Company Presentation.

2G. Company Presentation.

Speaker:
Friedrich Pehle - CFO

2G. Kraft-Wärme-Kopplung.

29.11.2021

Our product: Combined heat and power plants – CHP.

A combustion engine drives a generator.

20 kW – 4500 kW
350 kW in average

agenitor

Input (100%):

All kinds of Gas

- Natural Gas
- Bio Gas
- Special Gas
  - Landfill Gas
  - Mining Gas
  - Sewage Gas
  - Mixtures
  - ...
- Pure H_2

Output (up to 98%*):

Electrical Energy (up to 42%)

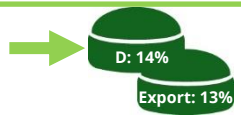
- Grid feeding
- Self-consumption

Thermal Energy (up to 60%)

- Heating systems (up to 90°C)
  - Grid feeding
  - Self-consumption
- High temperature applications (up to 400°C)
- Absorption chillers
- Steam generators

*) aura-model

Our product: Solution provider for many applications.

34% **Industry and Trade**	23% Industrial companies	3% Chemical Industry	8% Food Industry
15% **Service**	4% Hospitals	1% Sport and Event centers	10% Residential buildings and Public facilities
31% **Energy**	18% Utilies	6% Landfills and Sewage plants	27%  Biogas Plants

Our product: Competitive landscape.

Rang	Unternehmen	Instal. el. Kapazität in kW				Ø Modulgröße in kW	
		2020	2019	Diff.	in %	2020	2019
1	INNIO Jenbacher	242.157	300.567	-58.410	-19%	1.459	1.698
2	MWM (Caterpillar)	195.682	187.625	8.057	4%	955	906
3	**2G Energy AG**	**115.998**	**120.994**	**-4.996**	**-4%**	**317**	**347**
4	TEDOM-SCHNELL	76.246	94.885	-18.639	-20%	300	301
5	MTU (Rolls-Royce)[1]	58.261	70.660	-12.399	-18%	1.059	906
6	Elektro Hagl (nur Biogas)	38.000				319	
7	ETW Energietechnik	28.750	30.633	-1.883	-6%	1.027	1.056
8	Zeppelin Power Systems	22.150	22.650	-500	-2%	1.846	1.510
9	agriKomp (nur Biogas)	19.855	17.250	2.605	15%	248	208
10	AB Energy Deutschland[2]	19.204	36.500	-17.296	-47%	914	1.043
...	...	...	...	...	...	...	...
25	A-TRON	2.022	1.624	+398	25%	20	20

1) **MTU Onsite Energy:**
MTU sources its CHP up to 550 kW entirely from 2G

2) **AB Energy D.:**
AB is headquartered in Italy. Hence, Germany is not its home market and doesn't reflect its global importance.

2G Energy AG - Worldwide success with combined heat and power generation.

- **Foundation**: 1995 – HQ in North West of Germany
- **IPO:** 2007
- **Market Cap:** app. 500 Mio. Euro; Free float: app. 55%
- **Net sales 2021e**: 250 – 260 Mio. Euro
- **Employees**: app. 650-700 worldwide, 7 subsidiaries in USA, CA, UK, F, I, E, Pol
- **Importance to the (European) energy supply:**
  - above 6‘500 CHP plants in more than 50 countries
  - app. 1.8 GW act. capacity (compared to Brockdorf = app. 1.4 GW)
- **Competitive situation**:
  - **H_2:** Technological leader (worldwide);
  - Germany: General market leader

More electricity from coal.

Mehr Strom aus Kohle

Flaute bei Windkraft im ersten Halbjahr / Klimaziele in Gefahr?

Wiesbaden – Ungünstige Witterungsbedingungen haben im ersten Halbjahr 2021 die Stromerzeugung aus erneuerbaren Energien in Deutschland deutlich sinken lassen. Die Kohle (27,1 Prozent) verdrängte die Windkraft (22,1 Prozent) wieder vom ersten Platz unter den eingesetzten Energieträgern, wie das Statistische Bundesamt mitteilte. Branchen- und Umweltverbände forderten einen schnelleren Ausbau der erneuerbaren Energien und der Speicher für Ökostrom.

