

Roth & Rau AG  
Annual Report 2009

# 1.367 $\text{kW/m}^2$

= the volume of solar energy per  $\text{m}^2$  reaching the edge of the earth's atmosphere

**ROTH  
&RAU**

$\text{kW/m}^2$

0.3

0.6

0.9

1.2

1.5

1.8

2.1

2.4

2.7

3.0

Roth & Rau Group

# Product Portfolio

## Photovoltaics: individual equipment

### Silicon solar cell production systems

- In-line antireflective coating
- In-line diffusion and firing

### Wafer production systems

- Silicon crystallisation systems

## Plasma and ion beam technology

- Plasma and ion sources
- Plasma and ion beam assisted thin film and surface processing systems

## Turnkey production lines

- Crystalline silicon solar cell production
- CdTe thin film solar module production

## Other activities

- Software
- Spare parts and services

Annual Report 2009

**ROTH  
&RAU**

## Key Figures in accordance with IFRS

### Operating Performance

€ 000s

	2009	2008	Change
Sales	197,903	272,122	-27.3 %
International share in %	82.8	86.5	-3.7 PP
New orders	195,687	269,660	-27.4 %
Orders on hand as of 31.12.	204,769	213,037	-3.9 %
EBITDA	24,318	34,610	-29.7 %
EBIT	16,100	28,548	-43.6 %
EBT	16,707	31,801	-47.5 %
Consolidated net income <sup>1</sup>	12,929	23,024	-43.8 %
Earnings per share in €	0.94	1.82	-48.4 %
Employees as of 31.12.	874	606	44.2 %

### Key Ratios

in %

EBITDA margin	12.3	12.7	-0.4 PP
EBIT margin	8.1	10.5	-2.4 PP
Tax rate	22.4	27.2	-4.8 PP
Equity ratio	73.4	71.5	1.9 PP
Return on equity <sup>2</sup>	7.3	13.8	-6.5 PP

### Key Balance Sheet and Cash Flow Figures

€ 000s

Total assets	298,819	288,704	3.5 %
Shareholders' equity	219,278	206,456	6.2 %
Investments	23,468	51,483	-54.4 %
Operating cash flow	-1,359	-27,300	95.0 %
Cash and cash equivalents	66,041	91,515	-27.8 %

<sup>1</sup> consolidated net income: income attributable to shareholders in Roth & Rau AG

<sup>2</sup> return on equity: EBIT/shareholders' equity as of 31 December

5-Year Overview of Key figures

Sales  
in € million

2005	<div></div>	33.4
2006	<div></div>	42.9
2007	<div></div>	146.2
2008	<div></div>	272.1
2009	<div></div>	197.9

EBIT  
in € million

2005	<div></div>	4.3
2006	<div></div>	4.5
2007	<div></div>	13.9
2008	<div></div>	28.5
2009	<div></div>	16.1

Consolidated net income  
in € million

2005	<div></div>	2.5
2006	<div></div>	2.9
2007	<div></div>	11.7
2008	<div></div>	23.0
2009	<div></div>	12.9

New orders  
in € million

2005	<div></div>	37.1
2006	<div></div>	129.1
2007	<div></div>	244.6
2008	<div></div>	269.7
2009	<div></div>	195.7

Orders on hand  
as of 31 December, in € million

2005	<div></div>	16.0
2006	<div></div>	102.2
2007	<div></div>	200.6
2008	<div></div>	213.0
2009	<div></div>	204.8

Employees  
as of 31 December

2005	<div></div>	90
2006	<div></div>	137
2007	<div></div>	236
2008	<div></div>	606
2009	<div></div>	874

## Core Markets



### Europe

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Roth & Rau Dünnschicht Solar GmbH,  
Hohenstein-Ernstthal  
AIS Automation Dresden GmbH, Dresden  
Roth & Rau Muegge GmbH, Reichelsheim  
R³T GmbH, Taufkirchen  
Roth & Rau MicroSystems GmbH, Hohenstein-Ernstthal  
Roth & Rau CTF Solar GmbH, Kelkheim  
SLS Solar Line Saxony GmbH, Limbach-Oberfrohna  
Roth & Rau Ortner GmbH, Dresden

Roth & Rau Switzerland AG, Neuchâtel  
Roth & Rau Italy S.r.l., Monza



### China

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Roth & Rau Shanghai Trading Co. Ltd., Shanghai



### India

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Roth & Rau India Pvt. Ltd., Mumbai



### USA

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Roth & Rau Software Automation USA Inc., Salt Lake City, Utah  
Solar Holding Inc., City of Wilmington, Delaware  
Roth & Rau USA Inc., San José, California  
Roth & Rau Ortner c.l.s. USA Inc., Salt Lake City, Utah  
Cober Muegge LLC, Norwalk, Connecticut

### Further Roth & Rau locations

**Republic of Singapore:** Roth & Rau Singapore Pte. Ltd., Singapore  
**Republic of Korea:** Roth & Rau Korea Co. Ltd., Seoul  
**Australia:** Roth & Rau Australia Pty. Ltd., Sydney  
**Malaysia:** Roth & Rau Ortner c.l.s. Malaysia Sdn. Bhd., Kuala Lumpur

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# Targets and Results

## 2009 Targets

## 2009 Results

→ Sales of around € 200 million

→ Sales: € 197.9 million

→ EBIT margin of around 8.0 %

→ EBIT margin: 8.1 %

→ Optimise internal structures

→ By reallocating the plasma and ion beam technology segment to Roth & Rau MicroSystems GmbH and pooling the services business at Roth & Rau Ortner GmbH, we have provided the Group's activities with a clear structure. Moreover, we had specified internal processes in guidelines and enhanced the internal controlling system in order to enhance transparency and comprehensibility. Furthermore, we have issued codes of procedure laying down structures for the management of subsidiaries and investments.

→ Achieve cost savings, especially in materials management

→ We have restructured and improved procurement processes across the Group, thus enabling potential cost savings to be exploited. Alongside this, the increasing standardisation of components and modules has also helped to reduced costs of materials.



## 2009 Targets

- Acquisitions to expand product and technology portfolio in thin film solar division

## 2009 Results

- By taking over CTF Solar GmbH, Roth & Rau has secured access to expertise in the manufacture of turnkey lines for the production of thin film solar modules on a cadmium telluride basis, thus providing the company with a major unique selling point. Moreover, in February 2010 Roth & Rau signed a joint venture agreement with a Chinese solar company to prepare the market launch of the turnkey lines.

- Step up research and development activities

- R&D investments grew by 138.7 % to € 11,658k (2008: € 4,884k). The number of employees working in R&D rose more than threefold to 109 at the 2009 balance sheet date (2008: 33). Two major milestones involved the opening of the Technology Centre in Hohenstein-Ernstthal and the launch of operations with two pilot systems in Roth & Rau Switzerland's development laboratory at the Institute of Microtechnology. Here, solar cells with output efficiency levels in excess of 20 % were already manufactured in February 2010, six months ahead of schedule.

## 2010 Targets

- Sales of € 285 million
- EBIT margin of around 9.0 %
- Rapid integration of new group companies
- Acquisitions focusing on expanding the company's product and technology portfolio and boosting its market position
- Investments in research and development focusing on high-efficiency solar technologies
- Expand Roth & Rau Academy to offer even better training and motivation
- Include group companies in environmental protection and sustainability measures

# Letter to Shareholders

Dear Shareholders,

Following years of double-digit growth, the solar industry underwent its first period of consolidation in 2009. This pause on the way towards becoming a mature, established industry was due in part to the global recession, but also had sector-specific causes. The cell and module capacities built up in the past, for example, as well as the problems encountered in financing solar projects in the wake of the financial crisis, led to an enormous volume of excess capacity, thus placing massive pressure on solar system prices. This development also impacted on our business in the past year. The low propensity to invest shown by cell and module manufacturers made itself felt above all in our order figures. Having fallen short of our expectations in the first nine months of 2009, orders benefited from a marked revival in demand in the fourth quarter, leading to pleasing order figures at the end of the year. All in all, orders on hand showed a moderate decline of 3.9 % to € 205 million as of 31 December 2009. Our sales of € 198 million mean that, as expected, we failed to match the figure of € 272 million in the record 2008 financial year, but can nevertheless report the second-best year in the company's history – and that in spite of the difficult underlying framework.

When we look to the future, the sector developments outlined above harbour clear opportunities for the Roth & Rau Group. Companies intending to remain competitive in the changed conditions in the solar market in the long term must invest in high-efficiency production technologies in the coming years. Equipment suppliers have a responsible part to play in this respect, as it is their systems and technologies that help to reduce production costs, raise output efficiency levels and thus contribute to the sector's long-term growth. The Roth & Rau Group will play an active role within this dynamic climate and help to shape its development. Our declared aim is to offer market-leading technologies in future as well. We therefore took the breather in the operating business in the past financial year as an opportunity to invest intensively in research and development. With the opening of new technology centres in Hohenstein-Ernstthal and at the Institute of Microtechnology in Switzerland, we have

reached key milestones in this respect. The most important research projects we are currently addressing are the development of high-efficiency, trailblazing cell technologies enabling output efficiency rates in excess of 20 % to be achieved. We have provided detailed information about our progress in this area in the Research and Development chapter.

Alongside our research activities, the acquisitions made in the past two years have also enabled us to substantially broaden our product and technology portfolio. One focus in 2009 involved expanding the increasingly important range of services offered in the fields of customer support, factory automation and process management. Not only that, we were also able to integrate the process steps of diffusion and firing into the product range. Overall, in the current 2010 financial year we will thus be able to cover up to 80 % of the components required to manufacture crystalline silicon solar cells with proprietary products and services. The equivalent figure for 2008 was still 45 %. This development has significantly boosted our position in the market.

A further measure of considerable strategic importance was our takeover of CTF Solar GmbH, which enabled us to significantly expand our business activities in the field of thin film solar technology as well. We are currently the only company worldwide to offer turnkey production lines for the manufacture of solar modules based on cadmium telluride technology. The market launch is planned to take place in 2010 within the joint venture agreed with a Chinese solar company in February of this year. We have thus acquired a unique selling point in a dynamic market of the future.



Thomas Hengst, Chief Sales Officer  
Dr. Dietmar Roth, Chief Executive Officer  
Carsten Bovenschen, Chief Financial Officer





Dr. Dietmar Roth, Chief Executive Officer

Overall, in the past year we further strengthened the Roth & Rau Group's foundation for new growth. In this, we consciously accepted that these investments would place a burden on earnings in the short term. In view of this, we are satisfied with the EBIT margin of 8.1 % we have achieved. After all, we met our earnings target on the one hand and maintained our profitability at a solid level on the other. Our conviction that we are pursuing the right strategy has also been affirmed by the capital market. With growth of 93 %, Roth & Rau's share posted a very pleasing performance in the past year, outperforming the TecDAX technology stock index by a clear margin.

We aim to build on these successful developments in the current financial year as well. In 2010, we will continue to maintain our strategic focus on expanding our product and technology portfolio, research and development, efficiency enhancement and boosting our international market position. It will be necessary on the one hand to ensure the rapid integration of the new subsidiaries, while on the other hand actively exploiting any further acquisition opportunities arising from the current process of market consolidation. One example here is the takeover of the competitor OTB in early 2010. OTB's superb positioning in Asia and the high degree of compatibility of our product ranges will enable us to substantially boost our competitiveness. We are convinced that, as one of the leading equipment suppliers, we are thus steering the right course to accompany our customers worldwide as a strong partner in future as well.

We see growth potential for the coming years above all in the new global solar markets. We intend to consistently exploit this potential by drawing on our strong international presence. That's why we have chosen our current and future core markets as the topic for this year's Annual Report. In his guest contribution on Page 24, Professor Dr. Rolf Wüstenhagen, professor for the management of renewable energies at the University of St. Gallen and an energy visionary, outlines what a sustainable, global solar future could actually look like.

We are optimally equipped to achieve our long-term growth targets. With liquid funds of € 66 million at the balance sheet date, the Roth & Rau Group still has great financing strength. Not only that, we secured additional financial scope on the capital market in February 2010, generating gross issue proceeds of € 35.9 million in the context of a cash capital increase. We have also broadened our personnel basis in preparation for future challenges. As well as effectively boosting personnel resources in key group departments, we also expanded the Management Board from two to three members. The Supervisory Board appointed Thomas Hengst as the Group's new Chief Marketing Officer as of 1 July 2009. We are very pleased about this cooperation with Thomas Hengst, who has already worked at Roth & Rau AG for many years and has extensive knowledge of the global photovoltaics market.

2010 should be a year of growth for the Roth & Rau Group once more. The positive development in orders towards the end of 2009 has continued in the first months in the new financial year. The investments in necessary capacity expansion and technology upgrades announced by numerous manufacturers also give us grounds for optimism. In view of this, we expected to generate consolidated sales of € 285 million and an EBIT margin of around 9 % in the 2010 financial year. This forecast is based on a continuing moderate recovery in the external business framework.

We would like to conclude by thanking our employees for the work they have performed and their great motivation in the past 2009 financial year. The dynamic changes at the Group have also required them to show a high degree of flexibility and commitment. We greatly appreciate their contributions in this respect. Furthermore, we would also like to thank our shareholders for the trust they have placed in Roth & Rau AG. ■

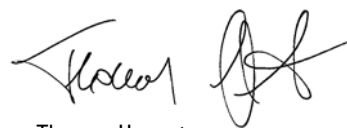
Yours faithfully,



Dr. Dietmar Roth  
Chief Executive Officer



Carsten Bovenschen  
Chief Financial Officer



Thomas Hengst  
Chief Sales Officer

# Report of the Supervisory Board

Dear Shareholders,

The Management Board and the Supervisory Board addressed the strategic alignment and further development of the Group in great detail in the past financial year. They focused in this respect on the enhancement of the product and technology portfolio and on the expansion of international locations. The Management Board at all times involved the Supervisory Board at an early stage and directly in all major decision-making processes.

In the 2009 financial year as well, the Supervisory Board performed the tasks required of it by law and the Articles of Association with great care. We monitored the management of the company and assisted the Management Board in an advisory capacity. The Management Board provided us with regular, extensive and prompt written reports on all transactions of major significance and on developments in the company's key financial figures. It also informed us in particular of strategic issues relevant to corporate planning and business policy, as well as to the Group's business performance, risk situation, risk management and compliance. Alongside the reports from the Management Board, we continually formed our own impression of the company's situation and also maintained close contact with the Management Board outside the framework of Supervisory Board meetings.

A total of ten Supervisory Board meetings were held in the year under report (4 February, 30 March, 20 April, 11 May, 26 June, 11 August, 29 September, 9 October, 6 November and 15 December). For reasons of efficiency, the Supervisory Board once again decided not to form any committees. No Supervisory Board member attended fewer than half of the meetings. Our meetings regularly focused on the operating performance of the Group and its business divisions. In view of the global financial and economic crisis, we focused especially closely in the year under report on the Group's current earnings, financial and risk position. In addition, the Supervisory Board also focused on the following key topics:



Eberhard Reiche, Chairman of the Supervisory Board

- 2008 annual financial statements and 2009 interim reports, including risk reporting
- Preparation of the Annual General Meeting
- Strategic alignment of research and development activities
- Implementation of planned acquisitions and identification of further potential strategic takeovers
- Establishment of subsidiaries and demerger of the plasma and ion beam technology segment
- Medium and long-term business planning
- Adjustment of phantom stock programme for Management Board members to comply with the Act on the Appropriateness of Management Board Compensation (VorstAG)
- Management Board personnel matters
- Internal audit activities
- Process optimisations at Roth & Rau AG
- Granting and withdrawal of powers of procurement

Matters requiring approval were presented to the Supervisory Board correctly and in good time for the adoption of resolutions. In the year under report, these chiefly related to planned acquisitions, the medium and long-term business and investment plans and the establishment of subsidiaries. Following suitable inspection, we granted our approval in all cases.

No conflicts of interest requiring immediate disclosure to the Supervisory Board and subsequent report to the Annual General Meeting arose among members of the Management or Supervisory Boards in the 2009 financial year.

## Corporate Governance

The Management and Supervisory Boards dealt closely with the further enhancement of corporate governance at the Group in the 2009 financial year. We held in-depth discussions concerning the implementation of the German Corporate Governance Code at various meetings of the Supervisory Board, taking particular account of the recommendations newly included in the version of the Code dated 18 June 2009. In this respect, the phantom stocks programme for Management Board members was also adapted to the current regulatory situation. The Management and Supervisory Boards updated their joint Declaration of Conformity pursuant to § 161 of the German Stock Corporation Act (AktG) on 30 March 2010 and made this permanently available to shareholders on the internet at [www.roth-rau.de](http://www.roth-rau.de). Moreover, we also initiated the scheduled efficiency review of our activities in line with the recommendations of the Code and involved PriceWaterhouseCoopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, (PWC). This process was completed with the report provided by PWC to the Supervisory Board meeting on 30 March 2010. We will draw on the findings of this report to continually enhance the work of the Supervisory Board. The joint report on corporate governance at Roth & Rau pursuant to Point 3.10 of the German Corporate Governance Code can be found on Page 14 onwards.

## Audit of annual and consolidated financial statements

In line with the resolution adopted by the Annual General Meeting on 18 May 2009, we commissioned PriceWaterhouseCoopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, to audit the annual financial statements and the consolidated financial statements for the 2009 financial year. The Statement of Independence pursuant to Point 7.2.1 of the German Corporate Governance Code was obtained in advance.

The Management Board prepared the annual financial statements and management report of Roth & Rau AG for 2009 in accordance with the requirements of the German Commercial Code (HGB). Pursuant to § 315a HGB, the consolidated financial statements and the group management report for 2009 were prepared in accordance with International Financial Reporting Standards (IFRS) in the form requiring application in the European Union. The auditor provided both sets of financial statements and both management reports with unqualified audit opinions in each case. The auditor further confirmed that the risk management system in place at Roth & Rau AG is suitable to meet legal requirements.

We discussed the audit reports and all documents relating to the financial statements in great detail at the meeting held to approve the financial statements on 30 March 2010, which was also attended by the auditor. The auditor reported on the key findings of the audit and was available to answer any



additional questions and provide further explanations. Our own detailed audit did not give rise to any objections. We endorsed the audit findings of the auditor in full and approved the annual and consolidated financial statements prepared by the Management Board for the 2009 financial year. The annual financial statements of Roth & Rau AG are thus adopted. The Supervisory Board endorsed the appropriation of net unappropriated profit proposed by the Management Board.

### Changes in the Management Board

The Supervisory Board acted in the year under report to ensure continuity in the Supervisory Board, prematurely extending the management board contract with Carsten Bovenschen, which was due to expire in May 2010, for five years.

Given the greater strategic and operative challenges facing the company in view of the size it has now attained and of the continuation of its growth course, we expanded the Management Board, which previously comprised two individuals, to three members. We appointed Thomas Hengst as a new member of the Management Board of Roth & Rau AG with effect from 1 July 2009. As Sales Director, he will above all press ahead with the company's further internationalisation.

We should like to thank the Management Board and all employees and express our recognition of the great commitment they have shown in the past financial year. We should also like to thank our shareholders for the trust they have placed in Roth & Rau AG even in turbulent times on the stock markets. ■

The Supervisory Board



Eberhard Reiche  
Chairman of the Supervisory Board  
Hohenstein-Ernstthal, 30 March 2010

# Corporate Governance

The management and supervision of the Roth & Rau Group has always been focused on sustainably increasing the company's value. The Management and Supervisory Boards are committed to high-quality, transparent corporate governance and base their actions in this respect on the recommendations and suggestions made by the German Corporate Governance Code. Their objective is to reinforce the trust placed in the company's management by investors, customers, employees, suppliers and the general public in the long term and to continually enhance corporate governance at the Group.

In this corporate governance report, the Management and Supervisory Boards provide joint report on corporate governance at Roth & Rau:

The Management and Supervisory Boards dealt closely with the further enhancement of corporate governance at the Roth & Rau Group in the past financial year as well. One focus here related to the German Corporate Governance Code in the version dated 18 June 2009 and the recommendations newly included therein. Roth & Rau complies with these new recommendations, which among other aspects require account to be taken of diversity considerations in the composition of the Management and Supervisory Boards. Moreover, the company will be implementing the new regulations governing financial loss liability insurance (D&O insurance) for the Management and Supervisory Boards.

On this basis, we submitted an updated Declaration of Conformity pursuant to § 161 (1) of the German Stock Corporation Act (AktG) on 30 March 2010 and published this on the internet at [www.roth-rau.de](http://www.roth-rau.de). The Declaration of Conformity can also be found on Page 19 of this corporate governance report.

## Shareholders and Annual General Meeting

Our shareholders are able to exercise their rights, including their voting rights, at the Annual General Meeting. To this end, in the run-up to the Annual General Meeting they are provided with extensive information about the past financial year and all matters relevant to the items to be voted on. All documents and information relating to the Annual General Meeting and the invitation setting out the proposed agenda items are published at an early stage in the investor relations section of [www.roth-rau.de](http://www.roth-rau.de). Following the Annual General Meeting, we also publish the voting results and the presentation of the Management Board there. Shareholders may exercise their voting rights at the Annual General Meeting either in person or by an authorised person of their choice. They also have the option of assigning their voting rights to a voting proxy appointed by the company and obliged to act in line with their instructions. This voting proxy can be contacted throughout the Annual General Meeting. We do not comply with the suggestion to broadcast the event on the internet. We believe that the costs involved exceed the resultant benefits for our company and our shareholders.

## Cooperation between the Management and Supervisory Boards

The Management and Supervisory Boards of Roth & Rau AG work closely together in every respect on a basis of trust, basing their actions on sustainably increasing the value of the company. The Management Board manages the company under its own responsibility. It formulates the Group's strategic alignment, agrees this with the Supervisory Board and ensures its implementation. The Management Board provides the Supervisory Board with regular, extensive reports on the Group's latest business performance, corporate planning, risk situation, opportunity and risk management and compliance. These reports include explanations of any potential budget variances. The Supervisory Board monitors the Management Board and accompanies it in an advisory capacity. Decisions of fundamental importance require approval by the Supervisory Board. Further information about the work of the Supervisory Board and the cooperation between the Management and Supervisory Boards can be found in the Report of the Supervisory Board from Page 10 onwards.

In terms of the composition of the Management Board, the Supervisory Board takes due account of diversity considerations. The Management Board was expanded from two to three members in the 2009 financial year. Thomas Hengst took over the newly created position of Sales Director as of 1 July 2009. His areas of responsibility include sales at the overall Group, the international outlets and the fields of marketing, global customer service, product management and development. Apart from Thomas Hengst, the Management Board otherwise still consists of Dr. Dietmar Roth (CEO) and Carsten Bovenschen (CFO). Dr. Dietmar Roth is responsible for corporate development (incl. M&A), research and development, production, and legal & compliance, while Carsten Bovenschen bears responsibility for the finance and controlling, supply chain, quality management, personnel, IT and investor relations. The Supervisory Board still consists of the same three independent members, namely Eberhard Reiche (Chairman), a qualified lawyer and head of the internal audit department at envia Mitteldeutsche Energie AG, Prof. Dr. Alexander Michaelis (Deputy Chairman), Director of the Fraunhofer Institute for Ceramic Technologies and Systems, and Daniel Schoch, CFO at Corestate Capital AG. It is thus ensured that the Management Board is independently advised and monitored.



The positions held by members of the Management and Supervisory Boards in other statutory supervisory boards and comparable supervisory bodies at companies have been listed under Note 7.4. to the consolidated financial statements.

In their decisions, the members of the Management and Supervisory Boards are obliged solely to safeguard the interests of the Roth & Rau Group. No member of either the Management Board or the Supervisory Board was confronted with any conflict of interest requiring immediate disclosure to the Supervisory Board and subsequent report to the Annual General Meeting in the 2009 financial year.

Roth & Rau AG has concluded a financial loss liability insurance policy (D&O insurance) for members of the Management and Supervisory Boards. The deductibles agreed in the insurance policies for Management Board members will be adjusted within the respective deadline to meet the requirements of the Act on the Appropriateness of Management Board Compensation (VorstAG). A corresponding deductible is to be agreed for Supervisory Board members.

## Compensation report

The basis for determining the compensation of the Management and Supervisory Boards, as well as the level and structure of such compensation, are presented in detail in the compensation report in the Group Management Report on Page 59 onwards. In the interests of transparent communication, Roth & Rau discloses the compensation of members of the Management and Supervisory Boards on an individual basis and broken down into its respective components. The compensation report also forms part of the Corporate Governance Report.

## Opportunity and risk management

The responsible handling of opportunities and risks represents a key aspect of good corporate governance. The Management Board of Roth & Rau AG ensures that opportunity and risk management structures suitable for the early detection and monitoring of potential opportunities and risks are in place. Given the financial and economic crisis, one particular focus in the past financial year involved the management of financial risks. The Management Board provides the Supervisory Board at regular intervals with detailed reports on the Group's current risk situation. The opportunity and risk management structures are subject to ongoing enhancement and are adapted to changes in the underlying framework. Further information can be found in the opportunity and risk report from Page 89 onwards.

## Compliance

Roth & Rau AG has a comprehensive compliance system which is being consistently enhanced and adapted to changing requirements by the Management Board and the company's compliance officer. The objective of the compliance system is to safeguard employees against any infringement of legislation and company guidelines and to support them in correctly applying such legislation and guidelines. The compliance guidelines, which set out minimum standards of conduct for all of the Group's employees, represent a key instrument in this respect. Fighting corruption is one focus of group-wide compliance activities. Alongside this, other compliance measures serve to prevent insider offences, to uphold occupational health and safety standards, to protect the company's security, and to ensure compliance with antitrust law and IT security.

Compliance processes are regularly audited by the internal auditors, who commenced their activities as of 1 January 2009. A.V.A.T.I.S. – Revisionsgesellschaft mbH Wirtschaftsprüfungsgesellschaft, an internal audit company based in Chemnitz, was commissioned to perform the internal audit.

## D&O share transactions and share ownership

§ 15a of the German Securities Trading Act (WpHG) requires the company's management staff and individuals closely related to such to disclose transactions involving shares in Roth & Rau AG when such transactions reach or exceed a total amount of € 5,000 per calendar year. We publish these disclosures (Directors' Dealings) on our internet site. We did not receive any notifications of such transactions in the year under report.

The CEO, Dr. Dietmar Roth, owned 5.76% of the shares in Roth & Rau AG at the balance sheet date on 31 December 2009. Other than this, no member of the Management or Supervisory Boards owned any shares in the company.

## Transparency

We see transparent communications above all as involving the equal treatment of all target groups. We publish all relevant information promptly in German and English on our website. All ad-hoc announcements, press releases, financial reports and company presentations are thus available at [www.roth-rau.de](http://www.roth-rau.de). Furthermore, the financial calendar provides information on regularly recurring publication dates, the date of the next Annual General Meeting and on capital market conferences at which the Management Board is due to present the company. Upon publication of our quarterly and annual financial statements we regularly offer teleconferences for analysts and investors at which the Management Board is available to answer questions. We then make recordings of the teleconferences and the relevant presentations freely available on our internet site.



## Accounting and auditing

Roth & Rau prepares its consolidated financial statements and interim reports in accordance with International Financial Reporting Standards (IFRS). The separate financial statements of Roth & Rau AG are prepared in line with the requirements of the German Commercial Code (HGB). Interim reports are discussed by the Supervisory Board with the Management Board prior to publication. Consistent with the resolution adopted by the Annual General Meeting, we commissioned PriceWaterhouse-Coopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, to audit the financial statements for 2009. The declaration outlining the extent of any other financial or economic links to Roth & Rau AG, which was obtained in advance, did not provide any grounds for objection. It was agreed once again in the period under report that the auditor should inform the Supervisory Board Chairman without delay of any grounds for disqualification or impartiality arising in the course of the audit in cases where these could not be remedied immediately. Moreover, the auditor provides report on all findings and occurrences of relevance to the duties of the Supervisory Board. Furthermore, the auditor also informs the Supervisory Board in the event of the discovery of any facts revealing inaccuracies in the Declaration of Conformity submitted by the Management and Supervisory Boards pursuant to § 161 of the German Stock Corporation Act (AktG).

The Financial Report Enforcement Panel (DPR) has audited the Roth & Rau Group's financial reporting procedures in recent months and certified that these are free from any defects.

