydrogen releases around ten tons of carbon dioxide.

Greater China → Consists of China, Hong Kong, Mongolia, Macau and Taiwan in the definition used.

Green hydrogen → Hydrogen, in which the electricity required to split water into hydrogen and oxy- gen comes from renewable energy sources (e.g. solar energy, wind, or hydropower).

HCl → Abbreviation for hydrochloric acid.

HCl electrolysis → HCl electrolysis is a process for converting hydrochloric acid into chlorine and hydrogen.

HCl-ODC electrolysis → The process of HCl membrane electrolysis with oxygen depolarized cathodes (HCl-oxygen depolarized cathodes).

High-temperature electrolysis (HTE) → A form of water electrolysis in which processes are carried out at very high temperatures (up to 900 degrees Celsius), which increases efficiency and, consequently, reduces the power requirement.

Hydrogen → The element with atomic number 1 and the most common atom in the universe. The combustible gas can serve as an energy carrier that does not release any environmentally or climate-damaging substances (especially CO_2) during combustion. The degree of climate neutrality differs depending on the production method used.

KGaA → The partnership limited by shares (KGaA) representing a hybrid form between a stock corporation and a limited partnership. The KGaA has personally liable partners (general partners), which is its main distinction from the corporate form of the AG.

Long-term incentive (LTI) → Multi-year variable compensation through stock rights for Management Board members and other selected executives.

Membrane process → An important chlor-alkali electrolysis process. A plastic membrane cell prevents the reaction products from mixing in the electrolysis cell.

Net financial debt/cash → The balance of cash, cash equivalents and fixed-term deposits reported on the statement of financial position, in addition to current debt instruments and current and non-current financial debt.

Net income/(loss) → Corresponds to the net income/loss within a fiscal year and is calculated as the balance of all income and expenses.

ODC → Abbreviation for oxygen depolarized cathodes.

ODC process → In chlorine electrolysis with oxygen depolarized cathode, the same electrolysis cell is used as in the membrane process, but the conventional cathode is replaced by a cathode with a special oxygen diffusion surface. Oxygen is introduced behind this and is reduced together with water to hydroxide ions.

Order intake → Represents projects contracted by customers with the Group within a fiscal year or interim period, as well as any subsequent changes relating to these projects, including new construction projects and all service projects.

PEM electrolysis → Proton exchange membrane (PEM) electrolysis is a water electrolysis process. In contrast to alkaline electrolysis, it is carried out in an acidic medium.

Pink hydrogen → Climate-neutral hydrogen generated by electrolysis using electricity from nuclear power.

Power-to-X → Processes that convert electricity into other energy carriers (usually into chemical energy carriers) that can be used for electricity storage, as fuels, or as raw materials for the chemical industry. Depending on the intended use and the form of energy produced, other references include power-to-fuel, power-to-chemicals, power-to-gas or power-to-heat.

Reverse power generation → The further processing of hydrogen with CO_2 into methane and use via the gas grid. If required, the gas can also be converted back into electricity in gas and steam power plants ("reverse power generation").

SDG → The 17 Sustainable Development Goals agreed by the UN member states to ensure sustainable development at the economic, social, and environmental levels.

Short-term incentive (STI) → One-year variable compensation.

SOEC → Abbreviation for solid oxide electrolyzer cells, the core elements of SOEC stacks, which are used for high-temperature electrolysis (HTE).

Steam reforming → Process for generating hydrogen from fossil, carbon-containing energy sources, usually natural gas and water. Because of the associated CO_2 emissions into the atmosphere, gray hydrogen is not climate-neutral.

Turquoise hydrogen → Turquoise hydrogen is produced when methane in natural gas is split by pyrolysis into hydrogen and solid carbon, which can be stored or reused but not avoided. The production of turquoise hydrogen is climate-neutral when energy from renewable sources is used in the process.

UN Global Compact → Worldwide UN initiative to shape globalization in social and environmental terms, with the aim of raising awareness and encouraging companies to act in order to achieve the Sustainable Development Goals (SDGs) by 2030.

Water electrolysis → The splitting of water in an electrolyzer with the aid of electricity into the elements of hydrogen and oxygen.

Imprint and Financial calendar

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Financial calendar

February 5, 2025
Annual General Meeting

February 13, 2025
Quarterly Statement Q1 2024/2025

May 15, 2025
Half-Year Financial Report 2024/2025

August 14, 2025
Quarterly Statement Q3/9M 2024/2025

December 17, 2025
Annual Report 2024/2025

Rounding and percentage deviations
The key figures in this report have been rounded to the nearest whole number. Rounding differences may therefore occur in figures and percentages.

The algebraic signs for the rates of change are from a business perspective: An improvement is shown as a positive percentage value, and a deterioration is preceded by a minus sign (-). For very high rates of change (≥ +100% or ≤ -100%), the direction of change is indicated by ++ or --.

Disclaimer
This report contains forward-looking statements based on current expectations, assumptions and forecasts of the Management Board and currently available information. Forward-looking statements are not guarantees of future performance or results. Rather, future developments and results depend on a variety of factors, involve various risks and uncertainties, and are based on assumptions that may not prove to be accurate. Therefore, actual results may differ materially from those expressed or implied by this financial report. The forward-looking statements contained in this financial report are not modified to reflect events or developments occurring after the date of this report.

This report is a translation of the original report in German, which is also available. In the event of any discrepancies, the German authoritative version of this report shall take precedence over the English translation.

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