Mehr als die Hälfte (56 Prozent) der gesamten in Deutschland erzeugten Strommenge von 258,9 Milliarden Kilowattstunden stammten nach Berechnungen der Statistiker von Januar bis Juni aus konventionellen Quellen wie Kohle, Erdgas oder Kernenergie. Das war gut ein Fünftel mehr als ein Jahr zuvor.

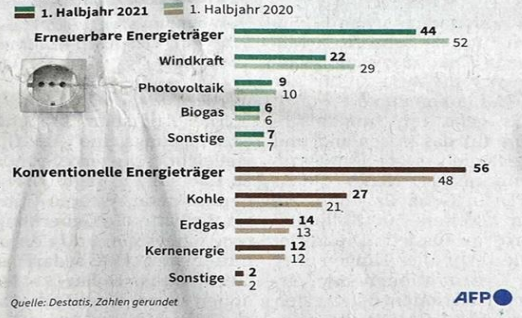
Vor allem der Verbrauch der als besonders klimaschädlich geltenden Braunkohle stieg kräftig. Deutschland will bis 2038 ganz aus der Stromproduktion mit Kohle aussteigen. Der Anteil erneuerbarer Energien wie Wind, Solarenergie und Biogas sank dagegen auf 44 Prozent. Im ersten Halbjahr 2020 hatten die Öko-Energien den Rekordanteil von 51,8 Prozent an der Stromproduktion erreicht. Fast 30 Prozent der deutschen Stromerzeugung lieferten damals Windräder an Land und auf See. Auch der in der Corona-Pandemie gesunkene Stromverbrauch hatte den Ökostromanteil steigen lassen. Jetzt sank die Stromerzeugung mit Windenergie auf den niedrigsten Wert für ein erstes Halbjahr seit 2018.

Die aktuellen Zahlen zeigen, wie abhängig die Ökostromproduktion von den Witterungsbedingungen ist. „Die Werte der Erneuerbaren sind im Vergleich auch deshalb insgesamt geringer, weil es im ersten Halbjahr 2020 eine außergewöhnlich hohe Einspeisung gab", hatte die Bundesnetzagentur in ihrer Analyse der Stromproduktion im ersten Halbjahr 2021 festgestellt. Der Februar 2020 sei wegen mehrere Sturmtiefs der Monat mit der höchsten Ökostromerzeugung seit mindestens 2015 gewesen. Im Frühjahr 2021 blies der Wind dagegen weniger heftig.

„Die Stromerzeugung aus Wind und Sonnenenergie unterliegt wetterbedingten Schwankungen. Das ist normal", betonte die Chefin des Bundesverbands der Energie- und Wasserwirtschaft, Kerstin Andreae. Die Zahlen zeigten aber, dass „das Ausbautempo der Erneuerbaren deutlich anziehen" müsse, wenn Deutschland die verschärften Klimaziele für 2030 erreichen wolle. Auch müsse mehr in die Entwicklung von Stromspeichern investiert werden, um Phasen ungünstiger Wetterverhältnissen ausgleichen zu können. dpa