## Declaration of Conformity in accordance with Sec. 161 of the German Stock Corporation Act

The Management and Supervisory Boards of Roth & Rau AG identify with the objectives of the German Corporate Governance Code and are committed to transparent, sustainable corporate management and supervision. They hereby declare that between submitting the previous Declaration of Conformity and 4 August 2009 Roth & Rau AG complied with the recommendations made by the German Corporate Governance Code government commission in the version of the Code dated 6 June 2008. Since 5 August 2009, the company has complied with the version of the Code dated 18 June 2009 and will continue to do so in future. The following exceptions apply:

- a) Point 3.8 of the Corporate Governance Code provides for the agreement of a deductible when the company concludes any D&O insurance policy for its Management and Supervisory Boards. Roth & Rau AG did not comply with this recommendation in the past. The D&O insurance policies concluded for members of the Management Board of Roth & Rau AG will be adjusted within the respective deadline to meet the requirements of the Act on the Appropriateness of Management Board Compensation (VorstaG). For Supervisory Board members, a deductible equivalent to their respective basic compensation will be agreed. The Management and Supervisory Boards view the agreement of any more significant deductible as being neither necessary nor expedient.
- b) In Point 5.1.2, the Corporate Governance Code recommends setting an age limit for members of the Management Board. Roth & Rau AG believes that the setting of an age limit for members of the Management Board would limit the Supervisory Board in its choice of suitable members for the Management Board.
- c) Point 5.3 recommends that the Supervisory Board should form committees. The Supervisory Board of Roth & Rau AG consists of three members. In view of this circumstance, the company does not believe that forming committees would enhance the efficiency of the Supervisory Board's activities.
- d) According to the recommendations in Point 5.4.6 of the Corporate Governance Code, members of the Supervisory Board should receive performance-related compensation alongside their fixed compensation. The Articles of Association of Roth & Rau AG only provide for fixed compensation of Supervisory Board members. This is intended to do justice to the independence required by the Supervisory Board to perform its supervisory function. The performance of this function should not be linked to any financial incentives. ■

Hohenstein-Ernstthal, 30 March 2010



For the Management Board  
Dr. Dietmar Roth



For the Supervisory Board  
Eberhard Reiche

# Roth & Rau's Share

## Share price performance

At the beginning of 2009 international stock markets were still reeling from the effects of the financial crisis triggered by the collapse of Lehman Brothers in September 2008. In the first quarter, stock prices were burdened above all by negative headlines from the financial sector and the intensification in the global economic crisis. The German DAX and TecDAX stock indices fell dramatically in value, reaching their lowest points in early March. A period of substantial recovery already set in at the beginning of the second quarter and continued through to the end of the year. From mid-July, the DAX maintained its ground above the 5,000 point mark on an ongoing basis and reached its annual high at 6,012 points on 29 December. The leading German index closed the year at 5,957 points on 30 December 2009, up 19.5 % on the beginning of the year. The TecDAX, in which Roth & Rau's share is also listed, performed even better. This technology index recovered to more than 700 points by mid-August and rose further to reach its annual high at 822 points on 16 December. Overall, the TecDAX closed 2009 at 818 points, equivalent to growth of 55.6 %.

Roth & Rau's share tracked the general market trend at the beginning of the financial year, reaching its annual low at € 11.01 at the beginning of March. In the course of the emerging recovery, the share made up for its losses since the beginning of the year and gained consistently in value in the following months. The share posted growth of 48.5 % at the end of the first half, thus already outperforming the TecDAX. The third quarter brought volatile developments in the share price, which continued until early November. In the final weeks of the year, Roth & Rau's share showed further substantial upward momentum, reaching its annual high at € 32.10 on 21 December. The share closed the year at € 30.22 on the final trading day in 2009, equivalent to growth of 93.3 % on the beginning of the year and thus clearly outstripping the pleasing performance of the DAX and TecDAX.



### Performance of Roth & Rau's share in 2009

indexed



### Investor relations

The regular, personal exchange of information with our investors enjoys high priority information within our investor relations activities. On account of the financial crisis, there was a noticeable increase in the need for talks signalled by capital market participants in the past year. The Management Board and IR managers took part in a total of 16 road shows and 20 capital market conferences in Europe and the USA and were available to answer questions on the company's business performance and strategy and general developments in the sector. This close personal dialogue helped reinforce existing contacts and attract new investors. Specifically, the company's regular discussion partners in the past year included Deka, DWS, Swisscanto, UBS, Sarasin and Fidelity.

At the second Roth & Rau Investors Day held for analysts and investors at the company's headquarters in Hohenstein-Ernstthal in April 2009 we took the opportunity once again of offering in-depth insights into our operating business to around 40 participants, thus enhancing their understanding of our products and services.

The teleconferences held upon publication of our quarterly reports provide a further regular forum for sharing information. To further enhance transparency for our private shareholders, since 2009 we have also made excerpts from the teleconferences freely available on our internet site afterwards.

We cultivate our contacts with private investors in particular at the Annual General Meeting, our key event each year, as well as via the investor relations section of our internet site. Here, extensive



information about our company and its share is always made available promptly in the form of press releases, ad-hoc announcements, presentations and our quarterly and annual reports. The financial calendar also provides information about major dates during the financial year, such as the Annual General Meeting and quarterly and annual report publication dates.

#### Analysts' recommendations

Roth & Rau's share was monitored and evaluated by various analysts in the past year as well. The latest recommendations are:

Institute	Recommendation	Price Target	Date
Equinet	Buy	33.00 €	16.03.2010
Close Brothers Seydler	Sell	22.00 €	15.03.2010
Commerzbank	Buy	40.00 €	11.03.2010
Bankhaus Lampe	Hold	27.50 €	11.03.2010
LBBW	Buy	31.00 €	05.03.2010
Merrill Lynch	Underperform	20.00 €	05.03.2010
Nomura	Buy	n.a.	05.03.2010
Goldman Sachs	Buy	43.00 €	03.03.2010
BHF-Bank	Reduce	24.00 €	18.02.2010
Crédit Agricole Cheuvreux	Outperform	36.00 €	09.02.2010
DZ Bank	Sell	17.00 €	05.02.2010
West-LB	Sell	26.00 €	05.02.2010
Credit Suisse	Outperform	33.00 €	01.02.2010
HSBC	Neutral	22.00 €	15.01.2010
Deutsche Bank	Hold	32.00 €	14.01.2010

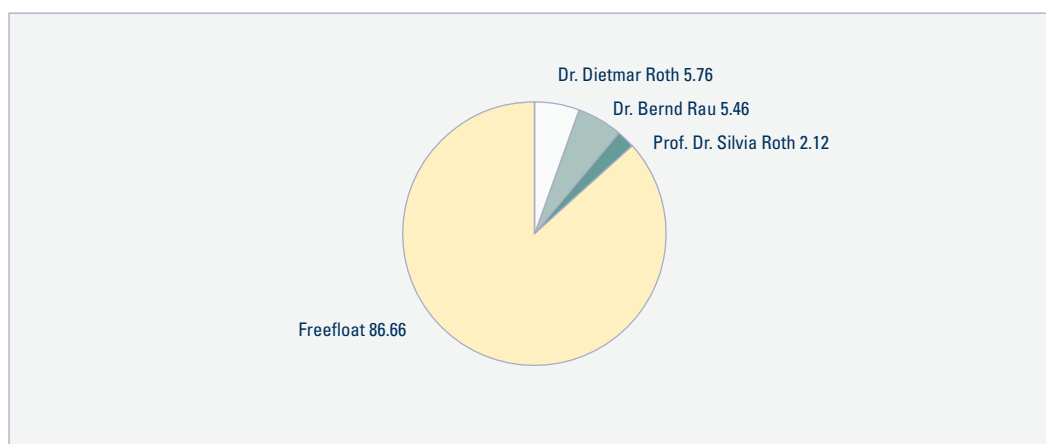
## Shareholders and Annual General Meeting

The shareholder structure of Roth & Rau AG remained unchanged in the 2009 financial year. Of 13,800,000 shares in total, 86.66 % were in free float. The remaining 13.34 % of the shares as of 31 December 2009 were held by the company founders.

The Annual General Meeting was held in Hohenstein-Ernstthal on 18 May 2009. The total of around 145 shareholders attending took the opportunity to inform themselves as to the latest developments at their company. As well as commenting on the results for the 2008 financial year, the Management Board also reported on the Group's strategic alignment for the coming years and met with great approval in this respect. In the subsequent voting, all of the administration's proposals were accepted with clear majorities. Shareholders' thus approved the creation of authorised and conditional capital offering the company additional financial scope. The shareholders attending represented 39.6 % of the company's share capital. Following the Annual General Meeting, we published the agenda, the presentation by the Management Board and the voting results on our internet site, where they are now permanently available. The next Annual General Meeting will take place on 21 May 2010. ■

## Shareholder structure

as of 31 December 2009



## Key data for Roth & Rau's share

ISIN	DE000A0JCZ51
WKN	A0JCZ5
Market segment	Regulated Market (Prime Standard)
Market ticker	R8R
Reuters Instrument Code	R8RG.DE
Stock exchanges	Xetra, Frankfurt, Berlin, Düsseldorf, Hamburg, Munich, Stuttgart
Indices	TecDAX, DAX Plus Family, CDAX, ÖkoDAX
Designated sponsors	Commerzbank AG

## Key figures for Roth & Rau's share

	2009	2008
Share capital as of 31.12. in €	13,800,000.00	13,800,000.00
No. of shares as of 31.12.	13,800,000	13,800,000
Annual high in €	32.10	60.63
Annual low in €	11.01	11.50
Year-end closing price in €	30.22	14.90
Average daily trading volume (no. of shares)	123,657	124,139
Average daily trading volume in € million	2.5	6.0
Market capitalisation as of 31.12. in € million	417.0	205.6
Earnings per share in €	0.94	1.82

All share prices refer to Xetra closing prices.

# Renewable energies

## The Way from 20:80 to 80:20

by Prof. Rolf Wüstenhagen

When it comes to energy and the climate, we are currently living in a 20:80 world. 20 % of the world's population is responsible for 80 % of global greenhouse gas emissions. This fact was pointed out not least by representatives of developing economies at the Copenhagen Climate Summit, who called for industrialised nations to take decisive action to cut their greenhouse gas emissions. The European Union has promised to cut emissions by 20 % by 2020. Compared with the scientific findings of the Intergovernmental Panel on Climate Change (IPCC), however, it is clear that this only marks a first step – to avert dangerous climate changes it will be necessary to reduce emissions by at least 80 % by 2050. One of the EU's further objectives is to raise the share of energy generated using renewable energies to 20 % by 2020. Pleasing as it is, however, this objective also has a downside. It reminds us that more than 80 % of the energy consumed in Europe, as well as in other countries such as China and in the world as a whole, is still generated from non-renewable energy sources.

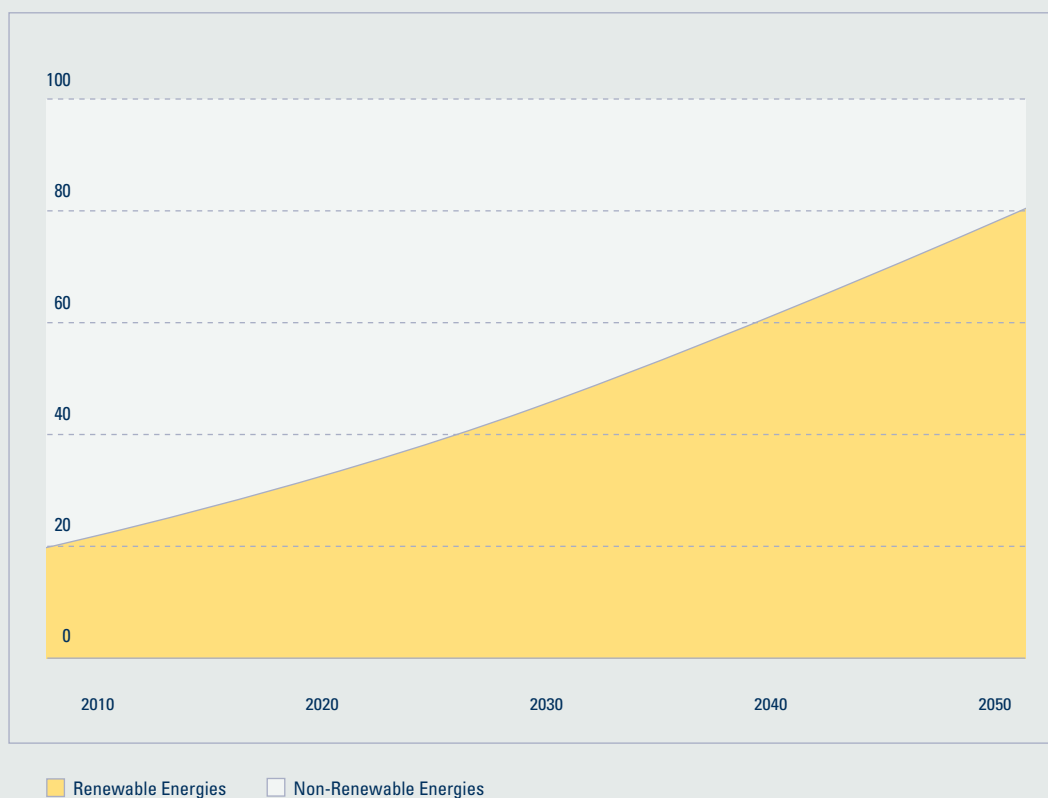
At the University of St. Gallen, we prefer to think along 80:20 lines. One rule of thumb among managers is that 80 % of the value is often generated with 20 % of the effort. By focusing on the 80 %, you will reach your objective faster.

Energy and the climate are also moving towards 80:20. President Obama has set the USA the target of reducing emissions by 80 % by 2050, while Governor Schwarzenegger in California has even entered that target in the statute books. One motivation behind such measures must surely be to avoid uncontrollable climate change, the costs of which have been quantified by the British economist Sir Nicholas Stern as amounting to up to 20 % of global GDP.

Having said that, it is not only politicians who are heading for 80:20. Ever larger sections of the population are beginning to realise that the future energy supply must come from renewable sources. In the past 12 months, for example, the citizens of Zurich have twice voted yes to substantial investments by

### From 20:80 to 80:20

in %





Prof. Dr. Rolf Wüstenhagen, Good Energies Professor for Renewable Energies Management, University of St. Gallen, Switzerland.



Arthur Buechel (Roth & Rau Switzerland) and Dr. Bernd Rau (Roth & Rau AG) at the 1st St. Gallen Renewable Energies Management Forum.

their municipal utility company in wind and geothermal energy – in both cases with 80 % majorities. Opinion polls have shown again and again that renewable energies are far more popular with consumers than other energy sources. In Germany, for example, 80 % of those polled recently stated that renewable energies were their preferred energy source – and that with only minor variations between supporters of different political parties.

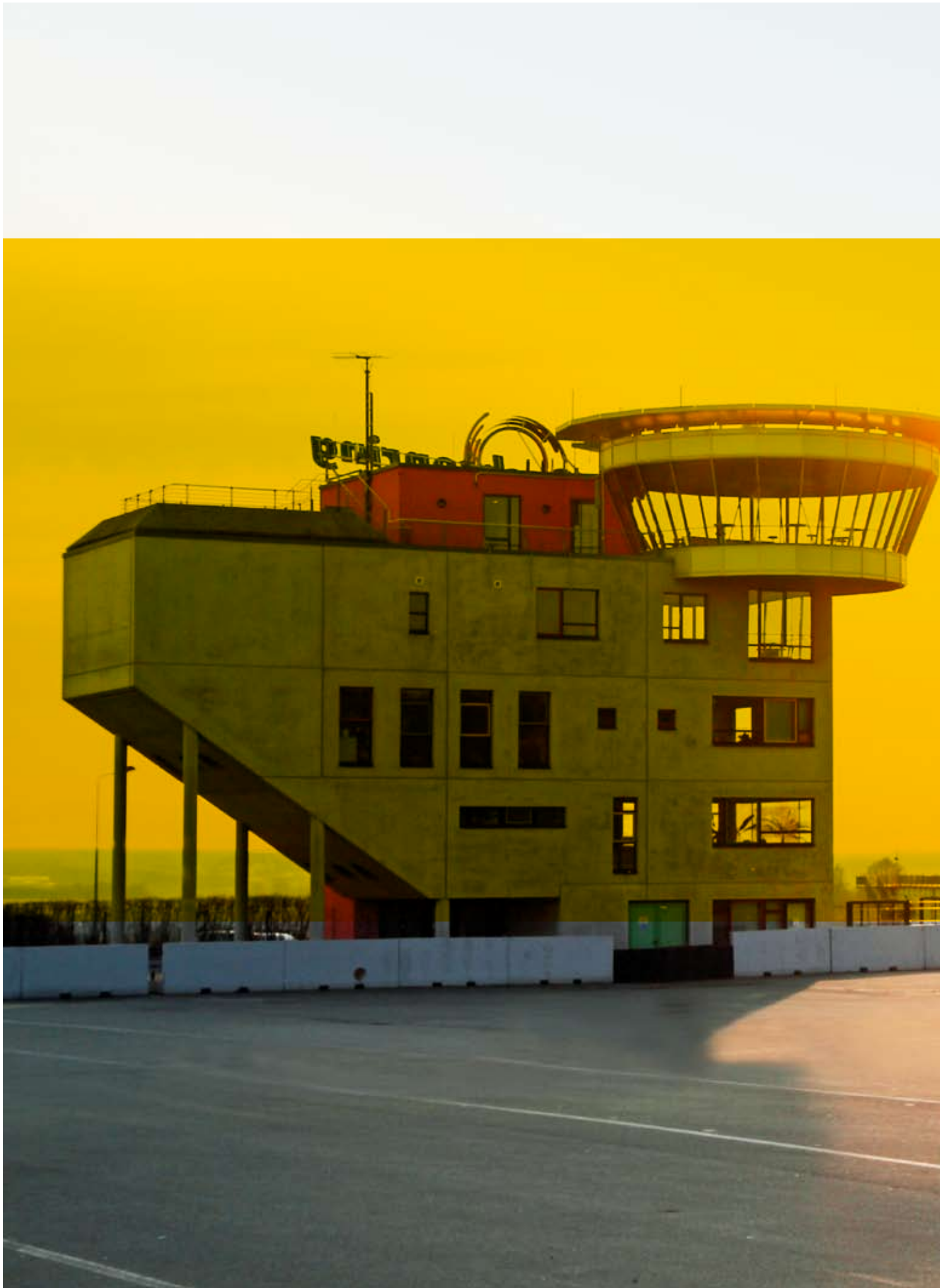
In view of these factors, the Good Energies Chair of Renewable Energies Management established at the University of St. Gallen in early 2009 is dedicated to pursuing the vision that renewable energies are moving from 20:80 to 80:20 and that this target can be reached by the middle of the century. Awareness is growing around the world that this development offers great economic opportunities both in home markets and for exports. At the same time, it allows us to contain the major risks presented by climate change and dependence on finite energy sources. Transforming our energy supply on this huge scale requires substantial investment and, not least, a great deal of training and development. That is another area we are working on here in St. Gallen.

It is pleasing to note that this vision is also shared by the German Federal Government elected in autumn 2009. When presenting the coalition agreement in Berlin, Federal Chancellor Angela Merkel stated that the new CDU/FDP government had as its objective "a consistent energy policy taking us into a completely new era of renewable energies". Accordingly, "renewable energies should take over the major share of the energy supply", gradually replacing conventional energy sources. Norbert Röttgen, Germany's Federal Minister of the Environment, has since repeatedly referred to 2050 as the year by which this objective should be achieved.

The path from 20:80 to 80:20 offers great opportunities not just for us Europeans, but also for the countries in the South. Or, as Harish Hande, cofounder and Managing Director of SELCO India, recently put it in his presentation at our Renewable Energies Management Forum in St. Gallen, “solar energy is expensive for the rich and affordable for the poor.” His company provides a superb example of how renewable energies often offer the best and most economic way of solving energy problems, particularly in poor rural regions of developing countries – provided that entrepreneurs consistently target their products on genuine customer needs and can find suitable financing models.

I can only agree with Harish Hande when he sees this common interest shared by North and South alike in developing a supply of renewable energies as offering a promising way out of the climate policy impasse. With this in mind, let us enter into a productive race to reach 80:20 – our children will thank us for it. ■

→ **The 1st St. Gallen Renewable Energies Management Forum was held on 12 March 2010. Further information can be found at <http://goodenergies.iwoe.unisg.ch>**



Sachsenring-circuit, Hohenstein-Ernstthal, Germany





Global radiation\*

Europe

# 1,950 kWh/m<sup>2</sup>

kWh/m<sup>2</sup>

300

600

900

1,200

1,500

1,800

2,100

2,400

2,700

3,000

Global radiation is the term used to describe the total solar radiation reaching a particular location over a specified period (e.g. a year). It consists of solar radiation reaching the earth's surface directly (direct radiation) and radiation reflected from clouds and water and dust particles (diffuse radiation).

\* Annual maximum global radiation in Southern Europe (average figure 1981 – 2000); source: Meteotest, Meteororm database



## Core Market Europe

Europe is one of the pioneers in the promotion and use of renewable energies. In both political and technological terms, European countries have acted as the motor behind global climate protection.

An EU Directive which came into effect in April 2009 requires member states to cover a compulsory share of their total end energy consumption with renewable energies by 2020. For Germany, for example, this figure amounts to 18 %. The aim is to increase the share of total energy consumption attributable to renewable energies in the EU as a whole to 20 % by 2020.

Germany has played a particularly decisive role in shaping the development of the European photovoltaics industry. This process was kicked off by the introduction of the Renewable Energies Act (EEG) in 2000 and the resultant feed-in tariffs paid for solar electricity. By the end of November 2009, 539,200 photovoltaics systems generating a total of 6,776,000 megawatt hours of electricity a year

Germany can boast the highest number of solar energy systems installed worldwide in recent years.



were already in place on roofs in Germany. That is enough to supply 1,936,000 households a year with electricity. Extensive research and development activities at German solar companies and solar research institutes have also created core technology development competencies that have become a factor of sustainable macroeconomic relevance. In its research and development, Roth & Rau has also cooperated closely with German producers and research institutes for many years now in order to implement new technologies within high-performance production systems.

The success of Germany's EEG legislation has subsequently been copied in many of its European neighbours, leading to the development of flourishing markets there as well. Italy, whose sunny south offers optimal conditions for photovoltaics, is the most promising market at present. Interesting promotion models are also to be found in some east European countries, but their implementation is currently faltering in some cases due to a lack of financing possibilities. It will be worth keeping a close eye on developments here in the coming years.

In recent years, the development of the European photovoltaics sector into an established mature industry, has also led the equipment market to change from a sellers' to a buyers' market. Cell and module manufacturers have gained extensive experience which is now reflected in increasingly strict quality requirements for products and growing price awareness. Roth & Rau is meeting these requirements with innovative technologies offering higher efficiency levels while also helping to reduce customers' operating costs. ■

The first SiNUS system used to manufacture silicon blocks was sold in Europe 2009.





By opening its new Technology Centre in Hohenstein-Ernstthal, Roth & Rau is pressing consistently ahead with its research and development activities.



The CAMiNI firing tool is one of the new thermal process systems developed with the subsidiary Roth & Rau Italy (previously Tecnofimes).





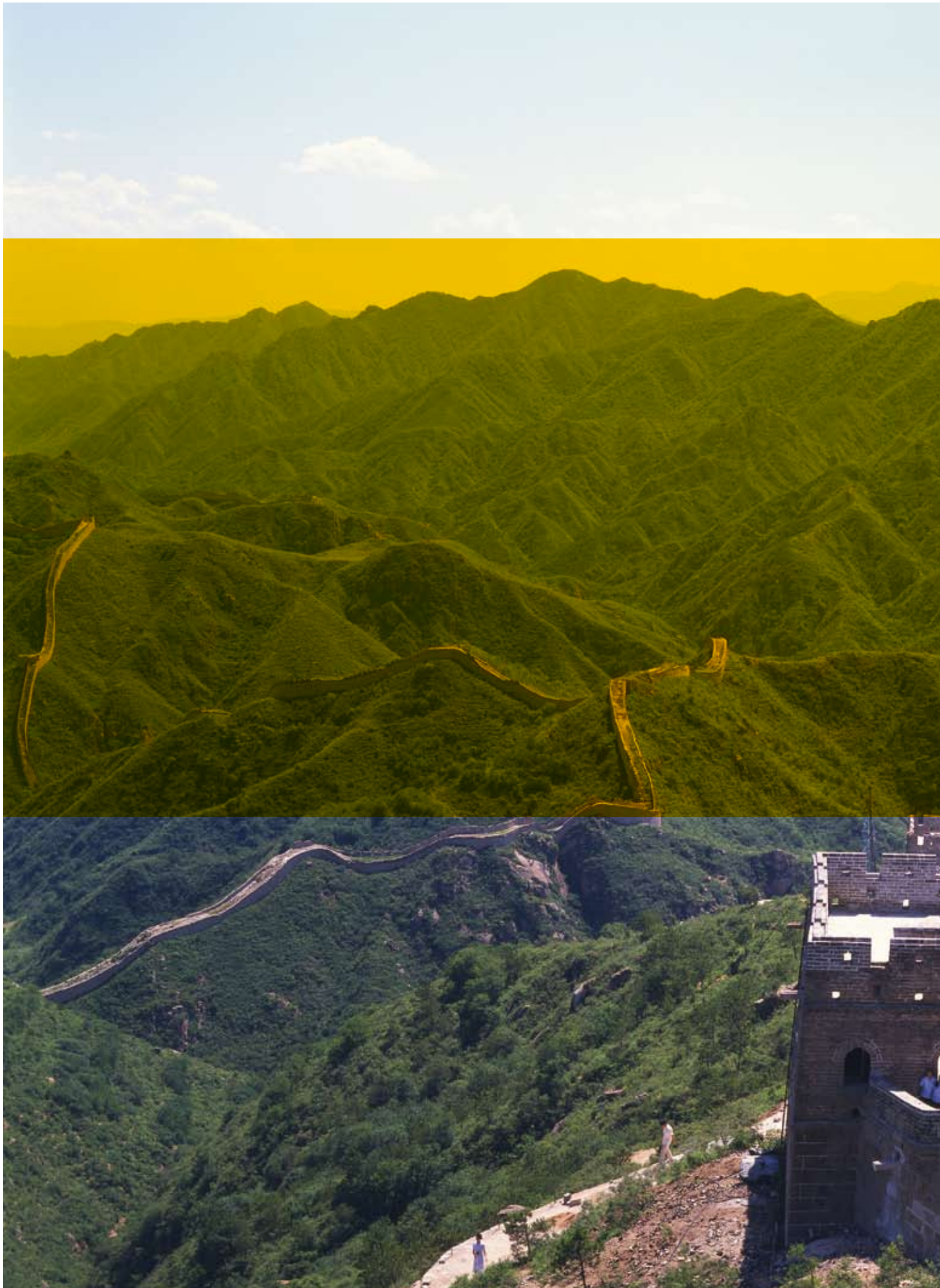
### Locations Europe

Roth & Rau Dünnsschicht Solar GmbH, Hohenstein-Ernstthal  
 AIS Automation Dresden GmbH, Dresden  
 Roth & Rau Muegge GmbH, Reichelsheim  
 R³T GmbH, Taufkirchen  
 Roth & Rau MicroSystems GmbH, Hohenstein-Ernstthal  
 Roth & Rau CTF Solar GmbH, Kelkheim  
 SLS Solar Line Saxony GmbH, Limbach-Oberfrohna  
 Roth & Rau Ortner GmbH, Dresden

Roth & Rau Switzerland AG, Neuchâtel  
 Roth & Rau Italy S.r.l., Monza

- According to the European Photovoltaic Industry Association (EPIA), Europe accounted for 81 % of the global photovoltaics market in 2008 (status: April 2009). Germany's share of the European photovoltaics market amounted to 33 % in 2008.
- Europe also plays a leading role worldwide in the field of photovoltaic research. Among the most renowned European solar research institutes are the Energy Research Centre of the Netherlands in the Netherlands, the Institute of Microtechnology in Switzerland and the Fraunhofer Institute for Solar Energy Systems and the Institute for Solar Energy Research in Germany.
- European technology and development competence is in great demand worldwide. Seven of the world's ten largest equipment providers are based in Europe.





Chinese Wall, Badaling, China





Global radiation\*  
China

# 1,650 kWh/m<sup>2</sup>

kWh/m<sup>2</sup>

300

600

900

1,200

1,500

1,800

2,100

2,400

2,700

3,000

\* Annual maximum global radiation in China (average figure 1981 – 2000); source: Meteotest, Meteonorm database



## Core Market China

China is the world's largest producer of greenhouse gases. Having said this, China is also the world's largest user of renewable energies. Chinese people's environmental awareness has grown enormously in the past three years.

Large smog-clad cities and noticeable changes in the climate due to rapid economic growth in recent years have triggered a rethink among politicians and the population alike. Waste separation has found its way onto school curricula and solar applications are part of the landscape in major cities such as Shanghai and Hong Kong.

The government has acknowledged ecological destruction as a negative factor in its macroeconomic accounting and aims to reduce CO<sub>2</sub> emissions by 40 % to 45 % in relation to economic output by 2020. Not only that, 15 % of energy is to be generated from renewable energy sources by then. To this end, the Chinese government announced a 10-year subsidy programme at the beginning of 2010.

Despite rising environmental awareness, strong economic growth remains the key factor driving the development of the Chinese solar market. A growing consumer-oriented middle class, increasing industrialisation, a large infrastructure backlog and the need to promote development in rural areas due to the growing prosperity gap between city and country – all these factors are leading China's energy requirements to rise massively.

What's more, given its large supply of well-qualified workers and university graduates and its relatively favourable manufacturing costs, China is and will remain an attractive manufacturing location. In future, those cell and module companies currently manufacturing their products in Europe may well relocate their mass production activities to China and other Asian countries. ■

The Chinese government is investing huge sums in transport projects to prevent infrastructure bottlenecks from impeding China's further economic growth.





The largest share of SiNA systems sold has been installed in Chinese production lines.



By expanding its sales and service network, Roth & Rau has further boosted the support it provides to its customers.



Roth & Rau has been offering its new generation of SiNA systems since 2009.



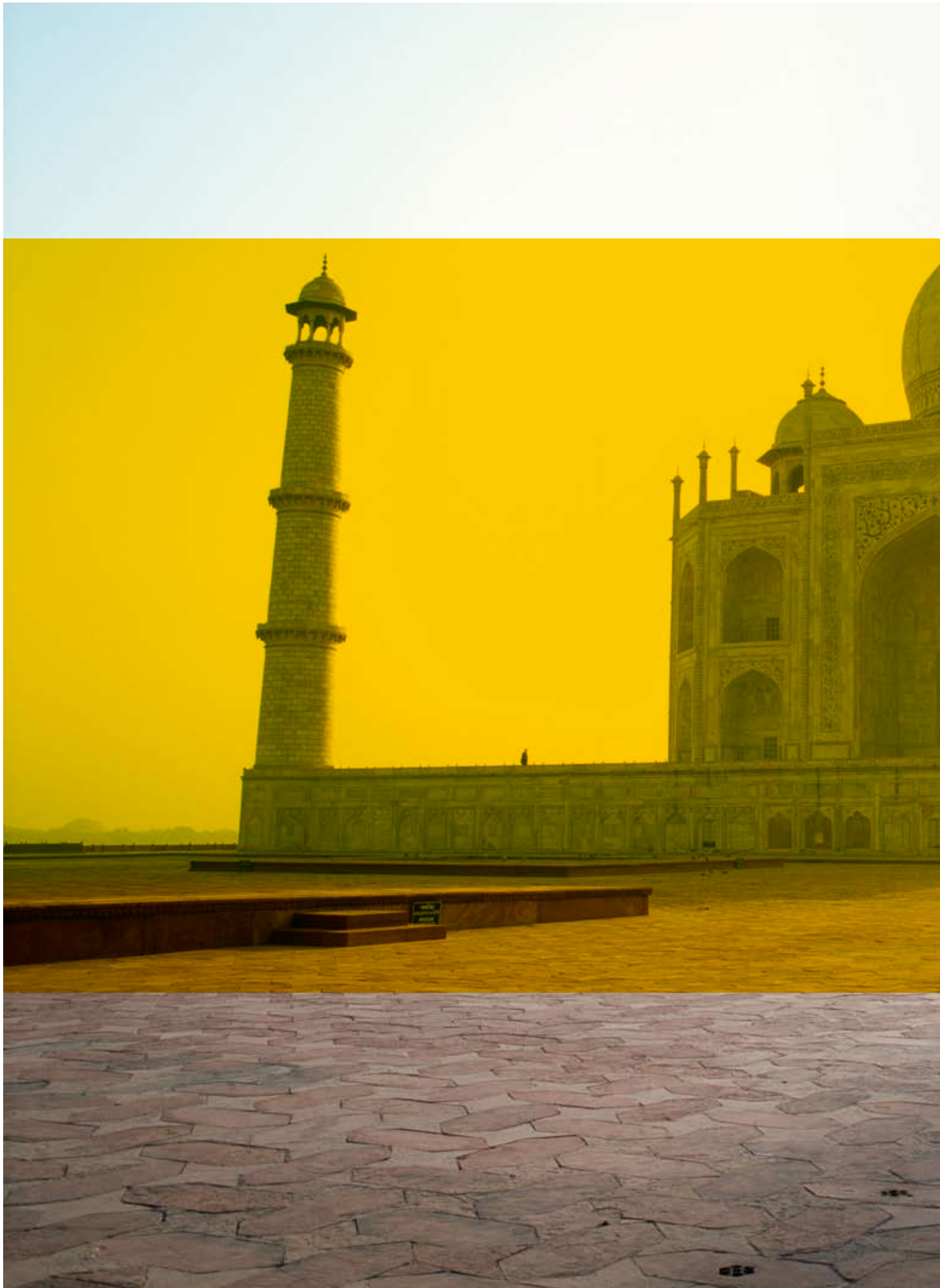


### Location China

Roth & Rau Shanghai Trading Co. Ltd., Shanghai

- China is already one of our top sales markets. In 2009, China accounted for 17 % of the Roth & Rau Group's sales.
- Roth & Rau maintains a presence in China as well and has benefited from the growth in the PV industry. A total of 20 employees currently work at Roth & Rau's outlet in Shanghai.
- The structural changes implemented at the Chinese sales and service company in the fourth quarter of 2009 will impact positively on the order situation in 2010.
- The planned takeover of OTB Solar B.V. in April 2010 will help to further improve Roth & Rau's market share in China.
- Working together with a Chinese solar company in a joint venture, Roth & Rau is planning to enter the Chinese cadmium telluride market. A model factory is due to be built in Brandenburg and further factories are planned for China in the coming years.





Taj Mahal, Agra, India



Global radiation\*  
India

2,150 kWh/m<sup>2</sup>

kWh/m<sup>2</sup>

300

600

900

1,200

1,500

1,800

2,100

2,400

2,700

3,000

\* Annual maximum global radiation in India (average figure 1981 – 2000); source: Meteotest, Meteonorm database







## Core Market India

By 2020, India will have become one of the world's top three economies and will even have overtaken China in its role as the fastest-growing economy. India owes this development not only to its democratic system of government and stable legal system, but also to its population's advantageous age structure. One quarter of the world's under 25 year-olds live in India. By around 2030, India will thus also have overtaken China in terms of the size of its young working population.

Around 60 % of India's gross domestic product is generated by its upwardly mobile, well-educated, economically prosperous urban middle class, estimated to comprise 220 to 300 million people. This group creates demand for goods of all kinds and gives grounds to expect ongoing above-average economic growth in future as well.

Having said this, India is also a country of extreme contrasts. Home on the one hand to the highest number of millionaires and billionaires worldwide, India is on the other hand nevertheless still a developing economy due to enormous deficits in its social infrastructure. Almost 70 % of all Indians live in the countryside, and most of them have no access to electricity. Solar energy is particularly well-suited to alleviate energy-related poverty in these areas.

The Indian government is relying on solar energy to satisfy the country's enormous energy requirements in the coming decades. It plans to gradually increase India's output of solar electricity to 20 Gigawatts by 2022. Climate policy targets also play a role here, as emissions have to be cut by 20 % compared with the rate of economic growth by 2020. In March 2009 India underlined its intentions and became the first major emerging economy to join the International Renewable Energy Agency (IRENA). ■

Mahatma Gandhi Road in Bangalore. Already overburdened, India's roads have to cope with around 1,000 extra new vehicles every day.



Roth & Rau sold a further turnkey production line to India in December 2009.



This SiNA is one of the first Roth & Rau systems to be supplied to the emerging Indian market.



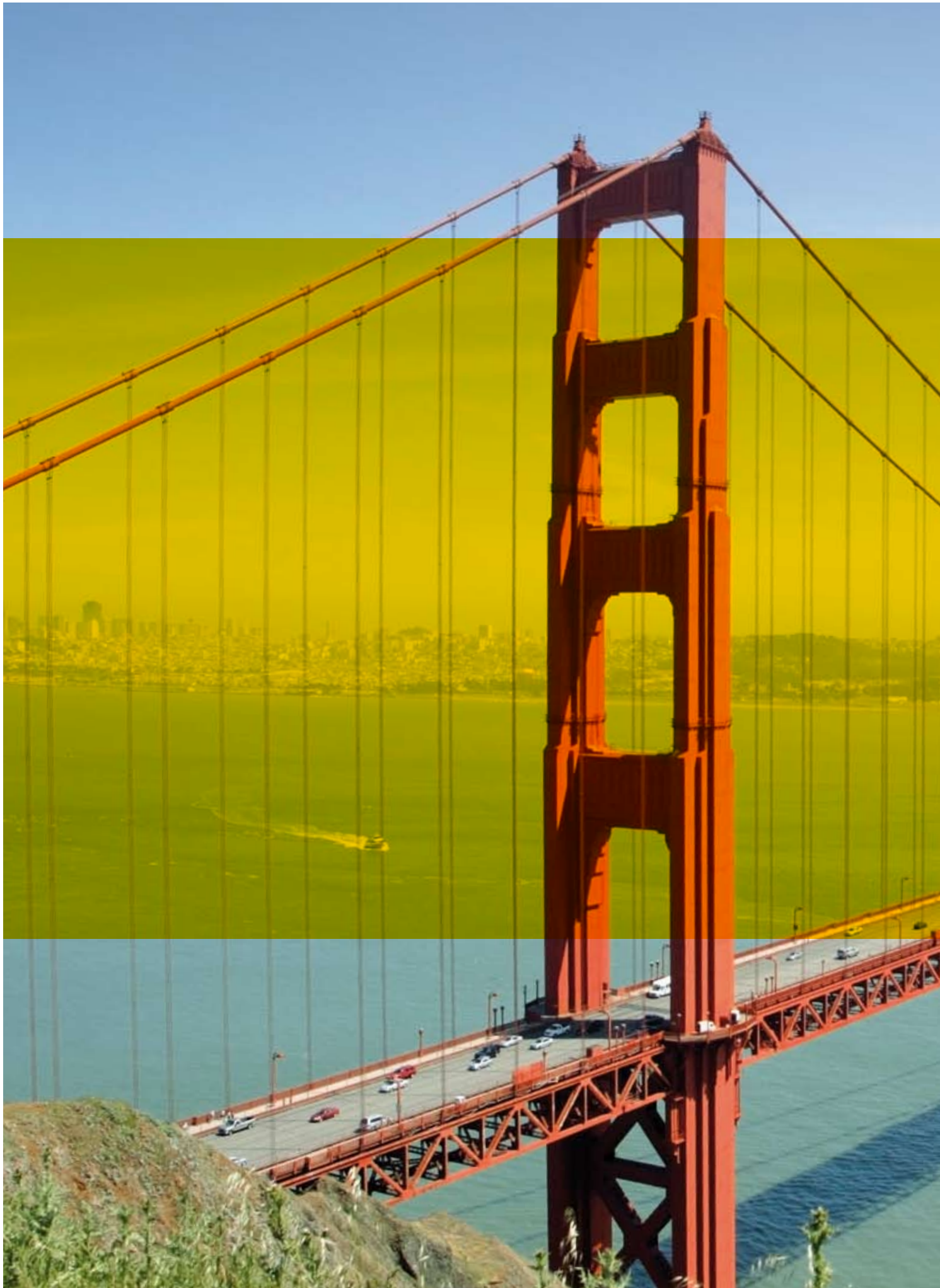




### Location India

Roth & Rau India Pvt. Ltd., Mumbai

- Roth & Rau is one of the first equipment providers to have a proprietary location in India and has already built up a superb market position.
- An extensive framework agreement was signed with an Indian manufacturer in December 2009. This foresees the gradual supply of several turnkey production lines worth € 68 million.
- Employees began work at Roth & Rau's Mumbai location in September 2009. Alongside customer support and acquisitions, a further key focus of their activities is the company's extensive range of maintenance and other services. Further offices are planned for Hyderabad, Delhi and Pune.
- Domestic demand for energy in India is so great that the solar capacities currently being built and planned are to be used solely to cover domestic needs.



Golden Gate Bridge, San Francisco, USA



Global radiation\*  
USA

2,000 kWh/m<sup>2</sup>

kWh/m<sup>2</sup>

300

600

900

1,200

1,500

1,800

2,100

2,400

2,700

3,000

\* Annual maximum global radiation in the South West of the USA (average figure 1981 – 2000); source: Meteotest, Meteororm database





## Core Market USA

Liberty and independence are the cornerstones of US history. Reducing the country's dependence on oil and securing its energy supply for further growth are the key topics it faces in future.

Sunbathing in New York's Central Park. Fighting climate change is an increasingly important topic in the USA as well.



The recent sharp rise in the oil price made many Americans pause for thought. The squandering of energy over very many years is being questioned by politicians and society as a whole. It is now down to the politicians in particular to promote this process. With its package of renewable energies subsidies worth billions, Barack Obama's new administration has taken an important first step in this direction.

This will benefit the US solar industry, which focuses on module production and huge open-air solar parks. With their extensive sun-drenched desert regions, the south-western US states in particular harbour enormous potential. The states of California, New Jersey and Arizona have assumed a pioneering role in this respect. California is one of the first states to have set itself the target of covering at least 20 % of its energy needs from renewable energies in future.

This emergent boom in the sector is also benefiting around 250 start-up companies, mostly on the West coast, which are testing new cell concepts and developing innovative technologies. Roth & Rau is exploiting this fertile soil, supporting select projects with its expertise and system technology. This leads to synergies and not infrequently to promising cooperations with Roth & Rau's global research and development activities. ■

California is almost 25 % desert and thus offers optimal conditions for generating solar energy.



By offering new technologies and products, Roth & Rau aims to boost its US market share in future.





### Locations USA

Roth & Rau Software Automation USA Inc., Salt Lake City, Utah  
 Solar Holding Inc., City of Wilmington, Delaware  
 Roth & Rau USA Inc., San José, Kalifornien  
 Roth & Rau Ortnr c.l.s. USA Inc., Salt Lake City, Utah  
 Cober Muegge LLC, Norwalk, Connecticut

- In the USA Roth & Rau has offices at various locations on the East and West coasts, as well as in Salt Lake City. The Group had a total of 19 employees in the USA at the balance sheet date. Alongside sales and project management, their main focuses of activity also include factory automation.
  
- In California, Roth & Rau is cooperating with SVTC Solar, a provider of extensive services for the development, testing and market launch of new solar energy products. At SVTC's Silicon Valley Photovoltaic Development Center, existing solar cell manufacturers and start-ups can test and enhance their new developments in production-like conditions. To this end, Roth & Rau plans to build a 5 MWp pilot line for the manufacture of crystalline silicon solar cells at the Development Center, which will allow technological developments to be rapidly transferred to large-scale production. This way, Roth & Rau stands to benefit from cooperation with technology developers and potential customers. Not only that, the facility will serve as a Roth & Rau showroom for North America.

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## Company

### Group Structure and Business Activities

Roth & Rau AG has been one of the world's leading suppliers of production equipment and innovative production technologies for the photovoltaics industry for 10 years now. Furthermore, the company also designs and manufactures plasma and ion beam assisted thin film and surface processing systems tailored to customers' specific requirements. The Roth & Rau Group's portfolio is supplemented by software products in the fields of systems management and production supervision, as well as by maintenance and service offerings.

#### Legal Structure

The changes in the Group's structure in the past financial year mainly result from its ongoing internationalisation. The subsidiaries Roth & Rau Australia Pty. Ltd., Sydney/Australia, and Roth & Rau India Pvt. Ltd., Mumbai/India, were founded to extend the Group's global network. Roth & Rau Korea Co. Ltd., Seoul/Korea, also took up its business activities in 2009. Roth & Rau Australia is intended to promote the joint research and development activities with the University of New South Wales and to act as a technological customer support centre for the sales organisations in the Asia-Pacific region.

A further focus involved expanding the range of services on offer in the fields of customer support, factory automation and process management. One major step towards achieving this was the takeover of Ortnet cleanroom logistic systems GmbH (now: Roth & Rau Ortnet GmbH) in Dresden. This company specialises in the installation, maintenance and optimisation of production system processes in the semiconductor and photovoltaics industries. Moreover, Roth & Rau's US subsidiary Solar Holding Inc. took over Romaric Automation Design Inc. (renamed as: Roth & Rau Software Automation USA Inc.) in Salt Lake City/USA, a company specialising in production management systems.

The takeover of Tecnofimes S.r.l. (now: Roth & Rau Italy S.r.l.) enabled the process steps of diffusion and firing to be integrated into the product range.

By acquiring CTF Solar GmbH (now: Roth & Rau CTF Solar GmbH) in Kelkheim (now: Hohenstein-Ernstthal), Roth & Rau has also secured the strategic expertise necessary to produce turnkey production lines for the manufacture of thin film solar modules on a cadmium telluride basis (CdTe). As the only industrial supplier of this kind of solution to date, Roth & Rau has thus acquired a unique selling point in the thin film market and is significantly expanding this business model. To this end, a joint venture was also agreed with a Chinese solar company in February 2010 concerning the construction and operation of CdTe solar module production systems (→ Events After the Balance Sheet Date, Note 7.6. of the Notes to the Consolidated Financial Statements).

A further change in the legal structure implemented in the year under report involved the contribution of the plasma and ion beam technology operations to Ion-Tech GmbH (now: Roth & Rau MicroSystems GmbH).

Overall, 20 companies in total have been fully consolidated in the consolidated financial statements of the Roth & Rau Group as of 31 December 2009. Two further companies have been included using the equity method. Further details concerning changes in the Group's legal structure can be found in Note 1.2.2. of the Notes to the Consolidated Financial Statements.



## Group structure

as of 31 December 2009, all company designations following renaming

Roth & Rau AG, Hohenstein-Ernstthal, Germany		
Production and administration	Service and sales	Research and development
SLS Solar Line Saxony GmbH, Limbach-Oberfrohna, Germany	Roth & Rau Shanghai Trading Co., Ltd., Shanghai, China	Roth & Rau Switzerland AG, Neuchâtel, Switzerland
Roth & Rau Dünnschicht Solar GmbH, Hohenstein-Ernstthal, Germany	Roth & Rau Singapore Pte. Ltd., Singapore, Republic of Singapore	Roth & Rau Australia Pty. Ltd, Sydney, Australia
AIS Automation Dresden GmbH, Dresden, Germany	Roth & Rau Korea Co., Ltd., Seoul, Republic of Korea	R³T GmbH, Taufkirchen, Germany
Roth & Rau Muegge GmbH, Reichelsheim, Germany	Roth & Rau India Pvt. Ltd., Mumbai, India	
Cober Muegge LLC, Norwalk, USA	Roth & Rau Ortner GmbH, Dresden, Germany	
Roth & Rau MicroSystems GmbH, Hohenstein-Ernstthal, Germany	Roth & Rau Ortner c.l.s. USA Inc., Salt Lake City, USA	
Roth & Rau CTF Solar GmbH, Kelkheim, Germany	Roth & Rau Ortner c.l.s. Malaysia Sdn. Bhd., Kuala Lumpur, Malaysia	
Roth & Rau Italy S.r.l., Monza, Italy	Roth & Rau USA Inc., San José, USA	
Solar Holding Inc., City of Wilmington, USA		
Roth & Rau Software Automation USA Inc., Salt Lake City, USA		

## Organisation

Roth & Rau AG performs key group-wide functions and, as the holding company, is responsible for the central management of the Roth & Rau Group. The functions it has performed to date relate above all to sales, marketing, treasury, controlling, risk management, quality management, intellectual property rights and IT for the group companies. To exploit synergies and enhance the Group's competitiveness, further competencies, especially procurement, are to be pooled as well in future. All group companies are bound by codes of procedure and are governed by the Group's strategic alignment. Within this framework, they act with the objective of expanding the Roth & Rau Group's position as one of the world's leading photovoltaics technology and equipment providers.

## International Service and Sales Network

We are consistently pressing ahead with expanding our international service and sales organisation. One key focus here is on high-growth markets in Asia. Having said this, the USA, Eastern Europe and North Africa also have a major role to play in the solar sector in future. Regional proximity to our customers is important, especially when it comes to offering a flexible and extensive range of services. This enables us boost customer retention and further expand our highly profitable maintenance and spare parts business. Sales activities in those countries where we have proprietary subsidiaries are performed by employees with fixed employment contracts. In all other markets, longstanding external sales partners are active on our behalf.

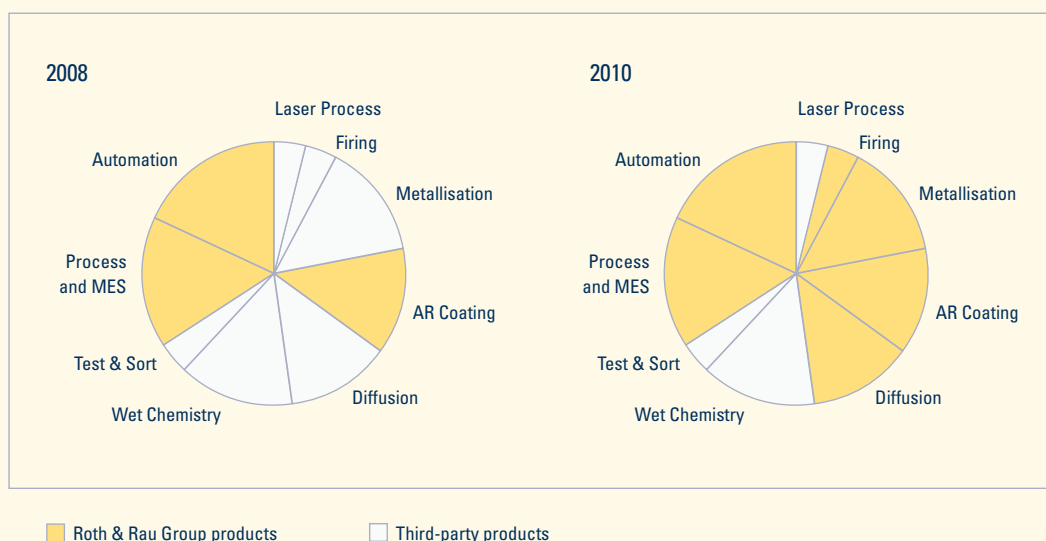
## Segments and Value Creation

The products and services of the Roth & Rau Group are pooled in the three segments of photovoltaics, plasma and ion beam technology, and other activities.

The **photovoltaics** segment comprises the products, technologies and services offered to the photovoltaics industry. Following acquisitions and the foundation of new companies, these have been significantly extended in the past two years. In 2010, we will be able to cover up to 80 % of the scope of supplies required to manufacture crystalline silicon solar cells with proprietary products and services. The equivalent figure for 2008 was still 45 %.

#### Breakdown of equipment market by share of capital costs

Capex



Two of the key products in the field of crystalline solar technology are the SiNA® and MAiA® in-line production systems. The SiNA® antireflective coating system enables cells to be coated with a layer of silicon nitride, thus reducing the share of light reflected away from the surface and achieving a passivation of contaminations and defects in the silicon wafer. Antireflective coating is a decisive factor in determining the solar cell's output efficiency. SiNA® systems are currently offered with various production capacities ranging from five to 100 MWp. One focus in 2009 involved developing a new generation of SiNA® system characterised above all by lower operating costs. Further information about this can be found in the Research and Development chapter from Page 61 onwards.

MAiA® involves a system concept facilitating the implementation of new plasma technologies, such as the coating of solar cells on both sides, the manufacture of multi-layer coats and dry etching processes. The equipment's modular structure also allows various plasma processes to be combined within a single system.

Further individual equipment products include process systems for the production steps of in-line diffusion and firing and customised equipment and plasma technologies for the manufacture of thin film solar modules.

Alongside the individual equipment business, the turnkey production line range represents the second major pillar of the photovoltaics segment. Our integrated equipment, technology and service concept enables solar cell production to be launched on a high technological level in a minimum of time. All systems are based on innovative cell concepts and plant systems from leading manufacturers. These products are targeted above all at new entrants in established photovoltaics markets and at manufacturers in emerging solar markets. Following our takeover of CTF Solar in February 2009, we are currently also the only industrial supplier worldwide to offer turnkey production lines for the manufacture of thin film solar modules on a cadmium telluride basis (CdTe). The agreement of a joint →

venture with a Chinese solar company in February 2010 represents an important milestone in the market launch of our CdTe turnkey production lines (→ Events After the Balance Sheet Date, Note 7.6. of the Notes to the Consolidated Financial Statements).

The photovoltaics product portfolio is rounded off with silicon crystallisation systems for wafer production.

As the Group's technological "germ cell", the **plasma and ion beam technology** segment is particularly important in strategic terms. This segment focuses above all on customised system solutions and processes for plasma and ion beam assisted thin film and surface processing processes suitable for a wide variety of industrial and research applications. One of the most important products in this segment is the IonScan equipment series, which is used for thin film thickness trimming in the semiconductor industry and polishing error correction in precision optics. Alongside Tokyo Electron, Roth & Rau is the only company in the world to offer this so-called ion beam trimming technology.

The third segment, **other activities**, includes the spare parts and service business, systems management software to monitor complex production processes through to the automation of entire factories and further products and services for customers outside the photovoltaics sector on the other.

Key figures and information about the economic performance of the three segments can be found in the Segment Report from Page 80 onwards.

#### **Main Sales Markets and Competitive Position**

The Roth & Rau Group markets its products and services to an international customer base. The international share of consolidated sales amounted to 82.8 % in the 2009 financial year (2008: 86.5 %). With a 51.3 % share (2008: 49.4 %), Asia remains one of the Group's most important sales markets. Alongside China and Singapore, Taiwan, South Korea and India are also playing an increasingly important role. Within Europe, Germany and Spain are two of the largest sales markets. We see future growth opportunities above all in Eastern Europe, Italy, France, the Middle East and the USA. Overall, by consistently expanding our global service and sales locations we were able to further enhance our international competitive position in the past year.

There were no material changes in the competitive environment for antireflective coating systems in 2009 compared with the previous year and we were able to reinforce our leading market position. Our main competitors include centrotherm photovoltaics AG and Shimadzu Corporation in the Japanese market. The planned takeover of our competitor OTB Solar B.V. will help us improve our market position in the current financial year. Oerlikon Solar Ltd., Singulus Technologies AG and the Korean equipment supplier JUSUNG Engineering Co. Ltd. are three new competitors to have entered the market in this segment, but they have not yet managed to acquire any substantial market share. Longstanding production experience and the level of cell efficiency achievable with the technology on offer are the main barriers to market entry.

In the turnkey production line business we were able to improve our market position compared with the previous year. We achieved this in particular by exploiting further technological progress, offering a broader portfolio of products and services and boosting our sales organisation.

The competitive environment is showing very dynamic developments in the increasingly important field of system management and process automation (MES systems), in which increasing numbers of software providers are moving into the photovoltaics market from the semiconductor industry.

There were no changes compared with 2008 in the competitive environment for specialist systems in our plasma and ion beam technology segment.

## Strategy and Corporate Management

### Strategy

The international solar industry is in the early stages of its long-term growth, which will be driven by rising global energy demand, the limited supply of fossil fuels and advancing climate change. The sector is currently facing substantial structural changes on its way towards becoming a mature industry. The Roth & Rau Group's strategy focuses on being able to react flexibly to the changing framework so as to benefit as one of the leading equipment suppliers from the long-term growth opportunities offered by the market in future as well.

With this in mind, our activities are based on the three following strategic pillars:

#### Expanding our technology and product portfolio

By continuously expanding our technology and product portfolio we aim to boost our process expertise and further diversify our portfolio along the entire equipment value chain. Cell production will remain the key focus in future as well.

The Group will therefore maintain its focus research and development activities in the 2010 financial year as well. Our objective here is to enhance existing products and to launch new products and technologies onto the market. We will be basing our activities on our customers' increasing need for lower production costs and higher output efficiency levels. Alongside this, we are working on increasingly standardising our products so as to further improve their profitability. In terms of new developments, we are focusing both on crystalline and thin film solar technologies and on expanding our range of services in other areas such as wafer production. Specifically, in the 2010 financial year we plan to introduce the selective emitter as a new form of solar cell generation in our turnkey solutions and as an upgrade for existing cell production lines. Further focuses of activity include bringing heterojunction technology to market maturity and the further development of systems and production technologies to manufacture cadmium telluride-based thin film solar modules. Not only that, we are also making intense efforts to build up a pilot production line for crystalline silicon solar cells at the Technology Centre in Hohenstein-Ernstthal and to launch operations at the Technology Centre at the University of New South Wales in Sydney/Australia, which is intended to act as a development and demonstration centre for the Asian market in particular. Further information about current projects can be found in the Research and Development chapter from Page 61 onwards.

Alongside research and development, external growth also plays a major role in the expansion of our technology and product portfolio. By making targeted acquisitions, we will acquire expertise and key technologies in select fields in future as well. We only expect around one third of the solar cell manufacturers currently on the market to survive in the long term. To enable us to act as a reliable partner on equal terms with these players in future as well, we will exploit any opportunities offered by the current period of consolidation to promote the further development of the Roth & Rau Group.



### Boosting our market position in key markets and accessing new markets

The significance of solar energy for the future energy supply is consistently rising worldwide. The Roth & Rau Group is already represented in the most important solar markets, a development driven above all by the continuous extension of our network of locations in the past two years. To boost our global market position, we will be further expanding our existing locations, especially in China, India, Singapore and Korea. Subsidiaries are currently in the process of being established and opened in Taiwan and Hong Kong. To access new markets we also plan to establish subsidiaries in future in the target regions we have identified. We currently see Russia, North Africa and South America as the most promising future markets.

### Expanding the global spare parts and service business and continuously enhancing customer service

With the increasing maturity of the solar industry, it has become ever more important to provide excellent customer support. Continuously expanding our extensive range of spare parts and services is therefore one of our most important strategic tasks. The main focus here involves providing technological support to our customers. A decisive role is played in this respect by factors such as regional proximity to our customers, the provision of competent support by our service employees and short reaction and service times.