Stromeinspeisung

Im Inland produzierte und ins Netz eingespeiste Strommenge in Prozent



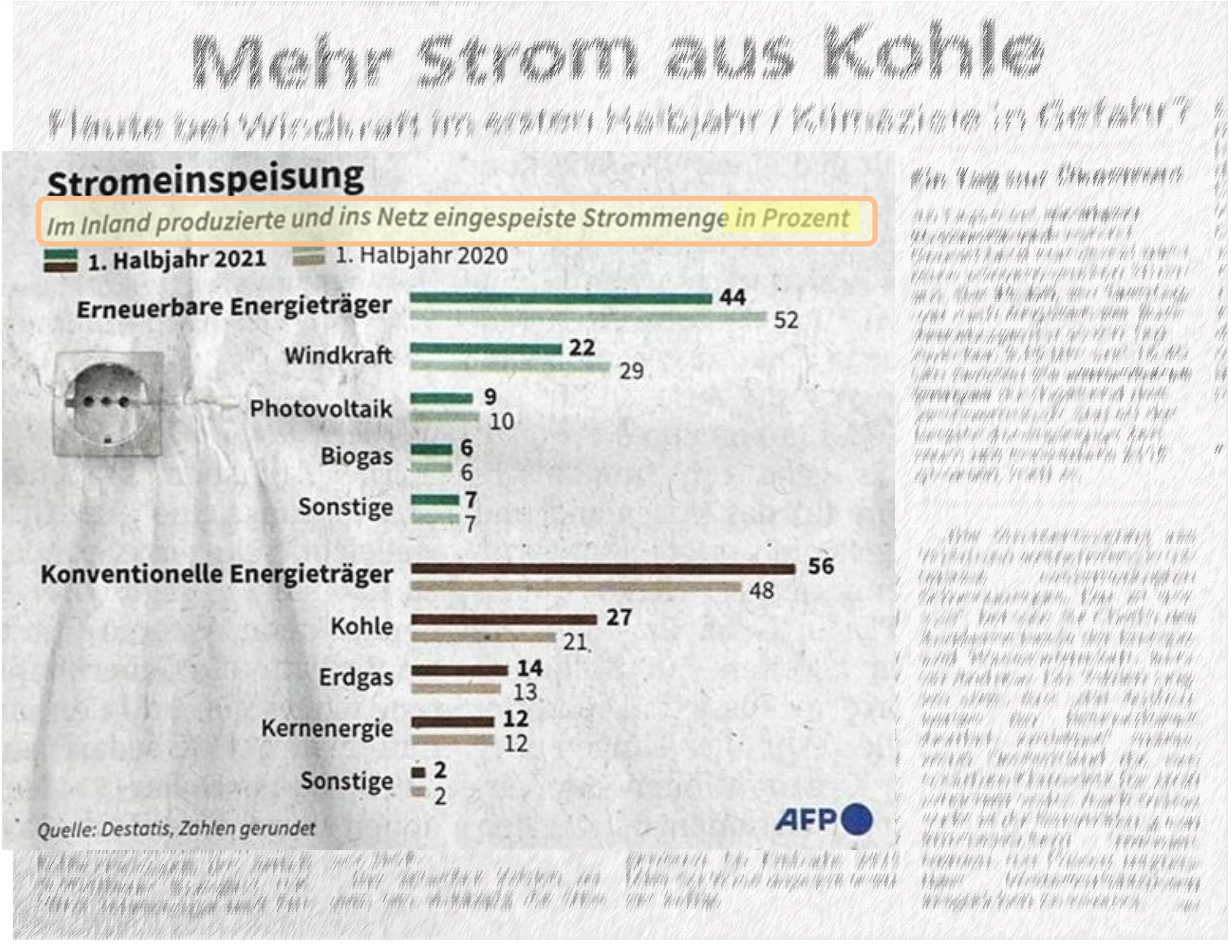
Quelle: Destatis, Zahlen gerundet

AFP

Ein Tag nur Ökostrom

An Tagen mit **niedrigem Stromverbrauch** kommt Deutschland manchmal ganz ohne konventionellen Strom aus. Der **31. Juli**, ein Samstag, war nach Angaben der Bundesnetzagentur so ein Tag. Zwischen 9.15 Uhr und 16.45 Uhr deckten die **erneuerbaren Energien** durchgehend den Stromverbrauch. Das sei der längste durchgängige Zeitraum seit mindestens 2015 gewesen, hieß es.

Power feed-in in %.