## Corporate Management

### Value-based management

The objective of value-based management at the Roth & Rau Group is to systematically increase the company's value in the long term. To achieve this, we rely above all on value-adding growth and the development of technologically leading, forward-looking products and services.

The Group bases its budgeting and controlling on various key financial figures. Among the most important of these are sales, earnings before interest, taxes, depreciation and amortisation (EBITDA), earnings before interest and taxes (EBIT) and cash flow from operations. The new orders and orders on hand figures, which act as key early indicators of the future development in consolidated sales, are also highly relevant for the Group's budgeting and controlling. Given the long terms involved in the project business, the orders on hand figure generally reflects the volume of sales to be expected in the next nine to twelve months. The terms involved in large-scale turnkey projects often amount to 18 months or longer. Furthermore, value-based management as practised by Roth & Rau is inextricably linked with a policy of open, transparent and prompt communications. We therefore often inform our shareholders and the capital markets about our current order situation between the regular reporting dates, thus facilitating an early assessment of the expected sales performance.

Internal corporate management also includes detailed budgeting compiled on the basis of the aforementioned key figures, as well as a group-wide controlling system broken down by segment and project. Budget and actual values for the various key figures are analysed in monthly reports, with the results being forwarded to the Director of Group Controlling and the Management Board. This ensures that budget variances can be detected at an early stage, thus enabling the company to take corresponding measures and to adjust targets to the changed circumstances.

In view of its strong external growth, the Group significantly enhanced its controlling system and financial management in the past financial year, pressing ahead, for example, with integrating and optimising internal reporting structures at its subsidiaries in order to raise the level of month-by-month transparency at the Group as a whole.

## Compensation report

In the interests of transparent communication, Roth & Rau discloses the compensation of members of the Management and Supervisory Boards on an individual basis and broken down into its respective components. This compensation report also forms part of the Corporate Governance Report (Page 14).

### Compensation of the Management Board

The Supervisory Board of Roth & Rau AG lays down the structure of the compensation system, reviews this regularly and determines the overall compensation of individual Management Board members. In this, it gives due consideration to the appropriateness of compensation, which is measured in terms both of the personal performance of the Management Board member and the economic situation, performance and future prospects of the company, as well as of customary levels of compensation taking due account of comparative companies and of the compensation structure otherwise in place at the company.

The total compensation of Management Board members consists of a non-performance-related component, which includes the annual salary, fringe benefits and pension commitments, and a performance-related component, which consists of a bonus and share-based payment (phantom stock programme – PSP). In connection with Thomas Hengst joining the Management Board and in order to ensure compliance with the Act on the Appropriateness of Management Board Compensation (VorstAG), which came into force on 5 August 2009, the Supervisory Board reviewed and adjusted the terms of the phantom stock programme for Management Board members in the year under report. This involved raising the assessment period for the overall investment, and thus the incentive provided to the Management Board, from two to four years.

The contracts with Management Board members provide for payment of compensation should their activities on the Board be prematurely terminated without compelling reason. Such compensation is limited to a maximum of two annual salaries, including fringe benefits, and may not compensate the member for any period in excess of the remaining term of the employment contract. Should their activities on the Board be prematurely terminated due to a change of control, Management Board members receive compensation amounting to three basic annual salaries, nevertheless limited to a maximum of the compensation due for the remaining contractual term.

### Non-performance-related compensation components

The members of the Management Board receive a basic annual salary paid in equal monthly instalments. Fringe benefits mainly involve the private use of company cars, reimbursement of travel expenses and insurance premiums for accident and direct insurance policies.

Furthermore, pension commitments providing for retirement or invalidity pensions, as well as for provision for dependants, have been made to Management Board members. While the pension commitment towards Dr. Dietmar Roth is already vested, this will only be the case for Carsten Bovenschen and Thomas Hengst following five years of activity on the Management Board at Roth & Rau AG. The level of retirement pension is based on a percentage share of the most recently paid basic annual salary. This share currently amounts to 50 % for Dr. Dietmar Roth and to 25 % for Carsten Bovenschen and Thomas Hengst. In the case of Carsten Bovenschen and Thomas Hengst, this percentage increases by 1 % for each year of activity from the sixth year of service onwards. The pension commitments towards Dr. Dietmar Roth and Dr. Bernd Rau, a former member of the Management Board, were outsourced from the balance sheet as of 31 December 2008. Claims already vested (past service) were assigned to Deutscher Pensionsfonds AG, while future claims will be handled via Zurich Deutscher Herold überbetriebliche Unterstützungskasse e.V. (ZDHUK). The commitments made to Thomas Hengst and Carsten Bovenschen are also handled via ZDHUK.





### Performance-related compensation components

Alongside their non-performance related compensation components, Management Board members also receive a bonus. The bonus for Dr. Dietmar Roth is based on the earnings before interest and taxes (EBIT) generated by the company. The bonuses for Carsten Bovenschen and Thomas Hengst, by contrast, are based in equal share on EBIT and on the achievement of individual target agreements. Consolidated EBIT pursuant to IFRS serve as the basis for reference here. The bonuses are capped at a maximum of 150 % of the basic annual salary in the case of Dr. Dietmar Roth, at a maximum of 100 % for Carsten Bovenschen and a maximum of 50 % in the case of Thomas Hengst. Bonuses are paid following adoption of the annual financial statements by the Supervisory Board.

Members of the Management Board also receive a share-based payment of a long-term incentive nature involving risk within the framework of the phantom stock programme (PSP). A total of 24,000 virtual shares (phantom stocks) whose value is linked to Roth & Rau's share price performance were allocated to Management Board members for this purpose in 2009. Phantom stocks may only be exercised following a lock-up period of two years following allocation. This is dependent on achievement of a specified exercise hurdle corresponding to a predetermined base price upon allocation plus 10 % p.a. In line with the new regulations adopted in the year under report, any profit arising for Management Board members participating in the programme upon exercising their phantom stocks must automatically be invested in full in shares in the company that are subject to a two-year lock-up period. Overall, therefore, the investment of the Management Board members is subject to a four-year assessment period.

A maximum limit of € 1 million per tranche has been set for the amount paid out. As the PSP was first introduced for the 2008 financial year, no amounts were paid out in the past financial year. Further information about the PSP can be found in Note 1.5.17. in the Notes to the Consolidated Financial Statements.

The key compensation components of Management Board members is presented in the following table. The previous year's figures are stated in brackets. The fringe benefits paid in the 2009 financial year amounted to € 8k for Dr. Dietmar Roth, € 27k for Carsten Bovenschen and € 7k for Thomas Hengst. Furthermore, contributions of € 172k were paid to the pension fund (2008: € 995k).

### Key compensation components of the Management Board

€ 000s	Annual salary	Bonus	Total
Dr. Dietmar Roth	220 (197)	330 (330)	550 (527)
Carsten Bovenschen	180 (141)	180 (150)	360 (291)
Thomas Hengst (since 01.07.2009)	50 (0)	50 (0)	100 (0)
<b>Total</b>	<b>450 (338)</b>	<b>560 (480)</b>	<b>1,010 (818)</b>

### Phantom stock programme

	Number of phantom stocks as of 31.12.	Volume of capital reserve as of 31.12. (€ 000s)	Volume of provisions as of 31.12. (€ 000s)
Dr. Dietmar Roth	20,000 (10,000)	18 (4)	9 (1)
Carsten Bovenschen	14,000 (7,000)	14 (2)	7 (1)
Thomas Hengst (since 01.07.2009)	11,000 (0)	15 (0)	0 (0)
<b>Total</b>	<b>45,000 (17,000)</b>	<b>47 (6)</b>	<b>16 (2)</b>



### Compensation of the Supervisory Board

The compensation of the Supervisory Board is governed by § 12 of the Articles of Association of Roth & Rau AG. Accordingly, each member receives fixed annual compensation of € 15k payable after the end of each financial year, as well as a meeting allowance of € 750 per meeting day. The Supervisory Board Chairman receives two-and-a-half and his Deputy one-and-a-half times the fixed compensation and meeting allowance. Moreover, Roth & Rau also reimburses the expenses of Supervisory Board members. No performance-related compensation components are foreseen for the Supervisory Board.

### Total compensation of the Supervisory Board

€ 000s

	2009	2008
Eberhard Reiche, Chairman (since 01.02.2008)	56	60
Prof. Dr. Alexander Michaelis, Deputy Chairman	33	38
Daniel Schoch	23	25
Harald Löhle, Chairman (until 31.01.2008)	0	5
<b>Total</b>	<b>112</b>	<b>128</b>

### Declaration on corporate governance (Sec. 289a HGB)

New requirements under the German Accounting Law Modernisation Act (BilMoG) require publicly listed stock corporations to submit a declaration on corporate governance. Roth & Rau AG has published this declaration in the investor relations/corporate governance section of its internet site at [www.roth-rau.de](http://www.roth-rau.de).

## Research and Development

Innovation is the bedrock of our competitiveness and our company's long-term success. Based on our customers' needs, we implement technologically leading products that provide us with unique selling points and offer growth opportunities.

We promoted the Group's research and development activities in the 2009 financial year as well. All in all, investments in research and development grew by 138.7 % from € 4,884k to € 11,658k. This corresponds to a 5.9 % share of sales (2008: 1.8 %). Including related investments of € 1,483k in infrastructure at this department (2008: € 1,917k) and costs of € 4,818k not eligible for capitalisation (2008: € 449k), research and development expenses accounted for a 9.1 % share of sales (2008: 2.7 %). A total of 109 employees worldwide, and thus 230.3 % more than in the previous year (2008: 33), are working on the development of our products.

We have long maintained close links with national and international universities and research institutes. In the past financial year, we cooperated in particular with the Swiss Institute of Microtechnology (IMT) at the Université de Neuchâtel (part of the Ecole Polytechnique Fédérale de Lausanne since 1 January 2009) and the University of New South Wales in Australia to press ahead with the development of highly efficient solar cells. Alongside these, the Energy Research Centre of the Netherlands (ECN), the Fraunhofer Institute for Solar Energy Systems (ISE) and the Fraunhofer Institute for Electron Beam and Plasma Technology (FEP) are also longstanding partners of the company.



For our **photovoltaics** customers, reducing production costs and increasing output efficiency levels are crucially important factors in their future competitiveness. In view of this, a large number of our research and development projects in the past year investigated possibilities of enhancing these two parameters.

The greatest priority was accorded to developing new cell technologies – the selective emitter and heterojunction technology. The new selective emitter technology involves an additional production step in which higher endowed areas of the emitter are produced locally around the front contact lines. This means that more free charge carriers are available, helping to increase the flow of electricity and thus to raise the solar cell's output efficiency. To manufacture selective emitters, Roth & Rau makes use of the laser doping process developed at the University of New South Wales (laser doped selective emitter). In the next development step, the cell's contacts are improved with the assistance of plating (electrochemical deposition), thus enhancing electricity conduction. These two new developments raise cell efficiency by 0.5 % to 1 %. Heterojunction technology involves the further development of a technology already known of and which has to date only been put to industrial use by a single company. Heterojunction cells consist of a monocrystalline silicon wafer, on both sides of which a thin film of amorphous silicon and a transparent, conductible oxide film (TCO) are applied. Amorphous silicon has superb passivation properties, guarantees high light yield and has excellent temperature behaviour, all of which together lead to very high rates of output efficiency. One milestone involves the development and launch of operations with two pilot systems at Roth & Rau Switzerland's development laboratory at the IMT in Neuchâtel, where solar cells with output efficiency rates of more than 20 % were produced at the beginning of February 2010, six months earlier than planned. This confirms our objective of achieving output efficiency rates of more than 20 % under production conditions upon the launch of the next but one generation of solar cells based on heterojunction technology. These high-efficiency technologies will remain a focus of development in future as well. For 2010, the company first plans to launch the selective emitter as a new solar cell generation in our turnkey solutions and as an upgrade for existing cell production lines. From 2011, heterojunction technology systems and production technologies are to be assigned to mass production.

Alongside these activities, we have also consistently improved our existing products. We managed on the one hand to further optimise the antireflective coating process so as to increase cell efficiency levels. On the other hand, we have developed and classified new, more cost-effective plasma sources characterised in particular by a higher coating speed. These are to be used in the new SiNA® system series generation from 2010 onwards. The prototype for the new CAMiNi firing oven was also completed and has already been successfully tested at a major German solar cell manufacturer.

We have also accessed a new technology segment by developing a silicon crystallisation system for the manufacture of multicrystalline wafers. In future, this will enable us to offer integrated turnkey solutions for the manufacture of wafers and cells as well. Crystallisation systems will provide customers in future with the possibility of manufacturing ingots from inexpensive metallurgical silicon, thus also helping to further reduce their production costs.

In our thin film activities, we have focused since 2009 on cadmium telluride technology (CdTe). To this end, we have pressed ahead with developing a coating system for CdTe modules and, together with our subsidiary Roth & Rau CTF Solar, developing turnkey production lines in this field. The market launch of these lines is planned to take place within the joint venture agreed with a Chinese solar company in February 2010.

Research and development activities in the **plasma and ion beam technology** segment, which has been organised at Roth & Rau Microsystems GmbH since 1 October 2009, focused once again on enhancing existing products and accessing new sales markets. The IonScan technology already established on the market was supplemented by the new IonScan3D system. These so-called IBF (ion beam figuring) systems enable polishing errors to be processed and finished on flexuous optics substrates locally and with the utmost precision on a nanometre scale. Roth & Rau has thus successfully entered the highly promising precision optics market.

Furthermore, with its innovative MicroSys SMART the company has created a system platform capable of clustering which is fully compliant with the needs of the microelectronics industry for coating and structuring systems both in terms of quality and productivity and of operating costs.

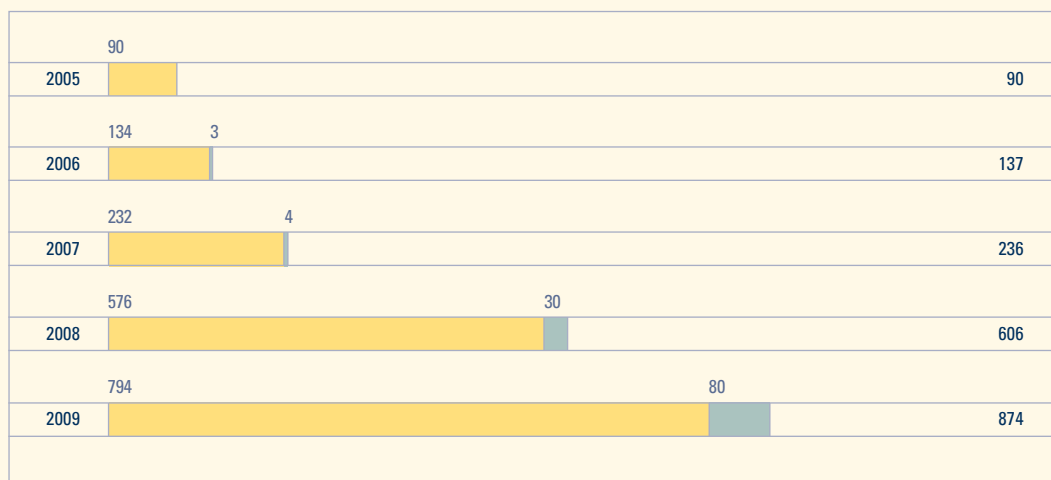
Further projects are currently dealing with large-surface ion beam systems (ion milling systems), which should enable the company to enter the hard disk and magnetic memory (MRAM) market, and with the further development of large-surface coating systems based on the AK series, which are produced for the deposition of barrier layers on organic light-emitting diodes (OLED).

## Employees

Highly qualified and motivated employees form the basis for our company's long-term success. We expanded our total workforce in the 2009 financial year in spite of the economic downturn. This development was mainly driven by the acquisitions made and the targeted boosting of personnel resources in the fields of research and development, turnkey project management and finance. All in all, the total workforce grew by 44.2 % to 874 employees as of 31 December 2009 (2008: 606). The majority of the workforce is employed in Germany. Due to the Group's strong international expansion, the number of individuals employed abroad showed marked year-on-year growth, rising from 30 to 80 employees.

### Employees

as of 31 December



Germany Abroad

The weaker order situation in the wake of the international economic crisis left its mark on the production departments. By reducing the high share of temporary employees, we were able to react flexibly to the change in capacity utilisation levels. Moreover, between 1 January and 31 December 2009 we converted production from two shifts to one shift a day. All other departments witnessed



year-on-year increases in staff totals. Above all, the significant intensification of research and development activities led the number of employees here to rise by 230.3 % to 109 (2008: 33). In the course of the company's further growth, personnel capacities in administrative departments were also boosted from 75 to 153 employees.

## Employees

by function as of 31 December

	2009	2008	Change
Production	333	269	23.8 %
Research and development	109	33	230.3 %
Technology/sales	232	211	10.0 %
Administration (excl. Management Board)	153	75	104.0 %
Kindergarten	3	2	50.0 %
Other	10	/	/
	840	590	42.4 %
Trainees	34	16	112.5 %
<b>Total</b>	<b>874</b>	<b>606</b>	<b>44.2 %</b>

### Focus on training and development

Developing the next generation of staff in-house and training our employees are two core elements of our personnel development strategy. We are currently training young people in seven different technical and commercial vocations. The Roth & Rau Group employed 34 trainees as of 31 December 2009 (2008: 16). Over and above this, we offer ongoing supervision to a growing number of student trainees and graduands in virtually all areas of the company.

We accord great priority to maintaining our contacts with universities and research institutes in the region, from which we have always been able to recruit highly-qualified specialist and management staff. In cooperation with West Saxony College (Westsächsische Hochschule) in Zwickau, since 2008 we have offered the microsystems technology dual study programme with the possibility of majoring in photovoltaics. At the beginning of the 2009 training year we once again took on two trainees within the framework of this dual study programme. In cooperation with regional vocational training colleges and technical colleges, we also offer a study programme in production technology, and since 2009 a study programme in business administration as well. These measures are accompanied by our regular participation in employment and recruiting fairs.

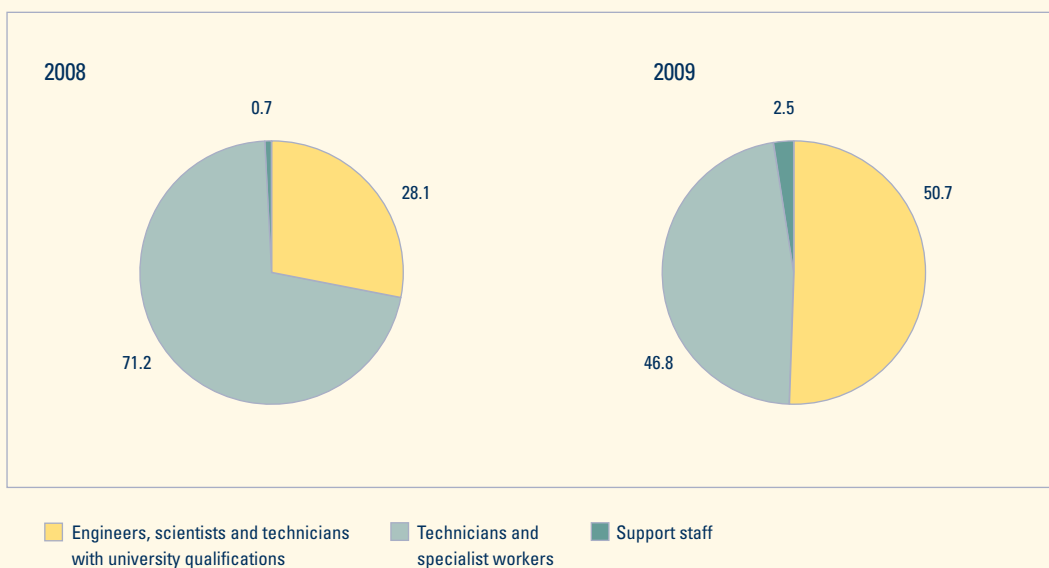
We also extended the range of training and development offered to our existing employees in the past financial year. Personnel development measures are based on regular one-to-one meetings in which each employee's development needs are identified. On this basis, a development plan setting out individual competency targets is compiled. The Roth & Rau Academy launched in 2009 will play a key role in training in future. Via the group-wide intranet, employees can now select from an extensive range of courses. Training courses are held regularly, for example, on new system generations and technologies, as well as on topics such as vacuum technology and plasma technology. Alongside technical expertise in the fields of quality management, environmental management, legal and compliance, and production, the Academy also offers training in soft skills, such as intercultural competence, presentation techniques, stress management, communications, personal management and time management. Bespoke training programmes are also offered to specific target groups, such as trainees, new employees and managers. Over and above this, individual training measures and courses are offered where necessary to entire departments or specific individuals. Training require-

ments are continually reviewed, with the results being factored into the further development of the Academy's training programme. Expenses on training measures amounted to € 419k in the 2009 financial year (2008: € 301k).

The qualifications structure chart shows a significant shift in favour of engineers, scientists and technicians with university qualifications in the past financial year. This reflects the targeted reinforcement of development-related departments.

### Qualification structure

in %



### Stable compensation structure

A transparent, easily comprehensible compensation system also accounting for employees' individual performance helps boost employee motivation and satisfaction levels. The economic crisis has not led to any changes in the compensation system, which was fundamentally revised in 2008. Alongside their fixed monthly compensation, all employees of the Roth & Rau Group apart from trainees and senior employees receive an individual variable compensation component which is reviewed quarterly. This is based on the qualifications and specific performance of the individual employee, as well as on the company's overall performance measured in terms of operating earnings (EBIT). Alongside their fixed compensation, senior employees also receive a variable compensation component based on individual target agreements.

Moreover, members of the Management Board, further management staff and selected employees are also entitled to participate in a share-based compensation programme (phantom stock programme). Further information about this can be found in the Compensation Report from Page 59 onwards and in Note 7.4. of the Notes to the Consolidated Financial Statements.

### Personnel expenses and key figures

The growth in the workforce led personnel expenses to increase by 92.2 % to € 38,724k in the 2009 financial year (2008: € 20,145k). Of this total, € 32,879k related to wages and salaries (2008: € 16,591k), € 5,351k to social security contributions (2008: € 2,578k) and € 494k to pension expenses (2008: € 976k).





Further key personnel figures developed as follows:

- Workforce age structure: 34.6 % of employees were aged 30 or below (2008: 31.4 %), 50.7 % were aged between 30 and 50 (2008: 52.2 %) and 14.7 % were aged 50 or above (2008: 16.4 %).
- The personnel turnover rate amounted to 7.8 %, as against 3.7 % in the previous year.
- 25 accidents at or on the way to work were reported in the 2009 financial year (2008: 10).
- At 2.2 %, the percentage of working days lost due to sickness was slightly up on the previous year (2008: 1.8 %).

## Procurement

The group-wide procurement process was restructured and significantly enhanced in the 2009 financial year. This has enabled us to exploit potential cost savings and raise supply reliability.

### Supplier management improved

We maintain close relationships in a spirit of partnership with our suppliers, many of which we have worked together with since the foundation of Roth & Rau AG. By involving our suppliers both in production processes and in various development projects, we are able to continually enhance the benefits offered by our products to our customers.

Strategic procurement based on best practice was implemented in the past financial year. Within the new procurement process, we have considerably increased the number of alternative suppliers for our largest, mostly strategic, product groups. This has enabled us to significantly reduce potential bottlenecks and dependencies on strong oligopolies.

The strategic procurement process sets out tendering standards for the handling of all product groups with order volumes in excess of € 1 million. These product groups are exclusively handled in so-called product group teams consisting of the relevant category manager and the technologists involved. The resultant team decision ensures that a balance is found between technical and commercial considerations when reaching decisions concerning the choice of supplier.

In general, order placement and supplier evaluation and selection are performed on a project-by-project basis. What's more, credit checks are performed on occasion so as to ascertain supply capacity. A consistent evaluation structure is currently being developed and should offer support in negotiations and enhance quality in future. A supplier relationship management system has been introduced as the basis for evaluation. Supplier evaluation will be carried out for each product group and by reference to seven criteria, such as product quality, supply reliability and innovation and development competence. This process is being driven by the category managers and will lead to a qualified classification of the company's suppliers. Based on their assessment, measures will subsequently be identified and implemented for suppliers, starting with the underperformers and progressing to the high performers.

### Cost of materials reduced

The cost of materials decreased by 42.5 % to € 118,059k in the 2009 financial year (2008: € 205,264k). The materials quota dropped to 59.7 %, as against 75.4 % in the previous year. Alongside the business-related reduction in procurement volumes by around 50 %, this development also reflects the measures successfully implemented in terms of cost and materials management. The reduction in cost of materials was driven above all by the increasing standardisation of components and modules, as well as by the reorganisation of the procurement process.

Moreover, the global economic crisis has led to a sharp drop in demand on procurement markets. The switch from a strong sellers' market in 2008 to a clear buyers' market in 2009 led to favourable developments in commodity prices and to significant procurement savings.

## Responsibility and Social Commitment

Acting responsibly and maintaining our commitment towards society are key components of our corporate culture. We have therefore promoted various projects in Germany and abroad for many years now.

According to estimates compiled by the International Energy Agency (IEA), 1.5 billion people worldwide, equivalent to around a fifth of the global population, still have no access to electricity. Around 85 % of these people live in rural areas, mainly in Southern Africa and Asia. Solar energy is superbly suited to offer sustainable relief for energy-related poverty in rural areas, and thus to lay foundations for positive social and economic developments. This is also the objective of the electrification projects organised by the Solar Energy Foundation in Ethiopia and the solarafrica.network in Tanzania, which we have supported for several years now. Based on the principle of "helping people to help themselves", these projects install solar energy systems to provide lighting to schools, for example, enabling pupils to be taught after sundown and thus enhancing the population's educational opportunities. People on location assume responsibility for the financing and technical operation of the systems. By training specialists, this also creates jobs. Further information about the two foundations and their projects can be found on the internet at [www.sonne-stiften.de](http://www.sonne-stiften.de) and [www.solarafrica.net](http://www.solarafrica.net).

A further focus involves promoting young people and upcoming talent in the fields of education and sport, as well as on supporting cultural events in the region. In Hohenstein-Ernstthal and the surrounding area, for example, we support schools and children's day-care centres. In our sports sponsorship activities, we are promoting talented young swimmers and "Racing Team Germany", a junior motorcycle racing team at the Sachsenring racetrack in Hohenstein-Ernstthal.

Alongside these activities, we also assume responsibility for our employees and ensure that they have optimal social working conditions. In this, we focus on projects promoting employees' health and making it easier for them to combine their family and work commitments. The company's own child day-care centre offers employees an extensive and flexible range of childcare services. This facility has been warmly received. Three permanently employed childcare specialists currently look after 19 children aged one to six. The company is also continually expanding its range of sports activities aimed at promoting employees' health. Hosting company football tournaments and participating in regional marathons also help to boost team spirit and a sense of community.

Over and above this, we also worked to improve our occupational health and safety management system in 2009 and had it certified under OHSAS 18001 (Occupational Health and Safety Assessment Series). This is one of the best-known standards laying down requirements for improving employees' health and safety at their workplaces.

## Sustainability and Environmental Protection

The Roth & Rau Group's sustainable management approach takes due account of the interests of all relevant target groups (stakeholders) in its actions and strategic decisions. The ways in which we implement this specifically in terms of our employees, suppliers and the company as a whole are outlined in the previous chapters.



As a supplier to the solar industry, we accord special importance to a sustainable commitment to climate and environmental protection. With our products, we are supporting the further development of regenerative energies worldwide and are thus also assuming responsibility for a secure energy supply in the interests of subsequent generations.

We ensure that environmentally-friendly technologies are used to manufacture, utilise and dispose of our products wherever this is possible and economically justifiable. Not only that, the efficient use of raw materials, energy and water and consistent separation of waste are second nature to all of our employees. When it comes to managing hazardous goods, we have implemented special environmental protection measures which also include in-depth training for the relevant employees and specialist companies.

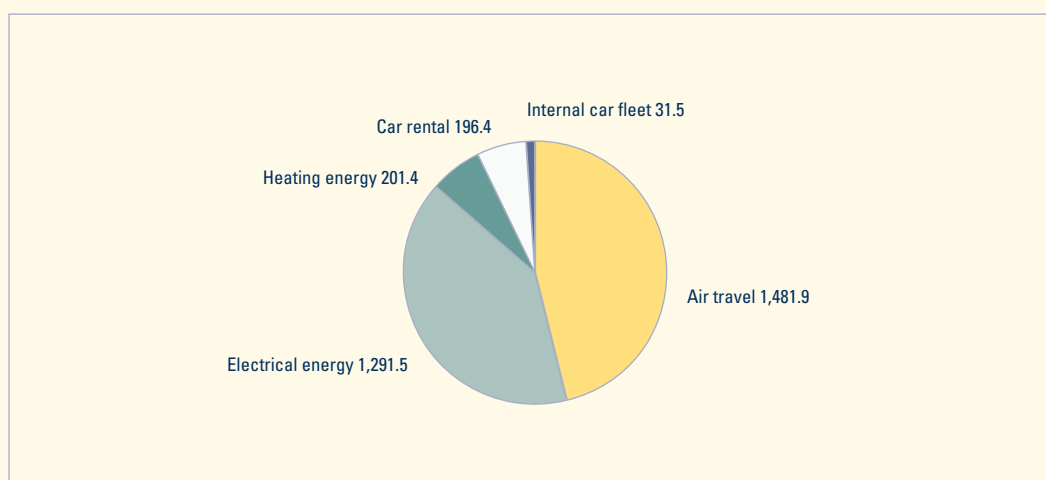
In 2009, we further enhanced our environmental management system at Roth & Rau AG and had this certified under the international ISO standard 14001:2004. We therefore conform to a globally recognised standard in terms of what company environmental management should involve and achieve. These measures include continuously reviewing the environmental impact of the given company in terms of its emissions and waste, for example. What's more, the newly formed Energy Management working group is also dealing with the introduction of energy management based on EN 16001:2009 and exploiting energy optimisation potential in technical and organisational terms. To this end, we regularly record consumption data and costs of select processes and activities and analyse these in terms of their environmental impact. The following table shows the key figures for the company's main location at Hohenstein-Ernstthal, which are higher than in the previous year due to the extension of the location to include a new office building and the sharp rise in personnel totals. The Group's subsidiaries are to be included in the analysis as well in future.

	2009	2008
Electrical energy consumption in kWh	2,076,314	916,086
Heating energy consumption in kWh	866,057	562,921
Water consumption in m <sup>3</sup>	3,235	2,673

CO<sub>2</sub> emissions amounted to 3,202.7 tonnes in 2009 and were caused as follows:

## CO<sub>2</sub> emissions

in tonnes



To enhance the success of environmental measures across the Group, we are closely involving our subsidiaries in these processes. Within our innovation management structures, we also motivate our employees to make suggestions concerning climate and environmental protection.

We will be publishing a sustainability report for the first time in 2010. This will set out the individual objectives and measures in the field of sustainability management and transparently document their ongoing development.

## Takeover Law Disclosures

The following disclosures made pursuant to § 315 (4) of the German Commercial Code (HGB) refer to the situation on the balance sheet date on 31 December 2009.

### Composition of share capital and securitised rights

The share capital of Roth & Rau AG amounted to an unchanged total of € 13,800,000.00 as of 31 December 2009 and was divided into 13,800,000 individual bearer shares. Each share has a proportionate amount of € 1.00 of the share capital and entitles its holder to one vote at the Annual General Meeting. All shares involve the same rights and obligations.

### Restrictions on voting rights or the assignment of shares

The Management Board is not aware of any restrictions on voting rights or the assignment of shares.

### Equity interests and voting right control

Direct or indirect shareholdings in the capital of Roth & Rau AG which exceed 10 % of the voting rights do not exist or are not known to the Management Board. There are no shares with special rights granting powers of control. Furthermore, the Board is not aware of any voting right controls in the event of employees holding an interest in the capital and not exercising their rights of control directly.

### Appointment and dismissal of Management Board members and amendments to Articles of Association

The appointment and dismissal of members of the Management Board is governed by § 84 and § 85 of the German Stock Corporation Act (AktG), as well as by § 6 of the Articles of Association of Roth & Rau AG. According to the Articles of Association, the Supervisory Board is responsible for appointing members of the Management Board and for determining their number. Amendments to the Articles of Association are adopted by the Annual General Meeting and, pursuant to § 179 et seq. of the German Stock Corporation Act (AktG), require approval by at least three quarters of the share capital represented upon adoption of the resolution. In deviation to this requirement, § 11 of the Articles of Association allows the Supervisory Board to adopt amendments to the Articles of Association which only affect the respective formulation.

### Powers of the Management Board to issue and buy back shares

#### Authorised Capital I:

Pursuant to § 5 (6) of the Articles of Association, the Management Board is authorised until 17 May 2014, subject to approval by the Supervisory Board, to increase the company's share capital on one occasion or in several partial amounts by a total of up to € 1,380k by issuing a total of up to 1,380,000 new bearer shares in return for cash contributions.

Subject to approval by the Supervisory Board, the Management Board may exclude shareholders' subscription rights



1. when the issue amount of the new shares does not fall significantly short of the stock market price of equivalent shares in the company upon the issue amount being determined pursuant to § 203 (1) and (2) and § 186 (3) Sentence 4 of the German Stock Corporation Act (AktG). This authorisation to exclude subscription rights only applies to the extent that the prorated amount in the share capital attributable to those shares to be issued in the context of the capital increase does not exceed 10 % of the share capital either upon this authorisation taking effect or upon this authorisation being exercised. The prorated amount in the share capital of those shares issued or disposed of to the exclusion of subscription rights during the term of this authorisation with direct or analogous application of § 186 (3) Sentence 4 of the German Stock Corporation Act (AktG) must be imputed to the aforementioned maximum amount for the exclusion of subscription rights; shares issued or to be issued during the term of this authorisation as a result of bonds with conversion or option rights issued in accordance with this requirement must also be imputed to the aforementioned maximum amount.
2. in order to exclude subscription rights relating to residual amounts.
3. to the extent necessary to protect against dilution in order to grant subscription rights to new shares to bearers of conversion or option rights issued or to be issued by the company or its group companies to the extent to which they would be entitled to such having exercised their conversion or option rights.

#### Authorised Capital II:

Pursuant to § 5 (7) of the Articles of Association, the Management Board is authorised until 17 May 2014, subject to approval by the Supervisory Board, to increase the company's share capital on one occasion or in several partial amounts by a total of up to € 2,760k by issuing a total of up to 2,760,000 new individual bearer shares in return for cash and/or non-cash contributions.

Subject to approval by the Supervisory Board, it may exclude shareholders' subscription rights:

1. upon any capital increase executed in return for non-cash contributions in order to acquire companies, parts of companies or shareholdings in companies.
2. in order to exclude subscription rights relating to residual amounts.
3. to the extent necessary to protect against dilution in order to grant subscription rights to new shares to bearers of conversion or option rights issued or to be issued by the company or its group companies to the extent to which they would be entitled to such having exercised their conversion or option rights.

#### Conditional Capital:

Pursuant to § 5 (8) of the Articles of Association, the share capital is conditionally increased by up to € 2,760k by issuing up to 2,760,000 new individual bearer shares. The conditional capital increase serves to grant bearer shares to the bearers or creditors of convertible and/or warrant bonds, profit participation rights and/or profit participation bonds and/or combinations of these instruments issued by the company or by its direct or indirect group companies in return for cash consideration on the basis of the authorisation adopted under Agenda Item 8 at the Annual General Meeting on 18 May 2009 to the extent that such instruments grant conversion or option rights to bearer shares in the company or stipulate an obligation to exercise such conversion rights. The issue of new bearer shares from conditional capital may only be executed at a conversion or option price corresponding to the requirements of the authorisation adopted under Agenda Item 8 at the Annual General Meeting on 18 May 2009. The conditional capital increase may only be executed to the extent that option or conversion rights are exercised or to the extent that the bearers or creditors with such conversion obligations actually meet their conversion obligations and to the extent that such obligations are not satisfied by drawing on treasury stock or new shares resulting from the exercising of authorised capital. New bearer shares have the same profit participation rights as equivalent shares already in circulation.



The Management Board is authorised, subject to approval by the Supervisory Board, to stipulate further details governing the execution of capital increases from Authorised Capital I and Authorised Capital II and the execution of conditional capital increases.

#### Powers of the Management Board to buy back shares

By resolution of the Annual General Meeting on 18 May 2009 the company is authorised until 17 November 2010 to acquire treasury stock up to a total of 10 % of the share capital. Such acquisition may also be undertaken by group companies dependent on the company or by third parties acting on behalf of the company or such group companies.

The acquisition may be executed via the stock exchange, by means of a public purchase offer addressed to all shareholders or by means of a public call for the submission of sales offers. In the case of acquisition via the stock exchange, the purchase price may not be more than 10 % higher or 30 % lower than the average closing price of the company's share weighted in terms of daily trading volumes on the Xetra trading system (or any successor system replacing the Xetra system) of the Stock Exchange in Frankfurt am Main on the three trading days preceding the acquisition of the shares. In the case of a public purchase offer or a public call for the submission of sales offers, the purchase price thereby offered or the limits of the price range offered (excluding ancillary acquisition costs) may not be more than 10 % higher or 20 % lower of the average closing price of the company's share weighted in terms of daily trading volumes on the Xetra trading system (or any successor system replacing the Xetra system) of the Stock Exchange in Frankfurt am Main on the five trading days preceding publication of the purchase offer or of the public call for the submission of sales offers. Should any substantial variances to the purchase price offered or the limits of the price range offered arise in the stock market price of the company's share in Xetra trading (or any successor system replacing the Xetra system) of the Stock Exchange in Frankfurt am Main in the period following publication of such purchase offer or such public call for the submission of sales offers, then the offer or call may be adjusted. In this case, the new offer is based on the average price on the five trading days prior to publication of such adjustment. The volume of the offer may be limited. Should the total subscription for the offer exceed this volume or, in the case of a call for the submission of sales offers, should not all offers be accepted in the event of there being several equivalent offers, then acceptance must be consistent with the ratio of the shares thereby offered. Preferred acceptance of lower numbers of up to 50 shares offered by the company for acquisition may be provided for per shareholder.

Alongside disposal via the stock exchange or by means of an offer addressed to all shareholders, the Management Board is also authorised, subject to approval by the Supervisory Board, to use the treasury stock acquired in accordance with the aforementioned authorisation as follows:

1. Treasury stock may be sold to third parties to the exclusion of shareholders' subscription rights in return for cash payment at a price that does not fall materially short of the stock market price of equivalent shares in the company at the time of such sale. This authorisation to exclude subscription rights is only valid to the extent that the shares to be disposed of do not account for a prorated amount of the existing share capital in the company of more than 10% either upon this authorisation becoming effective or upon this authorisation being exercised. This maximum amount includes the prorated amount of share capital attributable to any shares issued during the term of this authorisation to the exclusion of subscription rights by direct or analogous application of § 186 (3) Sentence 4 of the German Stock Corporation Act (AktG). It also includes those shares issued or to be issued during the term of this authorisation as a result of bonds with conversion or option rights issued in accordance with this requirement.



2. Treasury stock may be offered and assigned to third parties to the exclusion of shareholders' subscription rights in return for non-cash consideration in connection with the acquisition of companies, parts of companies or shareholdings.
3. Treasury stock may be used to the exclusion of shareholders' subscription rights to satisfy subscription and conversion rights arising as a result of the exercising of option or conversion rights or to satisfy conversion obligations granted or imposed due to the authorisation to issue warrant and/or convertible bonds, profit participation rights and/or profit participation bonds and/or combinations of these instruments adopted under Agenda Item 8 at the Annual General Meeting on 18 May 2009.
4. Treasury stock may be retired without any further resolution by the Annual General Meeting. Retirement leads to a reduction in the share capital. The Supervisory Board is authorised to amend the formulation of the Articles of Association in line with the scope of such retirement. Deviating from this provision, the Management Board may determine that the share capital should remain unchanged upon such retirement and that the portion of share capital attributable to other shares should rather increase pursuant to § 8 (3) of the German Stock Corporation Act (AktG). In this case, the Management Board is authorised to adjust the disclosure of the number of shares in the Articles of Association.

The aforementioned authorisations to acquire, retire, resell or otherwise use treasury stock may also be exercised in part.

Shareholders' statutory subscription rights to treasury stock are excluded pursuant to § 71 (1) No. 8 and § 186 (3) and (4) of the German Stock Corporation Act (AktG) to the extent that these shares are used in accordance with the aforementioned authorisations set out in Points (1) to (3).

Together with other shares in the company already acquired by the company and still in its possession or which are attributable to the company pursuant to § 71d and § 71e of the German Stock Corporation Act (AktG), the treasury stock acquired on the basis of this authorisation may at no time exceed 10 % of the company's share capital.

Roth & Rau AG did not own any treasury stock as of 31 December 2009.

#### Major agreements subject to change of control following a takeover bid

The syndicated loan agreement concluded in April 2008 includes customary clauses applicable in the event of a takeover bid. A mandatory unscheduled repayment of the full amount has been agreed in the event of major changes in the shareholder structure.

#### Compensation agreements in the event of a takeover bid

Members of the Management Board receive compensation amounting to three basic annual salaries, nevertheless not exceeding a maximum of the compensation due for their remaining contractual terms, in the event of their contracts being prematurely terminated due to a change of control. Change of control is defined as notification under § 21 (1) of the German Securities Trading Act (WpHG) that one shareholder or a pool of several shareholders hold at least 50 % of the voting rights, the conclusion of an affiliation agreement with the company as a dependent company as defined in § 291 et seq. of the German Stock Corporation Act (AktG) or incorporation of the company pursuant to § 291 of the German Stock Corporation Act (AktG). The pension commitment made to the Management Board members Carsten Bovenschen and Thomas Hengst on the basis of their employment contracts becomes vested upon any change of control, irrespective of the completion of any potential waiting periods or other contractual arrangements.

## Business Framework

### Macroeconomic Developments

The macroeconomic framework in 2009 was dominated by the global recession. In the wake of the international financial crisis, economies worldwide reported drastic downturns in the first half of 2009. Government economic stimulus packages worth billions, expansive monetary policies and the comparatively low oil price nevertheless enabled manufacturing output and trading volumes to stabilise at a significantly lower level in the second half of the year. Having said this, the crisis is by no means yet over. Unsolved problems, such as the weak constitution of international financial markets and banking systems, continuing restrictive credit terms and the expiry of state economic stimulus programmes, remain as sources of insecurity.

According to the Institute for the World Economy in Kiel (IfW), global gross domestic product (GDP) dropped by 1.0 % in 2009. The fact that this decline did not turn out more severe is due above all to the early recovery in manufacturing output in emerging Asian economies. Largely supported by government measures, the Chinese economy already began to grow rapidly again from the beginning of 2009 and is thought to have grown by 8.6 % overall. US GDP decreased by 2.5 %, even though massive economic policy interventions enabled the economy to recover from the third quarter onwards and financial markets stabilised further in the course of 2009.

Europe also benefited from a more favourable economic climate in the second half of the year. Based on estimates by the European community project Euro-zone economic outlook, GDP already showed slight growth of 0.4 % and 0.3 % in the third and fourth quarters compared with the respective previous quarters. Positive developments were seen above all in industrial manufacturing output which, following its sharp decline, benefited from the onset of the recovery in the global economy, especially in Asia. In 2009 as a whole, however, GDP in the euro area fell by 3.9 %.

With a 5.0 % drop in GDP in 2009, the German economy underwent its severest recession since the end of World War Two. According to the Federal Statistics Office, exports declined sharply by 14.7 %, while imports only fell by 8.9 %, as a result of which the net balance of trade made a negative contribution of -3.4 percentage points to GDP. The economy received support, on the other hand, from private consumer spending, which rose by 0.4 %, and government consumption spending, which grew by 2.7 %. These figures mainly reflect the state-incentivised car scrapping scheme and the federal government's economic stimulus packages. The labour market remained relatively stable in 2009, as companies mainly reacted to the crisis by cutting working hours by means of the government-sponsored reduced working hours' scheme, curtailing working time accounts or temporarily scaling down weekly working hours. All in all, according to estimates compiled by the ifo Institute, the unemployment rate amounted to 7.9 % in 2009.

### Sector Developments

Following several years of dynamic growth, in 2009 the solar industry had to contend with the negative implications of the financial crisis and the excess capacities built up along the value chain in the past. Measured in terms of turnover with solar modules, the market volume can be expected to have matched the previous year's level. According to estimates compiled by the Boston Consulting Group, the global market volume amounted to 5.8 GW in 2008.

The sharp decline in the Spanish end consumer market since mid-2008 due to the change in government subsidies and lack of financing options for large-scale solar projects led demand for



photovoltaics products to drop sharply. This development was exacerbated by the market entry of new providers, especially from Asia, thus further intensifying surplus capacities on the market. The result was a drastic fall in prices for solar module and cell prices.

The downturn in the open-air systems business meant that greater importance was accorded to the private customer business, traditionally a highly developed area in Germany. International providers increasingly also tried to acquire market share here by drawing on aggressive price policies. Against this backdrop, a slight recovery has been seen in demand for roof systems in Germany since the end of 2009.

Manufacturers reacted to the change in the market situation by adjusting their production capacities. As well as reducing working hours, they reacted in particular by postponing planned expansions in capacity necessary for the long-term growth of the solar industry. This meant that the negative effects were also felt in the equipment business. In established European and Asian markets, demand for production equipment cooled noticeably as the year progressed. Positive momentum only came from new markets, such as Korea, India, Eastern Europe and the Middle East. However, these projects were often held back by ongoing financing problems. The first signs of recovery only materialised from the fourth quarter of 2009 onwards.

Following the sharp drop in solar module prices, increasing numbers of politicians in Germany called for the feed-in tariff paid for solar energy in line with the German Renewable Energies Act to be reduced as well. In March 2010, the Federal Government approved one-off cuts of 16 % in the tariff paid for roof systems as of 1 July 2010 and cuts of 11 % to 15 % for open-air systems as of 1 October 2010. Other countries, such as the USA, China and India, by contrast, are currently planning to adopt subsidy programmes and promote the expansion of renewable energies.

## Summary of Business Framework

The economic crisis had the following main implications for the Roth & Rau Group in the 2009 financial year:

- The order situation was negatively affected by difficult financing terms for large-scale projects and by developments in the sector. New orders amounted to € 195,687k (2008: € 269,660k).
- In the case of existing projects, some delays were seen in project acceptance and the receipt of payments.
- Working hours were temporarily adjusted in line with the order situation. Production was thus converted from two shifts to one shift a day, while the share of temporary employees was reduced. New employees were mainly taken on in the research and development, service and sales departments.

We see the far-reaching structural changes over the past year as doubtlessly also having positive implications for the solar industry and the production equipment business in particular, as they have brought the point at which solar electricity becomes competitive (grid parity) a whole lot closer. The reduction in prices to their current levels would have been necessary in any case. Market developments have merely accelerated the process. Having said this, it is now important to achieve analogous reductions in manufacturers' costs as well, thus facilitating profitable business operations in the longer term. This situation harbours enormous growth potential for equipment suppliers. By developing new technologies, they can provide higher throughput rates, higher output efficiency rates and lower production costs, thus further promoting the sector's economic viability. Manufacturers, which are currently under enormous pressure to cut their costs, will have to invest in technology upgrades and production equipment of the latest generation. Should the recovery in the end consumer market continue, we therefore expect to see a new wave of investment from the second half of 2010 at the latest.

The development in government solar electricity subsidy programmes only has a limited impact on suppliers of production equipment. Overall, the subsidy programmes in the USA, China and India will help these markets to develop more rapidly, and thus impact positively on demand for production equipment. We see a gradual, moderate reduction in feed-in tariffs in Germany as representing an appropriate step towards consolidating the market and helping solar electricity to become competitive faster. Given our high international share of business, this will not impact on the business performance of Roth & Rau AG to any notable extent. Conversely, we expect increasing pressure on prices to lead to greater demand for innovative technologies and production processes.

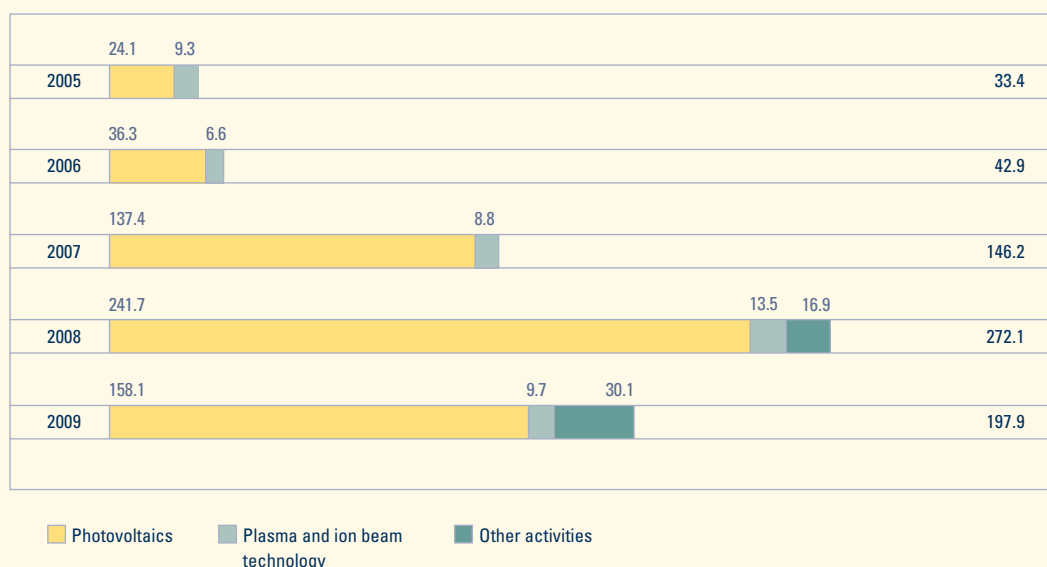
## Business Performance

### Sales and Earnings Performance

The Roth & Rau Group generated sales of € 197,903k in the 2009 financial year. Its sales were thus within the range forecast in November 2009. This 27.3 % reduction compared with the previous year was attributable to the fall in demand in the photovoltaics industry since the end of 2008, as well as to the very weak market climate, which lasted through to the fourth quarter of 2009. Fourth-quarter sales amounted to € 38,389k, as against € 74,643k in the previous year. The group companies acquired in the 2009 financial year contributed € 10,204k, or 5.2 %, to sales (2008: 4.5 %). Of total sales, € 158,085k were generated in the photovoltaics segment, € 9,690k in the plasma and ion beam technology segment and € 30,128k in the other activities segment. Further information about developments in the individual segments can be found in the Segment Report from Page 80 onwards.

#### Multiyear overview of sales

€ million

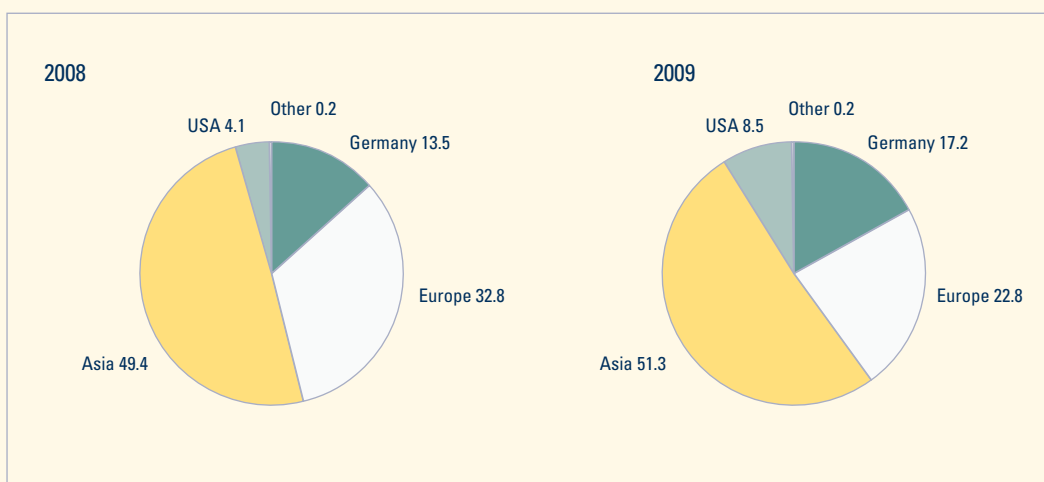




Roth & Rau once again generated the predominant share of its sales with international customers. International sales thus amounted to € 163,908k, accounting for 82.8 % of total sales (2008: 86.5 %). With sales of € 101,493k, Asia was as in previous years the main focus of the international business (2008: € 134,345k). Europe accounted for € 45,182k, and thus the second-largest share of international sales (2008: € 89,439k). The USA contributed sales of € 16,772k (2008: € 11,191k).

## Sales by region

in %



Stocks of finished products and work in progress changed by € -3,568k (2008: € 8,024k). Own work capitalised grew by € 9,558k from € 5,456k to € 15,014k, a development chiefly due to the stepping up of research and development activities. The increase in other operating income from € 2,537k to € 4,950k primarily involved badwill of € 1,141k calculated within the purchase price allocation upon the acquisition of CTF Solar GmbH (→ Notes to Consolidated Financial Statements, Note 4.1.1.2.).

A significant reduction was achieved in the materials quota, which fell from 75.4 % to 59.7 % in the past year. This figure was affected by the business-related decline in procurement volumes by approximately 50 %, as well as by the beneficial impact of ongoing enhancements to supply chain management. Moreover, this figure also reflects the year-on-year change in the measurement of sales from long-term construction contracts (→ Notes to Consolidated Financial Statements, Note 4.2.2.). Excluding this factor, the materials quota amounted to 60.0 %. Overall, the cost of materials reduced by 42.5 % from € 205,264k to € 118,059k.

The acquisitions made in the period under report and the stocking up of personnel totals in the research and development, technology, engineering, sales and administration departments led the total number of employees to increase from 606 to 874 at the balance sheet date. Personnel expenses showed a corresponding increase of 92.2 % from € 20,145k to € 38,724k in the past financial year. In conjunction with the lower volume of sales, the personnel expense quota thus rose substantially from 7.4 % to 19.6 %. Further information can be found in the Employees chapter from Page 63 onwards.

Other operating expenses grew by 18.1 % from € 28,120k to € 33,198k. This was attributable to various factors, including higher advertising and travel expenses due to the increasing internationalisation of business activities, advisory expenses incurred in connection with the acquisitions made, additional expenses for expanding external sales partnerships and the restructuring of the service business. The increase in these items was countered by a substantial reduction in merchandise delivery costs due to the decline in business volumes.

At € 8,218k, depreciation and amortisation was 35.6 % higher than the previous year's figure of € 6,062k. This item includes depreciation and amortisation of € 5,695k in connection with customary business activities, as well as budgeted depreciation and amortisation of € 2,523k on assets recognised within purchase price allocations.

The earnings margins based on sales developed in line with expectations. Earnings before interest, taxes, depreciation and amortisation (EBITDA) amounted to 12.3 %, thus more or less matching the previous year's figure of 12.7 %. At 8.1%, the EBIT margin (EBIT = earnings before interest and taxes) was in line with the forecast issued in November (2008: 10.5 %). Overall, the Roth & Rau Group generated EBITDA of € 24,318k (2008: € 34,610k) and EBIT of € 16,100k (2008: € 28,548k). It should be noted that operating earnings were negatively affected by special items of € 2,890k, including € 1,000k for non-period expenses and € 2,342k for investments in new business divisions not eligible for capitalisation. Excluding these special items, EBIT amounted to € 18,990k and the EBIT margin to 9.6 %.

Financial income amounted to € 1,824k in the period under report (2008: € 4,329k). The year-on-year decline in this figure was primarily the result of lower returns on the money markets, as well as of the reduction in cash and cash equivalents. Financial expenses, by contrast, rose from € 1,076k to € 1,217k. Overall, net financial expenses amounted to € 607k (2008: € 3,253k). Earnings before taxes (EBT) thus totalled € 16,707k, as against € 31,801k in the previous year. The EBT margin therefore amounted to 8.4 % (2008: 11.7 %). Taxes on income reduced from € 8,639k to € 3,735k, equivalent to a tax rate of 22.4 % (2008: 27.2 %)

Annual net income attributable to shareholders in Roth & Rau AG amounted to € 12,929k (2008: € 23,024k), while earnings per share amounted to € 0.94 (2008: € 1.82).

### Sales and earnings position

€ 000s	2009	2008	Change
Sales	197,903	272,122	-27.3 %
International share in %	82.8	86.5	-3.7 PP
EBITDA	24,318	34,610	-29.7 %
EBITDA margin in %	12.3	12.7	-0.4 PP
Depreciation and amortisation	8,218	6,062	35.6 %
EBIT	16,100	28,548	-43.6 %
EBIT margin in %	8.1	10.5	-2.4 PP
Net financial expenses	607	3,253	-81.3 %
EBT	16,707	31,801	-47.5 %
EBT margin in %	8.4	11.7	-3.3 PP
Earnings attributable to shareholders in Roth & Rau AG	12,929	23,024	-43.8 %
Earnings per share in €	0.94	1.82	-48.4 %



## Order Situation

Demand for production equipment in the photovoltaics industry was severely affected in 2009 by the downturn in the global economy and financing problems in the project business. New orders dropped sharply from the fourth quarter of 2008 onwards and amounted to € 83,453k at the end of the first nine months of 2009 (2008: € 221,619k). Orders only recovered noticeably in the fourth quarter, in which new orders of € 112,234k virtually made up for the weak performance previously. All in all, new orders fell by 27.4 % to € 195,687k in 2009 (2008: € 269,660k).

### Order position

€ 000s	2009	2008	Change
New orders	195,687	269,660	-27.4 %
International share in %	87.0	88.7	-1.7 PP
Orders on hand as of 31.12.	204,769	213,037	-3.9 %
Book-to-bill ratio	1.0	1.0	0.0 %

Orders on hand totalled € 204,769k as of 31 December 2009, and were thus only 3.9 % down on the previous year's figure. Of these, € 2,354k were attributable to the Group's external growth. The book-to-bill ratio, which expresses new orders as a proportion of sales, remained stable at 1.0.