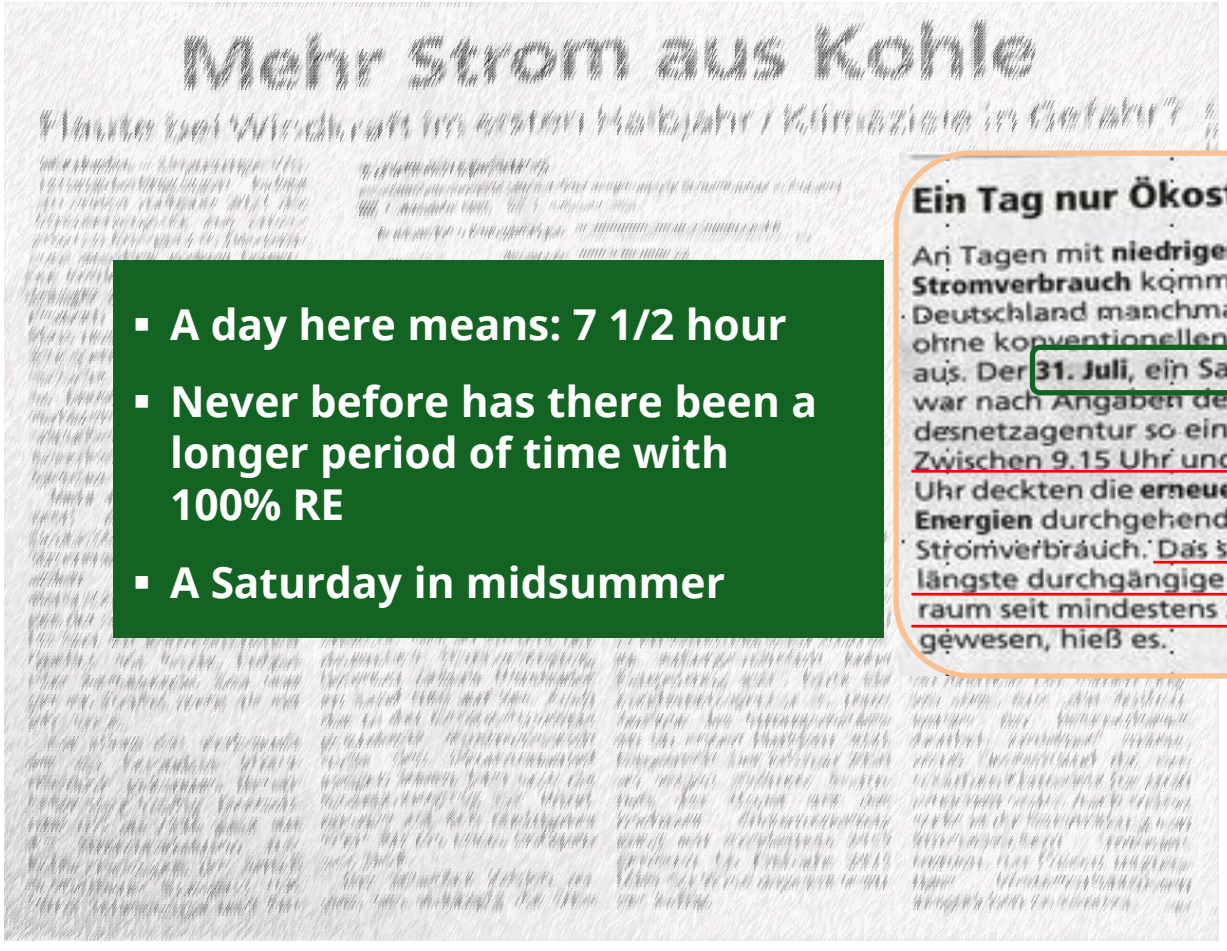
Lack of reliability in wind and solar systems.

How was the summer half-year (Q2 + Q3)?

1. Increase in production (+10%).
2. Renewable energies are losing relative importance.
3. Electricity generation from wind and solar increases by 4% and 2% respectively.
4. While at the same time the production of coal-fired electricity increases by 40%.

Quelle der Stromerzeugung im Sommerhalbjahr 2021				
in MWh	2020	2021	Veränderung	
			abs.	in %
Total	**212.141**	**233.638**	**21.497**	**10%**
davon				
Erneuerbar	50%	47%	-3%-points	
Konventionell	50%	53%	3%-points	
Wind	**41.969**	**43.845**	**1.875**	**4%**
Solar	**34.063**	**34.813**	**751**	**2%**
Wasser	**8.268**	**8.730**	**461**	**6%**
Biomasse	**21.265**	**22.726**	**1.461**	**7%**
Erneuerbare	**105.566**	**110.114**	**4.549**	**4%**
Atom	**28.269**	**32.041**	**3.772**	**13%**
Kohle	**47.569**	**66.385**	**18.815**	**40%**
Erdgas	**27.276**	**21.572**	**-5.705**	**-21%**
Öl und andere	**3.461**	**3.526**	**65**	**2%**
Konventionell	**106.575**	**123.523**	**16.948**	**16%**

One day just green electricity.



Mehr Strom aus Kohle

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- A day here means: 7 1/2 hour
- Never before has there been a longer period of time with 100% RE
- A Saturday in midsummer

A working day in autumn.