### Multiyear overview of new orders

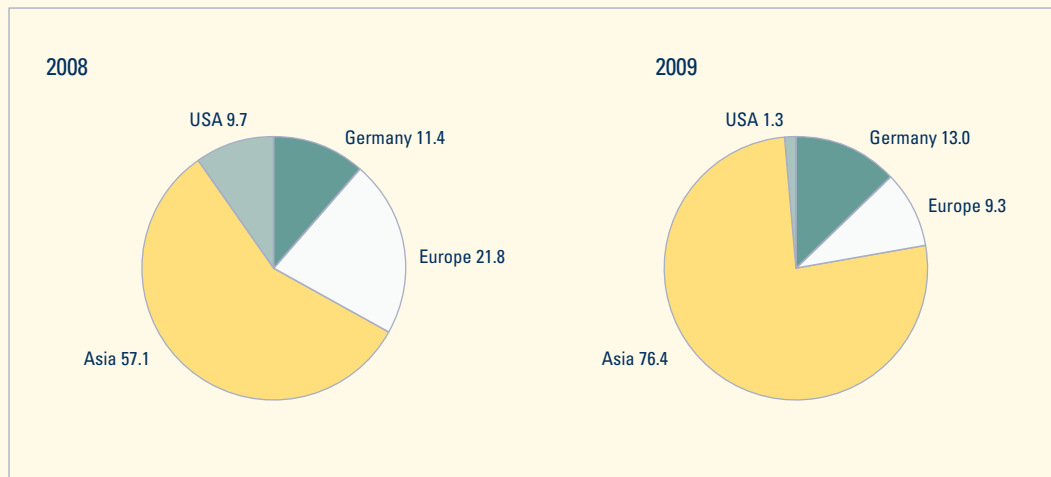
€ million

2005		16.0
2006		102.2
2007		200.6
2008		213.0
2009		204.8

The international business generated new orders of € 170,258k, equivalent to an 87.0 % share of all new orders (2008: 88.7 %). Asia once again accounted for 76.4 % and thus the largest share (2008: 57.1 %). The sharp year-on-year increase in Asia's percentage of total new orders reflects the relatively moderate decline in demand in Asia. Demand in Europe and the USA dropped far more sharply, leading their percentage shares in the regional analysis to decline by 9.3 % and 1.3 % respectively. The share of orders received from German manufacturers rose slightly from 11.4 % to 13.0 %.

## New orders by region

in %



New orders in the photovoltaics segment showed disparate developments. Demand for individual equipment was negatively affected by the marked reluctance to invest on the part of companies in established European markets. At € 56,983k, new orders in this business field were 64.4 % down on the previous year's figure. The turnkey business, on the other hand, reported growth of 36.6 % to € 104,694k, a development which was due to two factors. Firstly, demand for turnkey lines was especially high in Asia, where companies' willingness to invest remained high due to large numbers of new market entrants and strong growth in the sector despite the negative implications of the economic downturn. Secondly, in the fourth quarter of 2009 the Group received a major order from a renowned Indian customer for the gradual delivery of several turnkey production lines. All in all, order volumes in the photovoltaics segment fell to € 161,677k, down 31.7 % on the previous year's figure of € 236,595k.

Orders in the plasma and ion beam technology segment declined by 35.8 % to € 9,451k. Given that the previous year's figure had benefited from a single major order worth € 7,596k, however, the operating business was otherwise somewhat higher in 2009 than in the previous year. The Group acquired major orders in its key business fields of microelectronics, optics production and research and development systems for the photovoltaics industry. Among the most important projects for the optics industry are the supply of a coating system for mirror lenses to one of the world's leading manufacturers of lithography lenses and the production of a large-scale coating system for use in the manufacture of two-metre tessellated mirrors for the world's largest telescope (E-ELT – European Extreme Large Telescope) currently planned by the European Southern Observatory (ESO). Having received its first order for an IonScan system to correct polishing errors on optical lenses, the Group has at the same time accessed a new area of application for its IonScan technology, namely local ion beam processing for use in applications in the optics industry. In the field of microelectronics applications, a follow-up IonScan-type system for use in the manufacture of high-frequency filters (BAW) was delivered to a US customer and transferred to mass production. Four further ion beam etching systems were delivered to customers in Germany, Finland, the Netherlands and India. Moreover, a new generation of flexible inline research systems suitable for use both in photovoltaics research and in other interesting business fields, such as barrier coating, has been developed. Based on this system type, four research systems were produced for Roth & Rau Switzerland AG and similar follow-up orders were acquired for research institutes in Germany.



The other activities segment, which mainly consists of the software and spare parts and services businesses, received new orders of € 24,559k. This 33.9 % increase compared with the previous year was mainly driven by the Group's external growth.

### New orders by segment

€ 000s	2009	2008	Change
Photovoltaics	161,677	236,595	-31.7 %
Individual equipment	56,983	159,930	-64.4 %
Turnkey	104,694	76,665	36.6 %
Plasma and ion beam technology	9,451	14,730	-35.8 %
Other activities	24,559	18,335	33.9 %
Spare parts and services	10,686	9,517	12.3 %
Software	9,074	8,818	2.9 %
Miscellaneous	4,799	/	/
<b>Total</b>	<b>195,687</b>	<b>269,660</b>	<b>-27.4 %</b>

## Segment Report

The business activities of the Roth & Rau Group are subdivided into the three segments of photovoltaics, plasma and ion beam technology and other activities. Detailed information about the products and technologies in each segment can be found in the Segments and Value Creation chapter from Page 54 onwards.

Within the segment report, changes in the reporting structure compared with the previous year have made it necessary to adjust the previous year's figures. On the one hand, sales generated with spare parts and services have been reallocated from within the photovoltaics and plasma and ion beam technology segments to the other activities segment. On the other hand, in line with internal management reporting structures, segment key figures have been presented for the first time for the 2009 financial year prior to consolidation and purchase price allocation items. This enables the operating performance of the individual segments to be assessed (→ Notes to Consolidated Financial Statements, Note 3.1.).

### Photovoltaics

The sales performance of the photovoltaics segment reflects the prolonged reluctance to invest shown by cell and module manufacturers since the third quarter of 2008. The postponements in many projects aimed at developing and expanding capacities were due on the one hand to the decline in demand in the end consumer market and on the other to restrictive financing conditions in the wake of the global financial crisis. All in all, the photovoltaics segment generated sales of € 158,085k in 2009, as against € 241,748k in the record 2008 financial year. This segment's share of consolidated sales decreased from 88.8 % to 79.9 % in the period under report, a development due not only to the sales performance but also to the Roth & Rau Group's strong external growth in recent months. At 91.8 %, the international share of consolidated sales remained stable (2008: 92.1 %).



The turnkey business posted year-on-year growth, increasing its sales by 5.8 % from € 68,988k to € 72,983k. Given the long project cycles involved, this figure mainly includes projects acquired in the 2008 financial year and then completed in the period under report. In line with expectations, the share of segment sales accounted for by the turnkey business grew from 28.5 % to 46.2 %. Demand for individual equipment, which is particularly reliant on expansion investments in established markets, was affected more severely than the turnkey business by the weak performance of the industry in the past year. Against this backdrop, the individual equipment business field contributed sales of € 85,102k (2008: € 172,760k), equivalent to a 53.8 % share of segment sales (2008: 71.5 %).

The EBITDA margin in the individual equipment business field developed positively, rising from 13.6 % to 14.6 %. At 11.8 %, as against 12.8 % in the previous year, the EBIT margin also remained at a high level. The improvements made to procurement and supply chain management led to the generation of cost savings in this business field in particular. The earnings performance of the turnkey business was chiefly affected by special items of € 3,495k. These included investments of € 2,056k in new business fields which were not eligible for recognition, start-up expenses of € 699k in the cadmium telluride business field and non-period expenses of € 1,000k. These expenses were partly compensated for by the conversion of the recognition of portions of gains from a percentage of completion of 0 %, which benefited earnings in this segment to the tune of € 260k (→ Notes to Consolidated Financial Statements, Note 2.). Together, these factors therefore resulted in an EBITDA margin of 3.5 % (2008: 5.9 %) and an EBIT margin of 2.1 % (2008: 5.2 %). Adjusted for the special items referred to above, the EBIT margin amounted to 6.8 %.

Overall, the photovoltaics segment posted EBITDA of € 15,046k (2008: € 27,626k) and EBIT of € 11,586k (2008: € 25,767k). These figures correspond to an EBITDA margin of 9.5 % (2008: 11.4 %) and an EBIT margin of 7.3 % (2008: 10.7 %). Including purchase price allocation items, EBIT amounted to € 10,810k.

The investments made in the photovoltaics segment totalled € 16,619k, and thus rose year-on-year by 7.3 % (2008: € 15,492k). Investments focused on capitalised development expenses, as well as on machinery and technical equipment.

The number of employees rose to 468 as of 31 December 2009 (2008: 362).

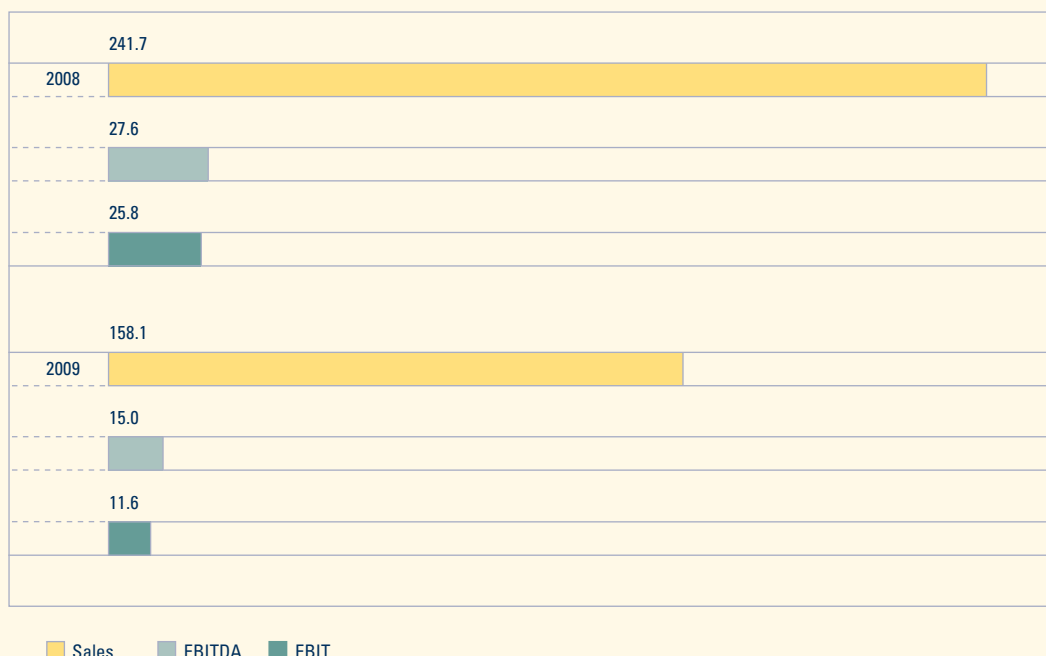
### Key figures: photovoltaics

	Individual equipment		Turnkey production lines		Total		Change
	2009	2008	2009	2008	2009	2008	
€ 000s							
Sales	85,102	172,760	72,983	68,988	158,085	241,748	-34.6 %
International share in %	90.9	91.3	92.7	94.2	91.8	92.1	-0.3 PP
EBITDA	12,464	23,574	2,582	4,052	15,046	27,626	-45.5 %
EBITDA margin in %	14.6	13.6	3.5	5.9	9.5	11.4	-1.9 PP
EBIT	10,083	22,196	1,503	3,571	11,586	25,767	-55.0 %
EBIT margin in %	11.8	12.8	2.1	5.2	7.3	10.7	-3.4 PP
Employees as of 31.12.	377	320	91	41	468	362	29.3 %



## Sales, EBITDA and EBIT

€ million



### Plasma and ion beam technology

Sales in the plasma and ion beam technology segment reduced from € 13,536k to € 9,690k in the 2009 financial year. This segment too felt the effects of the negative macroeconomic climate. At 4.9 %, the share of consolidated sales generated in this segment was at the same level as in the previous year (2008: 5.0 %). Its export quota rose by 9.1 percentage points from 31.7 % to 40.8 %.

This segment generated EBITDA of € 1,440k, as against € 2,058k in the previous year. This corresponds to an EBITDA margin of 14.9 %, thus virtually matching the previous year's figure (2008: 15.2 %). EBIT dropped from € 1,036k to € 302k. The EBIT margin thus amounted to 3.1 % (2008: 7.7 %). Including purchase price allocation items, EBIT amounted to € 293k.

Investments totalling € 1,253k were made in the plasma and ion beam technology segment in the period under report, as against € 2,251k in the previous year. In this segment too, investments largely involved capitalised development expenses. At € 989k, the volume of such expenses capitalised declined slightly compared with the previous year (2008: € 1,164k).

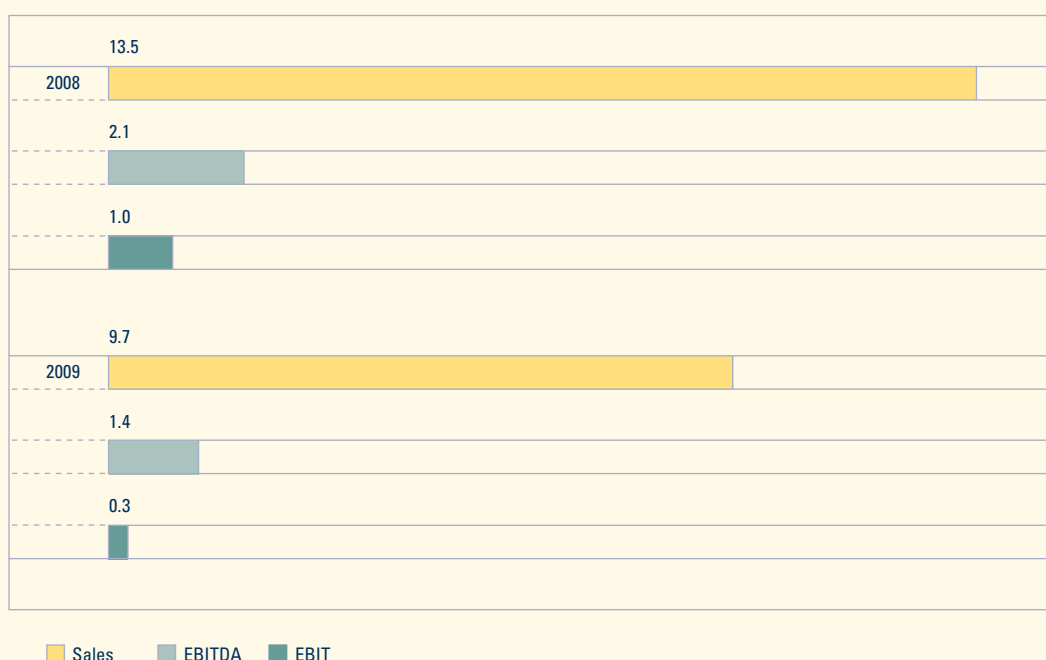
A total of 62 employees worked in this segment as of 31 December 2009 (2008: 54). This year-on-year increase by 14.8 % was principally due to the boosting of personnel resources in the Group's research and development departments.

## Key figures: plasma and ion beam technology

€ 000s	2009	2008	Change
Sales	9,690	13,536	-28.4 %
International share in %	40.8	31.7	9.1 PP
EBITDA	1,440	2,058	-30.0 %
EBITDA margin in %	14.9	15.2	-0.3 PP
EBIT	302	1,036	-70.8 %
EBIT margin in %	3.1	7.7	-4.6 PP
Employees as of 31.12.	62	54	14.8 %

## Sales, EBITDA and EBIT

€ million



## Other activities

The new other activities segment reported sales growth of 78.9 % from € 16,837k to € 30,128k, thus already accounting for 15.2 % of consolidated sales (2008: 6.2 %). Of this total, € 15,349k (2008: € 8,040k) related to the software business, which includes the sales at AIS Automation and Romaric Automation. At € 10,383k, the second-largest share of sales was contributed by the spare parts and service business (2008: € 8,797k), whose growth in the period under report was driven above all by the expansion of international locations. The miscellaneous item mainly includes sales at Muegge-electronic GmbH which cannot be allocated either to the photovoltaics segment or to the plasma and ion beam technology segment. These sales amounted to € 4,396k.

The other activities segment contributed € 7,699k to consolidated EBITDA in the period under report, equivalent to growth of 49.6 % on the previous year. EBIT rose by 41.1 % from € 4,680k to € 6,602k. The corresponding margins amounted to 25.6 % (2008: 30.6 %) and 21.9 % (2008: 27.8 %) respectively. The



year-on-year decline in profit margins, especially in the spare parts and service business, was due to high start-up costs at the new service companies in Korea, India, Singapore and the USA. Including purchase price allocation items, EBIT amounted to € 4,865k.

A total of € 5,595k was invested in the other activities segment (2008: € 33,740k). Of this sum, € 2,286k related to capitalised development expenses in the software business field and € 1,350k to the expansion of the spare parts and service business field. The previous year's figure included assets of € 19,222k acquired in the context of the AIS Automation Dresden acquisition.

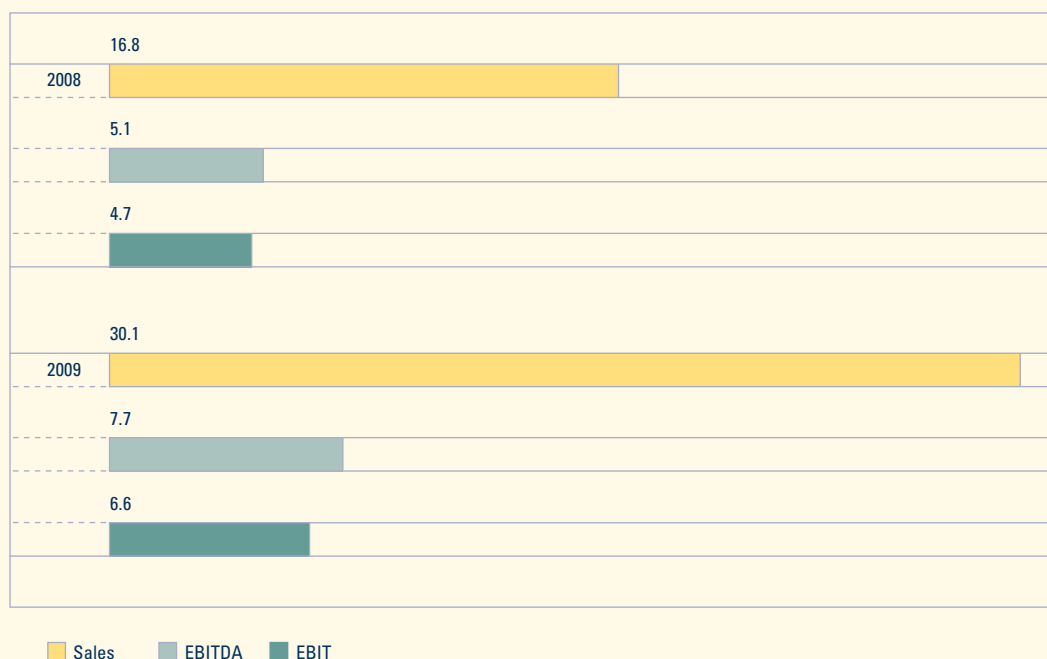
The number of employees working in this segment rose to 344 as of 31 December 2009 (2008: 190).

### Key figures: other activities

	Spare parts and services		Software		Miscellaneous		Total		Change
€ 000s	2009	2008	2009	2008	2009	2008	2009	2008	
Sales	10,383	8,797	15,349	8,040	4,396	/	30,128	16,837	78.9 %
International share in %	76.6	81.5	31.5	16.3	47.8	/	49.4	50.3	-0.9PP
EBITDA	2,021	2,947	4,639	2,200	1,039	/	7,699	5,147	49.6 %
EBITDA margin in %	19.5	33.5	30.2	27.4	23.6	/	25.6	30.6	-5.0 PP
EBIT	1,849	2,894	3,852	1,786	901	/	6,602	4,680	41.1 %
EBIT margin in %	17.8	32.9	25.1	22.2	20.5	/	21.9	27.8	-5.9 PP
Employees as of 31.12.	124	54	165	136	55	/	344	190	81.1 %

### Sales, EBITDA and EBIT

€ million



## Financial and Net Asset Position

### Principles and objectives of financial management

The Roth & Rau Group's financial management is intended to safeguard the company's financial flexibility and optimise its financing costs by working with a suitable capital structure. Two key focuses in this respect are liquidity management and financial risk management. In the past financial year we significantly enhanced our financial management and adapted it to fit the growing group structure. Specifically, the liquidity supply, financing of all group companies and currency management are now handled on a central basis by Roth & Rau AG. Internal financing guidelines aimed at optimising financing costs have also been laid down for the subsidiaries.

Liquidity budgets are compiled on an annual basis and reviewed and updated monthly. Furthermore, the Management Board also receives weekly liquidity reports providing budget/actual comparisons and short-term liquidity forecasts.

Existing credit balances are invested in line with uniform requirements across the Group in order to secure as consistent a rate of return on the credit balances as possible. Capital is invested exclusively at financial institutions of high credit standing and in financial assets with short capital commitment terms and not subject to any significant fluctuations in value.

The operating business is chiefly financed by prepayments from customers and by internal resources. Over and above this, we cover our capital requirements by taking up short and long-term financing facilities. In this, we accord priority to maintaining a highly diversified investor structure and a broad spread of maturity dates. Further financing scope is provided by our access to the capital market and the syndicated loans facility with a total volume of € 160 million and a term running until 2013. The main financing facilities include customary agreements requiring compliance with specified key figures (covenants). Roth & Rau had met all of its contractual obligations as of 31 December 2009. In future, we will also make increasing use of off-balance-sheet financing instruments, such as reverse factoring with select key suppliers in the context of working capital management or operating leases.

### Cash flow analysis

The Roth & Rau Group's cash flow statement improved significantly in the past financial year. The cash flow from operating activities amounted to € -1,359k, compared with a substantially higher negative figure of € -27,300k in the previous year. The cash flow was positively affected by the consolidated net income of € 12,972k (2008: € 23,162k), depreciation and amortisation of € 8,228k (2008: € 6,071k) and the change in deferred taxes by € 2,929k (2008: € 4,744k). Moreover, advance financing requirements also fell on account of the lower business volumes. Not least, the consistent optimisation of working capital management helped improve the volume of funds tied up in operating assets and liabilities. All in all, the increase in working capital accounted for an outflow of funds amounting to € 26,995, and thus significantly lower than the previous year's figure of € 62,161k.

The outflow of funds for investing activities amounted to € 25,243k (2008: € 47,138k). In 2008, the acquisitions of AIS Automation Dresden and Muegge-electronic had led to an outflow of funds totalling € 34,164k. In the year under report, however, company acquisitions only accounted for an outflow of € 6,781k. Moreover, investments in property, plant and equipment reduced year-on-year by € 1,741k. A total of € 10,886k was invested in development activities (2008: € 3,292k). Further details can be found in the Investments chapter from Page 88 onwards.

The repayment of loans led to an outflow of funds for financing activities of € 1,771k in the period under report (2008: € 443k). This contrasts with the inflow of funds of € 100,049k in the previous year,



which had consisted of funds totalling € 98,492k (after taxes) from the capital increase and funds of € 2,000k from the taking up of loans.

Roth & Rau had cash and cash equivalents of € 66,041k as of 31 December 2009 (2008: € 91,515k). Furthermore, unutilised guarantee and credit lines amounting to around € 136,000k were also available for the Group's financing.

### Select key figures: liquidity position

€ 000s

	2009	2008
Cash flow	25,636	34,861
Increase in working capital	-26,995	-62,161
Cash flow from operating activities	-1,359	-27,300
Cash flow from investing activities	-25,243	-47,138
Cash flow from financing activities	-1,771	100,049
Cash and cash equivalents at beginning of period	91,515	63,270
Changes in cash and cash equivalents due to changes in exchange rates, scope of consolidation and valuation	2,899	2,634
Cash and cash equivalents at end of period	66,041	91,515

### Balance sheet

Total assets rose to € 298,819k, up € 10,115k on 31 December 2008 (2008: € 288,704k), a development chiefly due to the first-time full consolidation of new subsidiaries.

Non-current assets increased overall by € 17,364k from € 62,380k to € 79,744k. They thus accounted for 26.7 % of total assets, compared with 21.6 % in the previous year. This growth was chiefly due to the increase in intangible assets by € 22,226k to € 49,585k (2008: € 27,359k). Intangible assets included capitalised development expenses amounting to € 10,886k (2008: € 3,292k), as well as intangible assets of € 15,552k determined in the context of preliminary purchase price allocations (2008: € 19,222k). Due in particular to the further expansion of research and development infrastructure at the Hohenstein-Ernstthal location, property, plant and equipment grew by € 6,953k to € 28,028k (2008: € 21,075k). Additions to non-current assets were countered by the reduction in financial assets from € 11,006k to € 384k mainly as a result of the initial consolidation of subsidiaries. Other non-current receivables reduced by € 1,340k to € 936k (2008: € 2,276k). In the previous year, this item included a loan to Muegge-electronic GmbH which was fully repaid in 2009.

Current assets showed a slight reduction of € 7,249k from € 226,324k to € 219,075k. This item was affected in particular by the decline in cash and cash equivalents by € 25,474k to € 66,041k (2008: € 91,515k) on account of the acquisitions made in the year under report and the increase in working capital. Not only that, inventories built up in the previous year could be reduced by € 6,696k from € 28,696k to € 22,000k upon the recovery in the economic situation at the end of the 2009 financial year. In the fourth quarter, for example, SiNA systems held in stock were rebuilt to meet specific customer requirements, leading inventories to reduce by € 2,215k. The net balance of receivables and liabilities from long-term construction contracts, by contrast, grew by € 24,335k. This was chiefly due to delays in the settlement of prepayments. Trade receivables and other receivables grew by € 7,515k to € 33,385k (2008: € 25,870k). This increase was due above all to projects of € 7,589k invoiced in December



and only due for payment in January 2010. Current tax claims, which in the previous year were included in other receivables, have been reported separately in the balance sheet as of 31 December 2009. These amounted to € 3,217k, as against € 4,442k at the previous year's balance sheet date.

Overall, the share of total assets accounted for by current assets declined from 78.4 % to 73.3 % (excluding cash and cash equivalents: 51.2 % compared with 46.7 % in the previous year). The share of total assets attributable to cash and cash equivalents also reduced from 31.7 % to 22.1 %.

Shareholders' equity grew by € 12,822k from € 206,456k to € 219,278k as of 31 December 2009. This development was the result of the annual net income generated in the year under report. The equity ratio, already at a high level, improved from 71.5 % to 73.4 %. Due to the reduction in EBIT, the return on equity amounted to 7.3 %, as against 13.8 % in the previous year.

Non-current debt rose by € 6,048k to € 23,762k (2008: € 17,714k). This item was affected in particular by the increase in deferred tax liabilities recognised for assets identified in the context of purchase price allocations and for capitalised development expenses. Following scheduled repayments, long-term loans reduced by € 11k to € 3,739k. Non-current debt thus accounted for 8.0 % of the balance sheet total (2008: 6.1 %).

Current debt reduced overall by € 8,755k to € 55,779k (2008: € 64,534k) and thus accounted for an 18.6 % share of the balance sheet total (2008: 22.4 %). This item was affected by the reduction in liabilities from long-term construction contracts by € 5,704k to € 2,468k (2008: € 8,172k). Moreover, partly as a result of delayed payment by some customers, prepayments received declined by € 4,995k to € 5,289k (2008: € 10,284k). This development was countered by the increase in current provisions by € 2,946k to € 10,569k (2008: € 7,623k). At € 35,189k, accounts payable and other liabilities were virtually unchanged on the previous year (2008: € 35,944k). By analogy with current tax receivables on the asset side of the balance sheet, current tax liabilities have been reported separately as of 31 December 2009, rather than under other liabilities as in the previous year. These amounted to € 1,262k, as against € 1,775k in the previous year.

Net debt (debt capital minus cash and cash equivalents) amounted to € 13,500k at the balance sheet date (2008: € -9,267k).