...

Tuesday, last week

1. Wind and solar had a utilization rate of 2% and 0% respectively.
2. At this level of utilization, additional wind and solar systems do not help any further => the failure of app 20 GW of nuclear + coal power cannot be covered in this way.
3. Import as a solution difficult:
   - Interconnector capacities are already largely exhausted.
   - The European neighbours also produce predominantly conventional electricity on this day.
4. Normally, only 30 GW (end of 2023: 27.5 GW) of coal-fired power plants are available.

Energiemix: Dienstag, 16. Nov. 2021, 16:00 Uhr				
in GW	IST	Kapaz.	Nutzung	
			ung./frei	in %
Total	66,5			
davon				
Erneuerbar	17%			
Konventionell	83%			
Wind	1,0	63,2	62,2	2%
Solar	0,2	56,0	55,8	0%
Wasser	3,4	14,7	11,3	23%
Biomasse	5,0	8,6	3,5	59%
Import (Schätz.)	1,5	max. 8,5	-	-
Erneuerbare	11,1	142,4	131,3	8%
Atom	8.0	8,1	0,1	99%
Kohle	27.3	44.0	16.7	62%
Erdgas	12,1	30,5	18,4	40%
Öl und andere	1,2	8,1	6,9	15%
Import (Schätz.)	6,8	max. 8,5	-	-
Konventionell	55,4	90,7	35,3	61%

Remaining gas-fired power plants are not enough.

Remaining gas-fired power plants are not enough: exploratory paper of future federal government .

Page 7

Meeting climate protection targets also requires an accelerated phase-out of coal-fired power generation. Ideally, this should be achieved by 2030, which will require the massive expansion of renewables and ***the construction of modern gas-fired power plants*** *that we are striving for in order to meet the rising demand for electricity and energy over the next few years at competitive prices. …*
The gas-fired power plants *needed until security of supply is ensured by renewable energies must be built in such a way that they* ***can be converted to climate-neutral gases*** *(H2-ready).*

The parties of the future federal government are explicitly committed to the construction of new gas-fired power plants, which must be convertible to H_2.

(Original) Power plant list of the Federal Network Agency.

	Erwarteter Zubau an konventioneller Kraftwerksleistung 2021 bis 2023				
		2021	2022	2023	2021 - 2023
	Batteriespeicher	13			13
	Erdgas	563	1.798		2.361
	Pumpspeicher	16			16
	sonstige Energieträgern (nicht erneuerbar)	35	58		93
	Insgesamt	**627**	**1.856**		**2.483**
19.01.2021					

- For power plants above 10 MW, only the addition of 2.5 GW is expected.
- What is not registered today will not be connected to the gird till the next 3-5 years.
- Until new large-scale power plants are connected to the grid, there is a huge gap (app. 15-20 GW).
- This gap is widened by accelerated shut down of further coal fired power plants.

Federation of German Industries sees a need for 43 GW of additional gas-fired power plant.

Additional gas-fired power plants are needed.

Because they are

- cleaner and more efficient than coal-fired power plants.
- base-load-capable.

But they also have

- to be based on proven technology.
- to be installed all over Germany on short notice.
- to be H_2-ready.

Only CHPs (of the latest generation) meet these three criteria.

2G is ready.
Unique H_2 competence:

- 2G is the global technology leader in H2 due to many years of experience with wood gasification.
- 2G offers a full range of products and maintains a regular price list.

agenitor H_2. 115 to 360 kW. Hydrogen

Typ		Output		Electrical level		
	Configuration	Elektrical	Thermal	Elektrical	Thermal	Overall
agenitor 404c H_2	ct0-0	115 kW	129 kW	37.7 %	42.3 %	80.0 %
agenitor 406 H_2	ct0-0	170 kW	183 kW	39.0 %	41.9 %	80.9 %
agenitor 408 H_2	ct0-0	240 kW	250 kW	40.2 %	41.9 %	82.1 %
agenitor 412 H_2	ct0-0	360 kW	371 kW	40.5 %	41.7 %	82.2 %

- 2G has already sold numerous H_2 CHP units.
- 2G is the only CHP supplier in the world that guarantees that a conventional CHP can later be converted into an H_2 CHP.

2G ist bereit.
Einzigartige H_2 - Kompetenz:

(0)	Germany:	Airport Berlin (in 2012 already; (project stopped due to change in customers priorities)
(1)	Germany:	Utility of Haßfurt in Bavaria
(2)	Dubai:	Siemens solar park
(3)	Germany:	Experimental station at Rostock-Laage
(4)	Japan:	Toyota
(5)	Germany:	Residential property in Esslingen/Germany (Although funded this project is not for research purposes)
(6)	Scotland/UK:	Airport on Orkney Islands
(7)	Japan:	Tokyo to support the local grid with green electricity and heat
(8)	Germany:	Further order from Public customer (Northern Germany)
(9)	Germany:	Further order from Industrial customer (Southern Germany)
(10)	Japan:	YANMAR (Werk 1)
(11)	Japan:	YANMAR (Werk 2)
(12)	Germany:	Further order from Industrial customer
(13)	Worldwide:	Several further projects currently under negotiation

2G is ready.
Unique H_2 competence:

Conversion capability is a unique selling point and strategic key

- Comprehensive replacement of nuclear and coal-fired power plants with natural gas CHP plants that are H_2-ready.
- Granular conversion from natural gas CHP to H_2
  - first: by general admixture of H2 (affects all consumers)
  - then: Conversion of individual CHP units to 100% H_2, depending on availability.
- If necessary, H_2 CHP units can also be operated with natural gas.
- Finally: complete back-up with base-load capable H_2 CHP.

On Tuesday, November 16, the wind and solar plants delivered less than 2% of their rated output = > rest must be covered by other CO2-free sources.

Net Zero is sought internationally.

- For 70% of global CO_2 emissions, the commitment to Net Zero by 2060 or much earlier already applies.
- This means that a base-load-capable alternative must be found for 50% of the world's coal-fired electricity.
- At the same time, the global demand for electrical and thermal energy is (strongly) increasing.
- Renaissance of nuclear energy is basically not a solution in the short term (typically significant construction delays combined with cost explosion).
- Absolute nuclear power production has been declining globally for years and will certainly not rise again.
- Currently, the LNG infrastructure is being massively expanded worldwide.

Country overview.

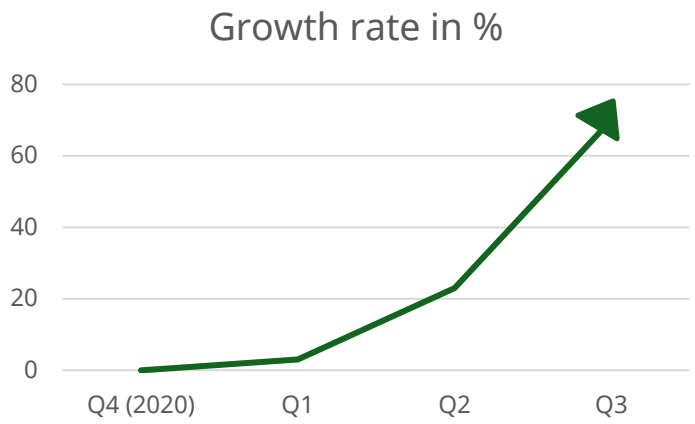
- U.S. has adopted a $1 trillion program to strengthen general infrastructure, including power infrastructure and climate protection.
- Poland to build gas pipeline from Norway via Denmark (commissioning 2022).
- France extends nuclear lifetimes => output is steadily decreasing as downtimes increase.
- The UK is not completing the two new nuclear power plants in time;
  Electricity is current and in short supply in the coming years.
- Belgium to shut down 6 GW of nuclear energy by 2025 and become a net importer.
- Switzerland identifies investment needs in order not to become a victim of the electricity gap in Germany.
- Japan has adopted an ambitious H2 strategy and started implementation.
- ...

Order intake rises continuously.

Comparison 2021 to 2020

Q4 (2020): + 0 %

- Q1: + 3 %
- Q2: + 23 %
- Q3: + 70 %
- **YTD: + 25 %**



Germany, the USA and the UK are already on a continuous growth path.
Significant increase in demand from these countries is plausible.

Development of company.