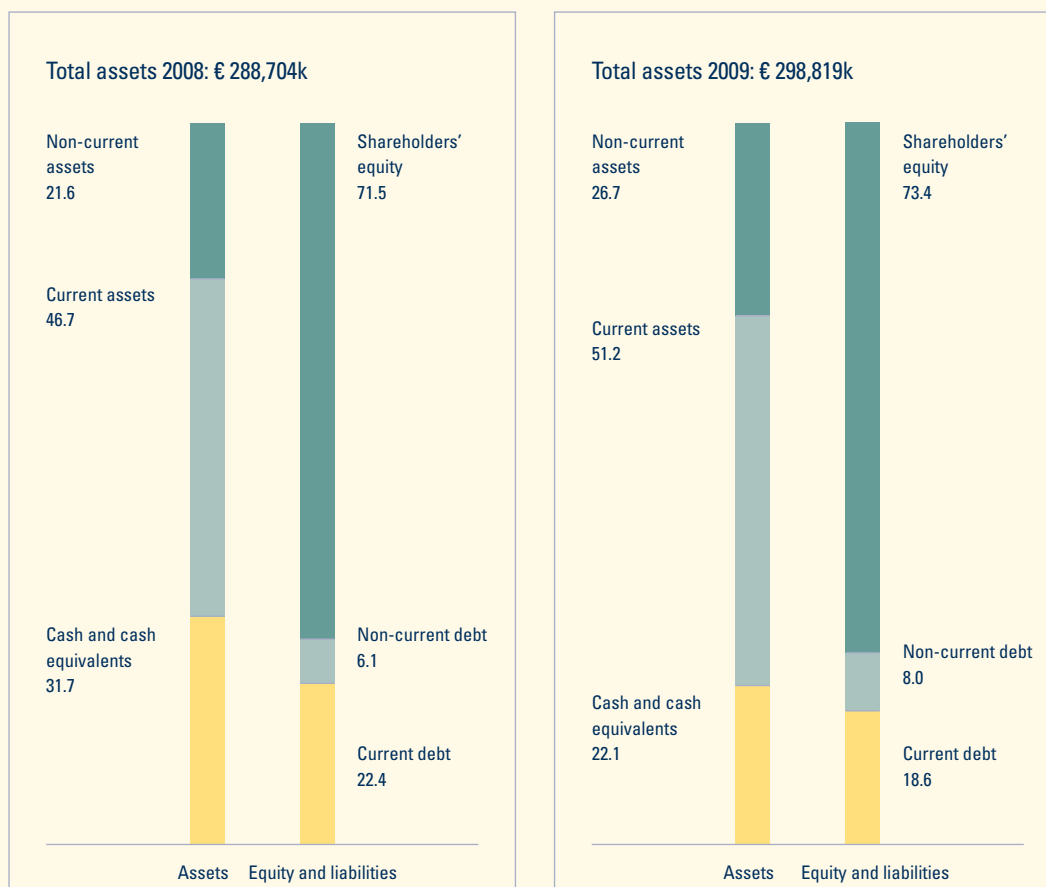
### Select key figures: balance sheet

€ 000s	31.12.09	31.12.08	Change
Total assets	298,819	288,704	3.5 %
Shareholders' equity	219,278	206,456	6.2 %
Equity ratio in %	73.4	71.5	1.9 PP
Return on equity in % <sup>1</sup>	7.3	13.8	-6.5 PP

<sup>1</sup> return on equity: EBIT/shareholders' equity as of 31 December 2009

## Asset and capital structure

in %



## Investments

Roth & Rau's investment approach is characterised above all by expansive investments in research and development. Investments mainly involve new technologies, training and development measures, expanding personnel capacities, the company's involvement in university research institutes and strategic acquisitions of new shareholdings and joint ventures.

Total investments at the Roth & Rau Group amounted to € 23,468k in the 2009 financial year, and thus fell 54.4 % short of the previous year's figure of € 51,483k. Of this total, € 10,165k (2008: € 3,292k) involved capitalised development expenses, less attributable government grants. An amount of € 668k was invested in other intangible assets (2008: € 691k). Investments in property, plant and equipment amounted to € 7,371k, as against € 9,112k in the previous year. Further investments involved outlays of € 4,248k for non-current assets at consolidated subsidiaries (2008: € 8,164k) and expenses of € 270k for the acquisition of new subsidiaries (2008: € 11,006k).

## Summary of Business Performance

As expected, the photovoltaics industry performed weakly in 2009, with numerous investments in capacity expansion being postponed for the time being. Over and above this, manufacturers' propensity to invest was negatively affected by reserved lending policies on the part of the banks. At the Roth & Rau Group, this decline in demand led to lower sales volumes of € 197,903k and an EBIT margin

of 8.1 %. We thus met the sales and earnings forecast issued in November 2009. In terms of our EBIT-DA margin, the figure of 12.3 % reported for 2009 virtually matched the previous year's figure of 12.7 %. This pleasing development was chiefly driven by the substantial savings achieved in cost of materials. The successful acquisitions of new subsidiaries in the previous year have enabled us to provide our business with a broader base, to boost our market position and to further expand our product and technology portfolio. We have thus laid a foundation for the Group's further growth. Operating earnings were also affected by the special items of € 2,890k outlined above. Orders on hand showed a moderate decline of 3.9 %. The recovery in demand in the fourth quarter of 2009 compensated virtually in full for the weak development in orders in the first nine months. We expect to see further improvements in the macroeconomic framework and the sector climate in 2010. More detailed information about future developments can be found in the Outlook from Page 95 onwards.

## Opportunity and Risk Report

The sustainable success of a company's performance is dependent on the company having a deliberate and controlled approach towards managing opportunities and risks. Dynamic worldwide growth in the sector in which the Roth & Rau Group operates regularly provides us with opportunities which we intend to exploit successfully. On the other hand, it is also important to manage potential risks appropriately so as to safeguard the company's continued existence. Opportunity and risk management therefore forms a key component of corporate management at the Roth & Rau Group.

### Opportunity and risk management system

The opportunity and risk management system is structured in such a way as to enable risks to be detected, evaluated and managed at an early stage. We define risks in this respect as including both those events which could impact negatively on the future of the Group as well as any failure to react to or adequately exploit possibilities for development and opportunities. We are making consistent efforts to improve our early warning risk detection, evaluation and management instruments and methods and to adapt these to the changing framework within which the Group operates.

The firm integration of the risk management system into existing organisational, reporting and management structures enables risks to be monitored across the entire Group. Not only that, all group employees have been made aware of potential risks and instructed to report these as appropriate. Individual risks are recorded at all group departments on a quarterly basis in line with specified risk categories and are then aggregated on group level at the central group controlling department. Subsequent evaluation provides information as to their probability of occurrence and maximum level of damages, as well as to any potential to endanger the company's continued existence. Given the long-term nature of the project business, this procedure is already adopted to analyse and assess orders in the acquisition stage. The risks identified are allocated to five risk classes requiring hierarchically structured reporting. Depending on the risk class, the decisions as to whether the risks should be avoided, reduced or hedged are taken either on operating management level or by the Management Board.

The Management Board is provided at regular intervals with detailed information on the latest risk situation. Any material risks arising at short notice or risks to the company's continued existence are reported directly and outside the usual reporting framework when necessary. The Supervisory Board is informed by the Management Board by means of quarterly aggregate risk reports compiled on the basis of individual risk evaluation.



### Significant features of the internal control and risk management system with regard to the group financial reporting process (§ 315 (2) No. 5 HGB)

The Roth & Rau Group's internal control system for financial reporting (IKS) and risk management system are structured so as to avoid or detect any material misstatements in the financial reporting process and to safeguard the effectiveness, economic efficiency and correctness of group financial reporting and compliance with the relevant legal requirements.

The group finance and group controlling departments at Roth & Rau AG are responsible for the processes involved in group financial reporting and the preparation of the management report. These are based on the regular financial reports prepared during the financial year (budget, actual and year-on-year comparison) in the context of operating business management (→ Corporate Management, Page 57). Legislative amendments, amendments to accounting standards and other requirements are continuously monitored in terms of their relevance and potential implications for the consolidated financial statements. IKS processes are amended when necessary.

The consolidation of subsidiaries is performed using a group-wide reporting system. Working closely together with the group finance department, the group controlling department is responsible for the uniform implementation of reporting and consolidation processes across the Group and is available to assist group companies in complying with the guidelines and procedures valid throughout the Group.

To minimise risks, the IKS system includes organisational checks and controls, such as work and process guidelines, consistent application of the dual control principle, the setting of responsibilities and deputisation regulations, and IT checks. Furthermore, IKS processes relevant to the financial reporting process are continuously monitored within the framework of the risk management system.

## Opportunities

### Sector-specific opportunities

The solar industry is still in the early stages of its long-term growth. This will be driven on the one hand by rising energy demand and on the other by the challenges presented by climate change. Moreover, experts view the achievement of grid parity, i.e. the point at which electricity generated from solar energy becomes competitive with gross electricity prices in private households, as representing a key growth driver. Solar cell and module manufacturers are thus coming under ever greater pressure to reduce their costs and innovate. This in turn is leading to increasing demand for inexpensive, innovative technology and production processes, a development from which Roth & Rau stands to benefit given its position as one of the leading international equipment providers.

The emergence of new, rapidly growing markets around the world is also creating opportunities. Ever more governments are accounting for the increasing importance of solar energy in their future energy supply by introducing new legislation promoting its development. Among other countries, we see the USA, India and China, where we already have locations, as especially promising markets. From a current perspective, Russia and North Africa represent further major markets of the future. To enable us to benefit early from growth opportunities in the international solar market in future as well, we are making efforts to continually expand the Roth & Rau Group's global presence.

In the turnkey business, opportunities are arising in particular due to the entry into the photovoltaics market of players alien to the sector. To develop solar cell production as quickly as possible, companies need turnkey providers capable of contributing both production equipment and all-round technological expertise. Roth & Rau has already built up a superb position in this market and will benefit from its development as soon as demand strengthens once more.

### Corporate strategy opportunities

The expansion of its technological leadership in the market and market-leading quality of its products provide Roth & Rau with corporate strategy opportunities. The company's strategic focus therefore involves investing in research and development, quality assurance and employee training measures.

Given its product range, which is largely based on research and development applications, the plasma and ion beam technology segment represents the Group's technological "germ cell", where customised system solutions and processes are developed for a variety of industrial sectors. This provides Roth & Rau with the opportunity to access further areas of application which could enable the company to diversify its business model, broaden its market base and spread its risks.

### Performance opportunities

Performance potential is available along the entire value chain, from procurement to production, sales to marketing. By integrating our suppliers into the production process, for example, we can exploit optimisation and quality reserves, thus improving our profitability. Over and above this, the increasing expansion of our international network of service and sales locations helps us to structure our distribution channels and marketing measures more efficiently.

## Risks

### Macroeconomic risks

Roth & Rau's business performance is influenced by macroeconomic developments in the sales markets relevant to the Group. To minimise any dependence on individual markets, we are further expanding our global presence and our regionally diversified customer base. Our export quota amounted to 82.8 % in the 2009 financial year.

The global economic downturn and financing "bottlenecks" for customers' investment projects led to a substantial decline in new orders in the past financial year. This will impact on our sales and earnings position in 2010. The company has adjusted its budget plans to the change in underlying conditions. In the longer term as well, macroeconomic developments will continue to be subject to considerable risks and negative factors, such as banks' ongoing liquidity problems, rising unemployment and the ongoing vulnerability of the international financial system. All in all, given its comfortable liquidity reserves and very strong market position, the Roth & Rau Group is able to act successfully even in a difficult market climate.

### Sector-specific risks

The Roth & Rau Group is especially dependent on ongoing developments in the photovoltaics industry and on this customer group's willingness and ability to invest. Our customers' investment behaviour was negatively affected in the past year by the scarcity of credit on the capital markets and the sharp fall in prices for solar cells and modules. Should the underlying framework remain unchanged or even deteriorate, then there is the risk that investment projects involving our systems could be further postponed or reduced in scale. Furthermore, any prolongation of restrictions on the financial markets or reduction in our customers' sales due to macroeconomic factors could impact negatively on the collection of systems already ordered and the punctual payment of outstanding invoices.



Changes in the regulatory framework may also inhibit customers' willingness to invest. Changes, for example, in the legislation promoting solar electricity could lead to slower market growth due to financial incentives in individual countries being reduced or abolished. This could impact negatively on demand for Roth & Rau's products. We are countering this risk by expanding our international market position and offering technologically leading products.

Risks may also arise from changes in the competitive framework. The process of market consolidation currently underway on all levels of the value chain due to mergers, strategic alliances and acquisitions means that increasing numbers of new competitors are entering the market and previous competitive relationships are changing fundamentally. Furthermore, there is the risk that competitors, especially those in Asia, will draw on aggressive pricing policies to boost their position in the market and thus acquire additional market share. We are countering these risks with the high quality of our products, technologically sophisticated solutions and customer retention measures.

#### Corporate strategy risks

There is the risk that the company may assess future market developments erroneously. Moreover, rapid technological change may mean that Roth & Rau's products no longer satisfy market requirements. We try to minimise this risk by closely observing the market and competitive climate, maintaining ongoing communications with our customers and suppliers and pursuing a broad range of research and development activities. We counter the risk of potentially erroneous technological developments by forging development partnerships with customers, suppliers and research institutes.

The acquisition of companies and company shareholdings and establishment of joint ventures are intended to contribute to the Group's long-term growth and expansion of its product portfolio. Any erroneous investment or misjudgement of the risks involved in individual transactions or of the risks resulting from the subsequent integration of companies acquired into the Group could impact negatively on the Group's net asset, financial and earnings position. These risks are limited by undertaking detailed financial and legal reviews in advance of the transactions and by the ongoing monitoring performed by the investment controlling department.

The company's rapid growth is accompanied by ever greater requirements in its organisational, management and risk structures. This leads to the risk that not all key corporate management and controlling tasks will be performed efficiently. To avert this risk, we made consistent efforts in the past financial year as well to optimise our internal processes and structures, while also further boosting the company's business resources and key management positions.

Roth & Rau's ongoing internationalisation strategy exposes the company to political, macroeconomic and legal risks in the relevant target countries which could limit the success of its expansion. We counter these risks by working on location with experienced specialists and managers who have extensive knowledge of local markets.

#### Performance risks

Roth & Rau is exposed to procurement risks resulting from the potential loss of suppliers, as it procures a major share of the components and modules necessary for its products from suppliers. The components generally involve specialist or key equipment and with its preferred suppliers Roth & Rau in some cases already has longstanding business relationships or long-term supply agreements. Should it nevertheless lose a supplier, then the company would have to turn to other providers, which could result in less favourable procurement terms or delays in production. We are managing these



risks by increasingly standardising our modules and components and by drawing on vertical integration. Not only that, in 2009 we also considerably extended the number of alternative suppliers for our most important product groups and enhanced our supplier management.

In the current market climate, there is also still the risk of supply dates being delayed on the sales side. Should completed equipment have to remain in storage for any longer period, then there is the risk that warranties granted by suppliers for components and modules thereby supplied will expire before the equipment is installed at the customer. In the individual equipment field, major progress has been made by improving quality assurance processes to ensure that components procured are subject to comprehensive quality assurance audits. This ensures that audited components subsequently stored also meet the relevant norms and quality standards even if they are only used in production at a later date. The introduction of these measures means that all components meet correspondingly high quality standards consistent with their specifications. In the turnkey production line field, the development of a supply relationship management (SRM) system has further refined the supplier selection process to ensure that, here too, improvements in the sustainability of the working relationship, and thus in quality assurance, also apply beyond the guarantee period of the articles supplied.

We avert those risks resulting from potential product defects and resultant liability claims by means of permanent production monitoring within our quality management framework. Moreover, the correct delivery and functionality of the systems is monitored by qualified service technicians and engineers. Furthermore, systems are only handed over to customers following complete inspection for potential defects.

#### Personnel risks

Personnel risks mainly involve any loss of employees in key positions or shortage in the supply of qualified specialist staff. Roth & Rau limits this risk with deputation and early succession regulations and with programmes promoting the next generation of key personnel. Not only that, we also create incentives by offering appropriate, performance-based compensation and voluntary social benefits, as well as permanently optimising working conditions. A further crucially important factor is the ongoing promotion of employee training and development measures and the tailoring of these to market requirements and the company's specific needs. To this end, in the 2009 financial year we founded the Roth & Rau Academy, which offers an extensive range of business and technical training programmes.

#### Financial risks

The Roth & Rau Group is exposed to various risks when financing its growth strategy and making the investments this involves. The company currently does not face any liquidity risk, as it has a high volume of liquid funds, adequate equity resources and long-term credit agreements. It is also currently not subject to any interest rate risk in connection with floating interest rate loans, as these have been secured with hedging instruments (interest swaps). Exchange rate risks only play a subordinate role at the Roth & Rau Group, as the overwhelming share of its international sales is invoiced in euros. When necessary, we draw on project-related currency hedging transactions. In specific individual cases, the creditworthiness of customers and suppliers has deteriorated considerably in the course of the financial and economic crisis. We counter potential credit risks (default risks) by performing detailed creditworthiness checks before accepting the relevant orders, insuring against bad debt and ensuring consistent receivables management.



In 2006, the company concluded a contract with Conergy SolarModule GmbH (formerly HighSi GmbH) concerning the supply and assembly of four cell production lines at its location in Frankfurt/Oder. The supply and assembly work has been completed. In the case of the first two lines, this was already completed in early 2008. Completion of the third and fourth lines was temporarily suspended at the end of 2008 after instalments due for payment were not transferred in spite of numerous reminders. The terms of the contract entitle the company to suspend further services when the client is in default with payment of due instalments. In Roth & Rau's opinion, the company is still entitled to claims of around € 8 million in connection with the contract. Conergy SolarModule GmbH claims that the company failed to perform the relevant services in line with the terms of the contract. It takes this as reason not to satisfy the company's payment claims and to allege that it has damages claims which supposedly exceed Roth & Rau's payment claims many times over. The parties have participated in arbitration negotiations in the meantime, but these have so far been fruitless. In parallel to these negotiations, Roth & Rau completed the third and fourth lines irrespective of the payment claims the company believes to be still outstanding. The final line commenced operations in November 2009. The possibility of a legal dispute cannot be excluded. The claims alleged by Conergy SolarModule GmbH are disputed in and of themselves. With regard to the level of the alleged claims, Conergy SolarModule GmbH has also so far failed to submit any written calculation, representation or evidence despite several requests to this effect from Roth & Rau. At present, therefore, the alleged claims cannot be evaluated in any detail in legal or economic terms.

Further details about individual financial risks can be found in Note 7.1. of the Notes to the Consolidated Financial Statements.

#### Legal risks

Patent-related legal risks may result from any unwitting infringement of third-party intellectual property rights. Given that part of Roth & Rau's expertise is not protected by patents, the possibility of competitors asserting claims against Roth & Rau due to the infringement of property rights cannot be excluded, although no such legal disputes have materialised to date. Conversely, there is also the risk that third parties will copy Roth & Rau's expertise and infringe patents or other property rights. We attempt to minimise this risk by reaching strict confidentiality agreements with employees, customers and partners in research and development projects.

We avert other legal risks involving warranty or customer recourse claims by means of efficient quality management and consistent warranty and liability regulations. Alongside these, our compliance department monitors potential sources of risk and obtains external legal advice where necessary.

Disclosures concerning pending legal disputes can be found in Note 7.2. of the Notes to the Consolidated Financial Statements.

#### Summary of risk position

To evaluate our overall risk position we assess risks in terms of their probability of occurrence. Accordingly, 8.8 % of individual risks are allocated to the "High Risk" category (probability of occurrence > 75 %), 24.6 % to the "Medium Risk" category (probability of occurrence > 50 %) and 66.6 % to the "Low Risk" category (probability of occurrence < 25 %).

All in all, the risks facing the Roth & Rau Group are thus manageable. There are currently no risks which could endanger the company's continued existence. Even in the unlikely event of all negative implications of all risks cumulatively materialising within a given year, then no risk to the company's continued existence is apparent.

## Events After the Balance Sheet Date and Outlook

### Events After the Balance Sheet Date

To promote the expansion of our strategic activities in the field of cadmium telluride thin film technology (CdTe), together with our subsidiary Roth & Rau CTF Solar GmbH we established a joint venture with a Chinese solar company in February 2010 in order to build and operate CdTe solar module production systems in China. We have thus reached a major milestone for the planned market launch of our CdTe turnkey production lines.

With the takeover of our competitor OTB Solar B.V. (OTB) in February 2010, we have further expanded our market share as a provider of crystalline solar technology equipment, as well as in our turnkey business. Not only that, we have secured access to new competitive technologies and expect to generate synergies by integrating OTB's product development capacities. A sum of € 35.5 million was agreed as the purchase price. OTB has financial liabilities of € 25 million.

To assist in implementing our long-term growth targets we secured further financial scope on the capital market, also in February 2010. Drawing on part of authorised capital, the company's share capital was increased by € 1,379,000 from € 13,800,000 to € 15,179,999. The new shares were placed at a price of € 26.00 per share in a private placement executed to the exclusion of subscription rights. The gross proceeds on the issue amounted to around € 35.9 million.

Further details about events after the balance sheet date can be found in Note 7.6. of the Notes to the Consolidated Financial Statements.

### Outlook

#### Macroeconomic developments

The macroeconomic framework has largely stabilised. According to the Kiel Institute for the World Economy (IfW), the recovery in the global economy will nevertheless only proceed at a moderate pace. Developments in industrialised nations will continue to be slowed by adjustment processes in the wake of the financial crisis and the development in credit volumes can be expected to remain weak. Not only that, governments' expansive economic policies are also expected to be curtailed. GDP growth of 2.0 % and 2.2 % has been forecast for the USA in 2010 and 2011 respectively, while the equivalent figures for the euro area amount to 0.8 % and 1.6 %. Emerging economies, by contrast, are set to show stronger output growth in the coming years. In China, the favourable macroeconomic framework will benefit economic growth in the next two years. Growth rates of 10.4 % and 9.5 % have been forecast here for 2010 and 2011. All in all, the IfW expects the global economy to grow by 3.6 % and 3.9 % in the next two years.

The ifo Institute believes that the German economy will continue to show weak developments. It will be held back in particular by the expiry of state economic stimulus measures and the high hurdles still restricting access to credit. Private consumer spending may well be boosted by the "Growth Acceleration Act" at the beginning of 2010, but will slacken as the year progresses due to rising unemployment totals. According to the ifo Institute, the unemployment rate will rise to 8.3 % in 2010 and 2011. Economic forecasts still involve a particularly high degree of uncertainty. This is also documented by the substantial variances in GDP growth forecasts for 2010, which range from +1.2 % (IfW) to +2.1 % (Deutsche Bank Research).



## Sector developments

The solar industry witnessed far-reaching structural changes and reduced growth momentum in 2009. We expect to see a slow recovery in 2010 and growth in the volume of photovoltaics capacity newly installed worldwide. The sector expects demand to be boosted by global economic stimulus packages including investment programmes for renewable energies, as well as by the increasing involvement of large electricity players.

Pressure on prices in the end consumer market will nevertheless remain high for the time being, thus generating additional insecurity. The ongoing presence of excess capacities, coupled with aggressive price strategies on the part of Chinese providers, will impact negatively on prices in the short term. In the longer term, the need to achieve grid parity will lead to further price cuts. Deutsche Bank expects module prices to stabilise at € 1.20 €/Wp for 2012 and 2013.

Against this backdrop, manufacturers are under greater pressure than ever to cut their production costs significantly if they are to survive on the market and achieve profitable growth in the longer term. We therefore expect demand for technology upgrades and replacement investments to pick up in 2010. Manufacturers, particularly those in China, have announced further expansion in their production capacities. Positive momentum will also come from the market entry of new players, especially in high-growth solar markets. The implementation of these projects is nevertheless dependent on an easing in the restrictions still in place on the financing side.

Solar energy will gain further significance internationally in the longer-term, and this will provide a sustainable boost to the photovoltaics industry. This development will be driven by the increase in global energy requirements, the limited supply of fossil fuels and ongoing climate change. Provided that the political framework and relevant infrastructure continue to develop favourably, the European Photovoltaic Industry Association (EPIA) expects solar electricity to be able to cover up to 12 % of European energy demand by 2020 (Paradigm Shift Scenario). Bank Sarasin expects global market volumes to grow to 155 GW by 2020 and points to the growing number of economic arguments in favour of solar energy.

Thanks to its international customer base, its superb position in the Asian region and its extraordinary technological competence, the Roth & Rau Group is excellently positioned as one of the world's leading equipment providers and stands to benefit from the long-term growth potential in the photovoltaics market in future as well.

## Developments at the Roth & Rau Group

The Roth & Rau Group will further expand its international market position. With this objective in mind, we will actively and consistently exploit the opportunities presented by structural changes in the market and the current period of consolidation. In February 2010 we announced our takeover of the solar activities of the OTB Group B.V. These optimally supplement our product portfolio and will help to boost our turnkey business. Alongside technological synergies, we also expect to see a positive impact on sales and earnings starting in 2011. Future acquisitions are also conceivable as a means of further expanding our product and technology portfolio.

Furthermore, we will also be stepping up our **research and development** activities in order to continually enhance the benefits our products offer to customers and to bring new technologies to market. We will be focusing in this respect on the development of new cell technologies promising higher levels of output efficiency and lower production costs. As an equipment provider, we can thus make a

decisive contribution towards promoting the competitiveness of solar energy and long-term growth in the sector. (→ Research and Development, Page 61)

We plan to achieve a breakthrough in the cadmium telluride thin film market in 2010. To this end, we agreed a joint venture with a Chinese solar company at the beginning of the year. The aim is to build and operate CdTe solar modules production systems in China. The construction of a model production facility in Brandenburg with an annual capacity of 80 MW is expected to be completed by 2013. The order to supply the turnkey line for the model factory, worth € 80 million, will contribute around € 10 million to consolidated sales in 2010. We see CdTe thin film technology as harbouring great growth potential in the long term, as it optimally satisfies the market's need for low production costs and competitive levels of output efficiency.

In our **plasma and ion beam technology** segment we will be focusing once again in 2010 on market segments with high development potential, such as the optics industry. At the end of 2009 we already received a major order for a precision optics polishing error correction system based on our IonScan system.

We will be upholding our **investment strategy** without amendment in the 2010 financial year. As in the previous year, one key focus will involve research and development. Roth & Rau AG will invest around € 25 million and thus around 40 % more than in the previous year. This figure includes the installation of a pilot line for the development of crystalline solar cell concepts at the Technical Centre in Hohenstein-Ernstthal. Over and above this, we have sufficient financial scope to exploit any potential acquisition opportunities offered by the current market situation.

The Group still has a robust foundation in terms of its **financing** and **liquidity**. With liquid funds of € 66,041k as of 31 December 2009 and unutilised guarantee and credit lines of around € 136,000k, we are in a comfortable position to start the new financial year.

One aim of our personnel management in 2010 is to further expand the Roth & Rau Academy successfully launched to promote staff development, thus helping to raise employee qualification and satisfaction levels on an ongoing basis. This also helps enhance our attractiveness as an employer given the tough competition for good employees. We plan to take on new staff in our research and development and sales departments in particular. The curtailment of production from two shifts to one shift a day was lifted at the beginning of the new financial year, thus enabling us increase personnel capacity deployment levels once again in this area as well. We can react flexibly to any further recovery in the order situation by deploying temporary employees.

In our **procurement activities**, we will be extending and intensifying the procurement concept we have newly introduced. Specifically, we will be pressing further ahead with the introduction of a continuous evaluation system in the field of supplier management. As the economic recovery gathers pace, we expect to see a sharp increase in procurement volumes in 2010, accompanied by a return to higher commodity prices. Together, these factors will lead to higher costs of materials. We expect to generate savings, on the other hand, by increasingly pooling the Group's procurement activities and by expanding procurement on location in Asia.

Our **order situation** already recovered noticeably in the fourth quarter of 2009 and the first months of the new year. Investments by cell and module manufacturers are expected to regain momentum from the second half of 2010 at the latest, as capacity expansion and the introduction of more efficient production technologies will be of crucial importance for their future growth. We therefore expect to receive new orders of at least € 200 million in 2010. In the short term, ongoing project financing difficulties may create continued uncertainty.