Strong sales growth in the coming years

in Mio. €	2020	2021e	2022e	2024e	2026e
Turnover	**246,7**	**250-260**	**260-290**	**330**	**400**
EBIT	**16,5**	**15,0 – 17,5**	**n. d.**	**33,0**	**34,0 – 40,0**
in % of EBIT	6,7%	6,0 - 6,75%	n. d.	10%	8,5 – 10%

Only moderate growth assumptions were made for Germany, the USA, the UK and Asia.

Development of company.

Capacity expansion in the coming years

- Previous annual production: approx. 200 MW
- Future capacities at the Heek site: approx. 500 MW
- Preconditions:
  - Increased throughput through further industrialization of processes (lead-to-lean project)
  - Further standardization both in the product portfolio and in assembly processes
  - A few additional halls in the commercial area (purchased, rented or built by yourself)
- No bottlenecks:
  - Market potential (due to energy transition and H_2 literally "immeasurable")
  - Financing (high equity ratio; strong cash flow due to advance payment culture)
  - Procurement (CHP units consist largely of "unspectacular" components of European origin)

**Should there be a disproportionate increase in demand,
the situation will take on characteristics of a seller's market.**

Investment Case.

- **Competitive advantage through R&D; technology leader; H_2**
- **Strong tailwind due to**
  - Strong reduction of coal and nuclear power in Germany (20 GW by 2022) and in the rest of Europe (50 GW by 2023)
  - Increasing availability of LNG worldwide
  - Increasing energy demand (e-mobility, heat pumps, growing world population)
- **Stable and long-term predictable cash flows**
  - Service business (growing, already 1/3 of Group sales today)
  - Advance payments by customers for project business
- **Sales of EUR 330 million achievable without significant additional investments**
- **ISS Prime rating:**

Corporate ESG Performance

Prime

RATED BY ISS ESG

PRIME STATUS

Awarded to companies with an ESG performance above the sector-specific Prime threshold, which means that they fulfil ambitious absolute performance requirements.

Kontakt.

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Finanzkalender.

November 22-24	German Equity Forum (virtual)
February 3	Pareto Securities' 24th annual Power & Renewable Energy Conference
February 24	Announcement of Preliminary Net Sales 2021
March 31	Preliminary results for FY 2021, 2022 guidance
April 22	Consolidated financial statements for FY 2021
May 19	Q1 key figures and business trends
June 3	Ordinary AGM, Ahaus
September 8	Consolidated financial statements for H1 2022
November 21	Q3 key figures and business trends

Thank you very much for your attention!

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Order intake Q3

Q3	Q3 2021		Q3 2020		Deviation	
CHP	in MEUR	in %	in MEUR	in %	in MEUR	in %
Germany	23,8	54%	18,3	70%	5,5	30%
Rest of Europe	13,4	30%	5,5	21%	7,9	144%
North-/Central America	0,9	2%	0,2	1%	0,7	350%
Asia/Australia	2,5	6%	0,3	1%	2,2	733%
Rest of the world	3,3	8%	1,7	7%	1,6	94%
TOTAL	**43,9**	**100%**	**26,0**	**100%**	**17,8**	**69%**

Order intake 2021 YTD vs. 2020 YTD

Gesamtjahr Jan.-Sept.	2021		2020		Deviation	
CHP	in MEUR	in %	in MEUR	in %	in MEUR	in %
Germany	71,5	52%	72,9	66%	-1,4	-2%
Rest of Europe	41,5	30%	23,0	21%	18,5	80%
North-/Central America	13,9	10%	2,3	2%	11,6	504%
Asia/Australia	5,1	4%	7,7	7%	-2,6	-34%
Rest of the world	6,1	4%	4,4	4%	1,7	39%
TOTAL	**138,1**	**100%**	**110,3**	**100%**	**27,8**	**25%**

Key figures.

	Q3 2021	Q3 2020	Δ	2020
Revenues	51,5 Mio. Euro	61,0 Mio. Euro	-15,6 %	246,7 Mio. Euro
Total output	67,1 Mio. Euro	64,7 Mio. Euro	3,7%	254,2 Mio. Euro
EBIT	1,4 Mio. Euro	2,7 Mio. Euro	-48,1 %	16,4 Mio. Euro
Liquidity	15,0 Mio. Euro	6,0 Mio. Euro	+250,0 %	11,0 Mio. Euro