Assuming that the macroeconomic climate continues to develop positively in the coming months, we expect to generate consolidated sales of € 285 million and an EBIT margin of around 9.0 % in the 2010 financial year. ■

Hohenstein-Ernstthal, 26 March 2010



Dr. Dietmar Roth  
CEO



Carsten Bovenschen  
CFO



Thomas Hengst  
CSO



Roth & Rau AG  
Annual Report 2009

# Consolidated Financial Statements

as of 31 December 2009 (IFRS)

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## Consolidated Balance Sheet

Assets € 000s	Notes	31.12.2009	31.12.2008
<b>Non-current assets</b>			
Intangible assets	4.1.1.	49,585	27,359
Property, plant and equipment	4.1.2.	28,028	21,075
Financial assets	4.1.3.	384	11,006
Other non-current receivables	4.1.4.	936	2,276
Investment property	4.1.5.	160	171
Deferred tax assets	4.1.6.	651	493
<b>Total non-current assets</b>		<b>79,744</b>	<b>62,380</b>
<b>Current assets</b>			
Inventories	4.2.1.	22,000	28,696
Receivables from long-term construction contracts	4.2.2.	94,432	75,801
Trade receivables and other receivables			
Current tax receivables	4.2.3.	33,385	25,870
Cash and cash equivalents	4.2.4.	3,217	4,442
<b>Total current assets</b>	4.2.5.	<b>66,041</b>	<b>91,515</b>
<b>Total current assets</b>		<b>219,075</b>	<b>226,324</b>
<b>Total assets</b>		<b>298.819</b>	<b>288.704</b>

**Shareholders' equity and debt**  
 € 000s

Notes

31.12.2009

31.12.2008

**Shareholders' equity**

Share capital	4.3.1.	13,800	13,800
Capital reserve	4.3.2.	149,498	149,457
Revenue reserves	4.3.3.	6,041	6,041
Other reserves	4.3.4.	54	245
Unappropriated retained earnings	4.3.5.	47,744	34,815
Shares attributable to shareholders in parent company		217,137	204,358
Minority interests	4.3.6.	2,141	2,098
<b>Total shareholders' equity</b>		<b>219,278</b>	<b>206,456</b>

**Non-current debt**

Non-current loans	4.4.1.	3,739	3,750
Deferred tax liabilities	4.4.2.	19,914	13,840
Non-current provisions	4.4.3.	109	124
<b>Total non-current debt</b>		<b>23,762</b>	<b>17,714</b>

**Current debt**

Liabilities from long-term construction contracts	4.5.1.	2,468	8,172
Trade payables and other liabilities	4.5.2.	35,189	35,944
Prepayments received	4.5.3.	5,289	10,284
Current loans	4.5.4.	1,002	736
Current tax liabilities	4.5.5.	1,262	1,775
Other current provisions	4.5.6.	10,569	7,623
<b>Total current debt</b>		<b>55,779</b>	<b>64,534</b>

Summe Schulden

79,541

82,248

**Summe Eigenkapital und Schulden****298,819****288,704**

## Consolidated Income Statement

€ 000s	Notes	01.01.–31.12.2009	01.01.–31.12.2008
<b>Sales</b>	5.1.	197,903	272,122
Increase/decrease in stocks of finished products and work in progress	5.2.	-3,568	8,024
Capitalised services rendered to own-account	5.3.	15,014	5,456
Other operating income	5.4.	4,950	2,537
		214,299	288,139
Cost of materials	5.5.	-118,059	-205,264
Personnel expenses	5.6.	-38,724	-20,145
Amortisation of intangible assets and depreciation of property, plant and equipment	5.7.	-8,218	-6,062
Other operating expenses	5.8.	-33,198	-28,120
<b>Earnings before interest and taxes</b>		16,100	28,548
Financial income	5.9.	1,824	4,329
Financial expenses	5.9.	-1,217	-1,076
<b>Net financial result</b>		607	3,253
<b>Earnings before taxes</b>		16,707	31,801
Taxes on income	5.10.	-3,735	-8,639
<b>Earnings after taxes</b>		12,972	23,162
Of which: attributable to minority interests	4.3.6.	43	138
Of which: attributable to shareholders in Roth & Rau AG		12,929	23,024
Earnings carried forward from previous year		34,815	15,798
Allocation to revenue reserves		0	-4,007
<b>Unappropriated retained earnings</b>	4.3.5.	47,744	34,815
<b>Basic earnings per share in EUR/share (IAS 33)</b>	5.1.1.	0.94	1.82

## Consolidated Statement of Comprehensive Income

€ 000s	01.01.– 31.12.2009	01.01.– 31.12.2008
Earnings after taxes on income	12,972	23,162
Change in amount recognised in equity (currency translation)	8	0
Change in fair value of available-for-sale financial assets	167	680
Amount transferred to income statement	-802	-169
Taxes on income	186	-188
Change in amount recognised in equity (available-for-sale financial assets)	-449	323
Change in fair value of derivatives used for hedging purposes	400	-374
Amount transferred to income statement	-47	21
Taxes on income	-103	103
Change in amount recognised in equity (cash flow hedges)	250	-250
<b>Total earnings after taxes and other comprehensive income</b>	<b>12,781</b>	<b>23,235</b>
Of which earnings attributable to minority interests	43	138
Of which earnings attributable to shareholders in Roth & Rau AG	12,738	23,097

## Consolidated Cash Flow Statement

€ 000s	Notes	01.01.– 31.12.2009	01.01.– 31.12.2008
Consolidated net income		12,972	23,162
Depreciation / amortisation of non-current assets	4.1.	8,228	6,071
Gains / Losses on disposal of property, plant and equipment		992	2
Change in deferred taxes	5.10.	2,929	4,744
Changes in value of derivative financial instruments		361	0
Change in non-current provisions	4.4.3.2.	-14	-661
Non-cash expenses and income		127	1,537
Change in value of equity-settled phantom stock option plan	4.4.3.1.	41	6
<b>Cash flow</b>		<b>25,636</b>	<b>34,861</b>
Increase (-) / decrease (+) in inventories	4.2.1.	8,570	-16,367
Increase (-) / decrease (+) in receivables from long-term construction contracts	4.2.2.	-17,948	-39,709
Increase (-) / decrease (+) in receivables and other assets	4.2.3.	-4,043	-17,197
Increase (+) / decrease (-) in prepayments received on orders	4.5.3.	-5,173	10,214
Increase (+) / decrease (-) in liabilities from long-term construction contracts	4.5.1.	-5,878	-19,187
Increase (+) / decrease (-) in business-related liabilities	4.5.2.	-2,523	20,085
<b>Increase (-) / decrease (+) in working capital</b>		<b>-26,995</b>	<b>-62,161</b>
<b>Cash flow from operating activities</b>		<b>-1,359</b>	<b>-27,300</b>
Investments in intangible assets	4.1.1.	-11,578	-3,983
Investments in property, plant and equipment	4.1.2.	-7,372	-9,112
Acquisition of subsidiaries, less cash acquired	4.1.1.2.	-6,158	-21,807
Investments in financial assets	4.1.1.4.	-270	-11,003
Loans to affiliated companies		0	-1,270
Proceeds from disposal of property, plant and equipment		135	37
<b>Cash flow from investing activities</b>		<b>-25,243</b>	<b>-47,138</b>
Capital increase		0	101,282
Costs of capital increase		0	-2,790
Taking up of loans		0	2,000
Redemption of loans	4.4.1.	-1,771	-443
<b>Cash flow from financing activities</b>		<b>-1,771</b>	<b>100,049</b>
Increase (+) / decrease (-) in cash and cash equivalents		-28,373	25,611
Cash and cash equivalents at beginning of period	4.2.5.	91,515	63,270
Changes in cash and cash equivalents due to changes in exchange rates, scope of consolidation and valuation		2,899	2,634
<b>Cash and cash equivalents at end of period</b>		<b>66,041</b>	<b>91,515</b>



## Statement of Changes in Group Equity

€ 000s	Shareholders' equity 01.01.	Contributions from capital increases	Capital contributions from minority shareholders	Net income for period and other comprehensive income for period	Employee stock option programmes	Shareholders' equity 31.12.
<b>01.01 – 31.12.2009</b>						
Share capital	13,800	0	0	0	0	13,800
Capital reserve	149,457	0	0	0	41	149,498
Revenue reserves	6,041	0	0	0	0	6,041
Other reserves	245	0	0	-191	0	54
Unappropriated retained earnings	34,815	0	0	12,929	0	47,744
Minority interests	2,098	0	0	43	0	2,141
<b>Total</b>	<b>206,456</b>	<b>0</b>	<b>0</b>	<b>12,781</b>	<b>41</b>	<b>219,278</b>
<b>01.01 – 31.12.2008</b>						
Share capital	2,530	11,270	0	0	0	13,800
Capital reserve	62,229	90,012	0	-2,790	6	149,457
Revenue reserves	2,034	0	0	4,007		6,041
Other reserves	172	0	0	73	0	245
Unappropriated retained earnings	15,798	0	0	19,017	0	34,815
Minority interests	0	0	1,960	138	0	2,098
<b>Total</b>	<b>82,763</b>	<b>101,282</b>	<b>1,960</b>	<b>20,445</b>	<b>6</b>	<b>206,456</b>

Roth & Rau AG  
Annual Report 2009

# Notes to the Consolidated Financial Statements

as of 31 December 2009

## 1. Organisation and principle accounting policies

### 1.1. Business and company

Roth & Rau AG, the parent company based in Hohenstein-Ernstthal (ISIN DE000A0JCZ51), is a supplier of plasma processing systems to the photovoltaics industry. In addition, the company offers components and processing systems based on plasma and ion beam technology to other sectors. The systems are developed by Roth & Rau and produced and marketed worldwide by the photovoltaics and plasma and ion beam technology segments.

Roth & Rau AG is entered in the Commercial Register of Chemnitz District Court under the number HRB 19213. It is a company limited in liability, founded in Germany and based in 09337 Hohenstein-Ernstthal, An der Baumschule 6–8.

The consolidated financial statements of the Roth & Rau Group (“the Group”) for the financial year as of 31 December 2009 were approved for publication by resolution of the Management Board at its meeting on 26 March 2010. The Management Board of Roth & Rau AG comprises Dr. Dietmar Roth (CEO), Carsten Bovenschen (CFO) and Thomas Hengst (CMO). The Supervisory Board consists of Eberhard Reiche (Supervisory Board Chairman), Prof. Dr. Alexander Michaelis (Deputy Chairman) and Daniel Schoch.

### 1.2. Principal accounting policies

#### 1.2.1. Basis of preparation

In general, application has been made of the historic cost principle in the preparation of these consolidated financial statements, with the exception of investment property, derivative financial instruments and financial assets available for sale, which have been measured at fair value.

The consolidated financial statements have been compiled in euros, the Group’s functional currency. Unless otherwise stated, all figures have been rounded up or down to the nearest thousand (€ 000s) in line with customary commercial practice.

In these IFRS annual financial statements and the comparative information contained therein, application has been made without exception of all International Financial Reporting Standards (IFRS/IAS) of the International Accounting Standards Board (IASB) and Interpretations of the International Financial Reporting Interpretations Committee (IFRIC) in the form requiring compulsory application in the EU as of the balance sheet date.

The following table presents the new or revised Standards (IAS/IFRS) and Interpretations (IFRIC) requiring compulsory application from 1 January 2009 or voluntarily applied prematurely from 1 January 2009, as well as their implications for the Group:



Standard/Interpretation		Compulsory application from	Adopted by EU Commission	Implications
IAS 1R	Presentation of Financial Statements – extensive revision, including requirement to include statement of comprehensive income	1 January 2009	17 December 2008	implications only for presentation, not for net asset, financial or earnings position
IAS 23R	Borrowing Costs - extensive revision to prohibit immediate recognition as expenses	1 January 2009	10 December 2008	no material implications
IAS 32 and IAS 1	Financial Instruments: Presentation (puttable financial instruments and obligations arising upon liquidation)	1 January 2009	21 January 2009	no material implications
IAS 39 / IFRIC 9	Financial Instruments: Recognition and Measurement (reassessment of embedded derivatives)	1 July 2009	15 October 2008	no material implications
IFRS 1 IAS 27	Cost of interests in subsidiaries, joint ventures and associates	1 January 2009	23 January 2009	no material implications
IFRS 2	Share-based Payment (Vesting Conditions and Cancellations)	1 January 2009	16 December 2008	no material implications
IFRS 7	Financial Instruments: Disclosures – amendments to improve disclosures on fair value and liquidity risk	1 January 2009	27 November 2009	no material implications
IFRS 8	Operating Segments	1 January 2009	21 November 2007	implications only for segment reporting, not for net asset, financial or earnings position
IFRS Improvements (2008)	Amendments resulting from annual IFRS improvements in May 2008 (Annual Improvements Project 2008)	1 January / 1 July 2009	23 January 2009	no material implications
IFRIC 13	Customer Loyalty Programmes	1 July 2008	16 December 2008	no implications
IFRIC 14 / IAS 19	IAS 19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction	1 January 2009	16 December 2008	no material implications

R = Revised

The following table presents the new or revised Standards (IAS/IFRS) and Interpretations (IFRIC) not yet requiring compulsory application in the 2009 financial year, as well as their implications for the Group:

Standard/Interpretation		Compulsory application from	Adopted by EU Commission	Implications
AS 24	Related Party Disclosures: revised definition of related parties	1 January 2011	no	no material implications
IAS 27, IAS 28, IAS 31	Follow-up amendments due to amendments to IFRS 3	1 July 2009	3 June 2009	no material implications
IAS 32	Financial Instruments: Presentation – Classification of Rights Issues	1 February 2010	23 December 2009	no material implications
IAS 39	Financial Instruments: Recognition and Measurement (Eligible Hedged Items)	1 July 2009	15 September 2009	no material implications
IFRS 1	Additional Exemptions for First-time	1 January 2010	no	no material implications
IFRS 1	Adopters Restructuring of Standard	1 July 2009	25 November 2009	no material implications
IFRS 2	Share-based Payments – Group	1 January 2010	no	no material implications
IFRS 3R	Cash-settled Share-based Payments	1 July 2009	3 June 2009	no material implications
IFRS 9	Business Combinations Financial Instruments	1 January 2013	no	implications for recognition and presentation of financial instruments
IFRS Improvements (2009)	Improvements to various Standards	1 January 2010	no	no material implications
IFRIC 12	Service Concession Arrangements	1 January 2010	25 March 2009	no implications
IFRIC 14	Prepayments of a Minimum Funding Requirement	1 January 2011	no	no implications
IFRIC 15	Agreements for the Construction of Real Estate	1 January 2010	22 July 2009	no implications
IFRIC 16	Hedges of a Net Investment in a Foreign Operation	30 June 2009	4 June 2009	no implications
IFRIC 17	Distributions of Non-cash Assets to Owners	1 July 2009	26 November 2009	no implications
IFRIC 18	Transfers of Assets from Customers	1 July 2009	27 November 2009	no implications
IFRIC 19	Extinguishing Financial Liabilities with Equity Instruments	1 July 2010	no	no implications



### 1.2.2. Consolidation principles

The consolidated financial statements include the financial statements of Roth & Rau AG and its subsidiaries as of 31 December 2009. Subsidiaries are fully consolidated from the date of acquisition, i.e. from the date on which the Group gains control. The financial statements of the subsidiaries have been prepared using the same accounting policies and as of the same balance sheet date as the financial statements of the parent company.

All intragroup balances, income and expenses have been eliminated in full, as have all unrealised gains and losses on intragroup transactions.

Furthermore, one German associate company has been included pursuant to IAS 28, as Roth & Rau AG holds an indirect 20 % shareholding and is involved in its management.

One indirectly held 50% shareholding has also been included as a joint venture pursuant to IAS 31, as this company is jointly managed and it is therefore possible to exercise significant influence over the company's business policy.

These companies have been included in the consolidated financial statements using the equity method and have initially been recognised at cost.

The Group's share of profit and losses at these companies has been recognised in the income statement from the date of acquisition, while its share of changes in reserves has been recognised in group reserves. Accumulated changes following acquisition have been offset against the value of the investment.

Unrecognised gains on transactions performed between group companies and these companies included using the equity method have been eliminated in line with the level of shareholding held in these companies by Roth & Rau AG.

To ensure uniform accounting policies at all companies included in the consolidated financial statements, their accounting policies have been based on uniform group accounting guidelines.

The following subsidiaries have been included in the consolidated financial statements as of 31 December 2009:

#### Photovoltaics segment

##### Roth & Rau Dünnschicht Solar GmbH

Roth & Rau Dünnschicht Solar GmbH, based in Hohenstein-Ernstthal, was founded as a wholly-owned subsidiary of Roth & Rau AG by notarised agreement dated 1 February 2008. The company's object is the development of modern surface technologies for use in plant construction, especially for refining thin film surfaces in the context of solar and photovoltaics technology, the industrial manufacture and sale of these systems and of system components of this nature, as well as the performance of related services. The company's share capital amounts to € 25k. The company was already consolidated in the quarterly financial statements as of 31 March 2008.

##### SLS Solar Line Saxony GmbH

Based on a notarised agreement dated 11 February 2008, the subsidiary SLS Solar Line Saxony GmbH ("SLS") was jointly founded with USK Karl Utz Sondermaschinen GmbH ("USK") to develop and manufacture automation solutions for use in silicon cell production. The company's share capital amounts



to € 4,000k. Roth & Rau AG holds 51% and USK 49% of the company's shares. The company was already consolidated in the quarterly financial statements as of 31 March 2008.

#### Roth & Rau Switzerland AG

Roth & Rau Switzerland AG was established as a wholly-owned subsidiary of Roth & Rau AG by notarial agreement dated 8 April 2008. The company's object is the performance of development work in cooperation with the University of Neuchâtel – Institute of Microtechnology in the field of heterojunction technology (HJT). Its share capital amounts to CHF 100,000. Roth & Rau Switzerland AG was consolidated for the first time as of 30 June 2008.

#### Roth & Rau Italy S.r.l. (previously Tecnofimes S.r.l.)

Roth & Rau AG took over 100 % of the shares in Tecnofimes S.r.l., based in Monza/Italy, as of 1 January 2009. Tecnofimes provides production equipment for thermal processes, such as diffusion and firing, used in the manufacture of crystalline solar cells. In future, new types of in-line diffusion furnaces are to be developed jointly and produced at Roth & Rau. With the fields of diffusion and firing, Roth & Rau is integrating two further process steps which, alongside antireflective coating, have a major influence on the output efficiency of crystalline silicon collar cells. The name of the Italian subsidiary was changed to Roth & Rau Italy S.r.l. as of 7 October 2009. The company was consolidated for the first time in the quarterly financial statements as of 31 March 2009.

#### Roth & Rau CTF Solar GmbH (previously: CTF Solar GmbH)

On the basis of a share purchase and assignment agreement dated 23 February 2009, Roth & Rau AG acquired all of the shares in CTF Solar GmbH, Kelkheim, from the management and the investment company Murphy & Spitz Green Capital AG. Roth & Rau CTF Solar GmbH has the expertise required to manufacture turnkey production lines for use in the manufacture of thin film solar modules on a cadmium telluride basis (CdTe solar modules). Roth & Rau plans to offer CdTe turnkey production lines as a general contractor in future, drawing in the process on its extensive experience with turnkey lines for crystalline solar technology. Roth & Rau will not only be responsible for project management, but will also produce the coating systems for the deposition of the cadmium telluride. These represent one of the key components in the overall production process and also account for 58 %, and thus the major share of the investment costs for the entire production line. The company was consolidated for the first time in the quarterly financial statements as of 31 March 2009. The company headquarters was transferred to Hohenstein-Ernstthal as of March 2010.

### Plasma and ion beam technology segment

#### Roth & Rau MicroSystems GmbH (previously: Ion-Tech GmbH)

Roth & Rau AG acquired 100 % of the shares in Ion-Tech GmbH (closely related company) on the basis of a share purchase and assignment agreement dated 15 December 2008. The takeover of this closely related company is intended to create a clearer group structure and to contribute towards restructuring the plasma and ion beam technology (PIB) segment. Ion-Tech operates in the field of component production for the PIB business segment. The shareholders' meeting held on 8 October 2009 resolved to rename the company as Roth & Rau MicroSystems GmbH. It was also resolved to increase the company's share capital by € 475,000 from € 25,000 to € 500,000 by way of an effective capital increase in return for non-cash contributions. The plasma ion beam technological operation of Roth & Rau AG was contributed as a non-cash contribution. The capital increase was registered in the Commercial Register on 21 December 2009. The company was consolidated for the first time as of 1 January 2009.

## Other activities segment

### AIS Automation Dresden GmbH

AIS Automation Dresden GmbH operates as a system and software provider in the field of automation and information technology for the photovoltaics and semiconductor industries. By notarised purchase and assignment agreement dated 9 June 2008, Roth & Rau AG acquired 100 % of the shares in AIS Automation Dresden GmbH. The company was consolidated for the first time in the quarterly financial statements as of 30 September 2008.

### Romarc Automation Design Inc. (in the future: Roth & Rau Software Automation USA Inc.)

Solar Holding Inc. acquired 100 % of the shares in Romarc Automation Design Inc (Romarc), based in Salt Lake City, USA, on 1 July 2009. Founded in 2001, Romarc specialises in manufacturing execution systems (MES) and has extensive experience in software automation for highly standardised manufacturing companies, especially in the semiconductor industry. The company was consolidated for the first time in the quarterly financial statements as of 30 September 2009.

### Roth & Rau Muegge GmbH (previously: Muegge-electronic GmbH)

Roth & Rau AG acquired 100 % of the shares in Muegge-electronic GmbH on the basis of a share purchase and assignment agreement dated 21 November 2008. The contract came into force on 5 December 2008. The operations of Muegge-electronic GmbH involve the development, manufacture and sale of electro-technical appliances and systems for use in microwave technology and industrial electronics applications. The company supplies Roth & Rau with microwave systems technology, one of the core components of the SiNA antireflective coating systems. The company's name was changed to Roth & Rau Muegge GmbH as of 11 January 2010. Roth & Rau Muegge GmbH was consolidated for the first time as of 1 January 2009. Roth & Rau Muegge GmbH holds a 50 % shareholding in Cober Muegge LLC, Norwalk, USA. Furthermore, Roth & Rau Muegge GmbH holds a 20 % shareholding in R³T GmbH, Taufkirchen, Germany. Both companies were included in the consolidated financial statements using the equity method.

The prorated assets and liabilities of companies accounted for using the equity method are presented in the following table:

€	20% R³T GmbH	50% Cober Muegge
Non-current assets	5,086	0
Current assets	98,592	86,134
Non-current debt	0	0
Current debt	88,336	18,745
Share of total earnings	7,023	7,870

## Service and Sales Companies

### Solar Holding Inc.

Solar Holding Inc. was founded in Delaware by notarised agreement dated 3 March 2008. This wholly-owned subsidiary is intended to serve as a subholding of Roth & Rau AG for its US subsidiaries. The share capital amounts to US\$ 100. The company was consolidated for the first time in the interim financial statements as of 30 September 2008.

**Roth & Rau USA Inc.**

Solar Holding Inc. established Roth & Rau USA Inc., a wholly-owned subsidiary, by notarised agreement dated 10 March 2008. The business activities of Roth & Rau USA Inc. should primarily involve sales and service in the US market. Its share capital amounts to US\$ 100. The company was consolidated for the first time in the interim financial statements as of 30 September 2008.

**Roth & Rau (Shanghai) Trading Co. Ltd.**

Roth & Rau AG is the sole shareholder of Roth & Rau (Shanghai) Trading Co., Ltd., which was founded in March 2008 to manage sales, installation and customer service in the Chinese market. Individuals previously employed at the representative office in Shanghai were taken over by the subsidiary in May 2008. The subsidiary's share capital amounts to € 500k. Roth & Rau (Shanghai) Trading Co., Ltd. was consolidated for the first time as of 30 June 2008.

**Roth & Rau Singapore Pte. Ltd.**

Roth & Rau AG founded its wholly-owned subsidiary Roth & Rau Singapore Pte. Ltd. on 18 August 2008. Its share capital amounts to SGD 10,000. Roth & Rau Singapore Pte. Ltd. acts as a service and sales company in Asia. The company was consolidated for the first time as of 31 December 2008.

**Roth & Rau Korea Co. Ltd.**

Roth & Rau AG founded its wholly-owned subsidiary Roth & Rau Korea Co. Ltd. in December 2008. The share capital of € 30k was paid in on 7 January 2009. The business activities of Roth & Rau Korea Co. Ltd. should chiefly involve sales and services in the South Korean market. The company was consolidated for the first time as of 31 March 2009.

**Roth & Rau Australia Pty. Ltd.**

Roth & Rau Australia Pty Ltd., based in Sydney, was founded on 30 April 2009. The purpose of this wholly-owned subsidiary is to assist Roth & Rau on location in developing the planned production system for silicon solar cells at the University of New South Wales (UNSW). The Solar Industrial Research Facility (SIRF), which complies with industrial standards, will enable UNSW to develop silicon solar cell technologies from laboratory to serial production stages. These innovative technologies are to be channelled into the development of new products and turnkey production systems at Roth & Rau in future. The SIRF will be the first solar research and development facility of its kind in the Asia-Pacific region. The company's share capital amounts to AUD 100,000. The company was consolidated for the first time as of 30 June 2009.

**Roth & Rau India Pvt. Ltd.**

Roth & Rau India Pvt. Ltd., Mumbai, is a 99.99 % subsidiary of Roth & Rau AG. The remaining 0.01 % is held by the subsidiary Roth & Rau Dünnschicht Solar GmbH. This Indian sales and service company commenced business operations as of 1 August 2009. Its share capital amounts to INR 100,000. The company was consolidated for the first time as of 30 June 2009.

**Roth & Rau Ortner GmbH (previously: Ortner cleanroom logistic systems GmbH)**

On 24 April 2009, Roth & Rau AG signed the purchase agreement to take over 100 % of the shares in Ortner cleanroom logistic systems GmbH ("Ortner"), Dresden. The contract was executed on 24 July 2009. Ortner specialises in the installation, maintenance and operation of production systems in the semiconductor and photovoltaics industries. Its particular strengths lie in installing and commissioning automatic handling systems for crystalline and thin film production lines, as well as in coordinating maintenance and analysing production processes to minimise downtime and reduce costs. The company has longstanding experience in the semiconductor industry. The management of Ortner cleanroom logistic systems GmbH will continue to run the company's operating business.



The company was consolidated for the first time as of 30 September 2009. Its name was changed to Roth & Rau Ortner GmbH as of 13 January 2010.

#### Roth & Rau Ortner USA Inc. (previously: Ortner c.l.s. USA Inc.)

Roth & Rau Ortner GmbH is the sole shareholder in Roth & Rau Ortner c.l.s. USA Inc, based in Salt Lake City, Utah, USA. The company's share capital amounts to US\$ 50,000. The company was consolidated for the first time as of 30 September 2009.

#### Roth & Rau Ortner Malaysia Sdn. Bhd. (previously: Ortner c.l.s. Malaysia Sdn. Bhd.)

Roth & Rau Ortner GmbH is the sole shareholder in Roth & Rau Ortner Malaysia Sdn. Bhd, which was founded in 2008 with share capital of MYR 100,000. The company was consolidated for the first time as of 30 September 2009.

### 1.3. Foreign currency translation

The consolidated financial statements are presented in euros, which is the Group's functional currency. That is the currency of the primary economic environment in which the Roth & Rau Group operates. Each company within the Group determines its own functional currency. In the year under report the euro was the functional currency of all subsidiaries except Romaric Automation Design Inc. The items included in the financial statements of the respective companies have been measured using this functional currency.

Foreign currency transactions are initially translated into the Group's functional currency at the exchange rate valid on the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency using the spot rate of exchange on the balance sheet date. All currency differences are recognised through profit or loss. Income and expenses are translated at the rate valid on the date of the respective transaction.

	Exchange rate 1 € =	Reporting date rate on 31.12.2009	Reporting date rate on 31.12.2008
Swiss francs	CHF	1.4836	1.4881
Chinese renminbis	CNY	9.8350	9.6061
South Korean won	KRW	1.6669	-
Indian rupees	INR	67.0400	-
Canadian dollars	CAD	1.5128	1.7225
US dollars	USD	1.4406	1.4094
Australian dollars	AUD	1.6008	-
Singapore dollars	SGD	2.0194	2.0334
Malaysian ringgits	MYR	4.9326	-
British pounds	GBP	0.8881	-

## 1.4. Changes in accounting policies

The accounting policies applied are consistent with those applied in the previous year with the following principal exceptions:

The revised version of IAS 1 “Presentation of Financial Statements” requires the mandatory inclusion of a statement of comprehensive income including income and expenses previously recognised directly in equity (“other comprehensive income”). This standard has implications for the presentation of the financial statements, but not for the Group’s net asset, financial and earnings position.

Segment reporting is subject to mandatory application of the principles set out in IFRS 8 “Operating Segments”. The segments requiring report in line with the management approach pursuant to IFRS 8 are based on the internal reporting and organisational structure of the Roth & Rau Group. This standard has implications for the presentation of segment reporting, but not for the Group’s net asset, financial and earnings position. The comparable figures reported in the segment report for the period under report have been adjusted as if application had already been made of IFRS 8 in the previous year.

## 1.5. Summary of principal accounting policies

### 1.5.1. Recognition of earnings and expenses

Sales, interest and commission income from financial services and other operating income are only recognised once the respective services have been performed or when the respective goods and products have been supplied, i.e. once the relevant risks have passed to the customer. Sales involving products (delivery of plant) are generally only recognised upon acceptance by the customer.

In view of the long-term construction contracts based on fixed-price contracts in the “Plant construction” division, contract revenues and contract costs are recognised in line with their percentage of completion as of the balance sheet date. The Group meets the conditions governing the application of the percentage of completion method laid down in IAS 11. This method is applied to construction contracts whose earnings can be reliably estimated. Prorated earnings are recognised from the beginning of construction work. When the earnings cannot yet be reliably estimated, sales are only recognised at the level of contract costs probably collectible. Prorated earnings are thus not recognised. Expected losses on construction contracts are recognised immediately.

Operating expenses are recognised in the income statement upon the supply or service being claimed or at the date on which they are incurred. When the revenues from a service transaction can be reliably estimated, then the relevant earnings are also recognised based on percentage of completion. Interest income is recognised pro rata temporis. Interest expenses incurred by the Group are recognised in part using the effective interest method and in part on a prorated basis depending on the relevant contractual obligations.

Provisions for warranties are stated upon recognition of the corresponding sales.

### 1.5.2. Borrowing costs

Following the amendments to IAS 23, those borrowing costs relating to assets requiring significant time to be prepared for their intended use or sale (qualifying assets) must be capitalised. The corresponding interest expenses must be calculated using the effective interest rate method. These amendments do not have any material implications for the consolidated financial statements.



### 1.5.3. Taxes on income

Taxes on annual earnings comprise current and deferred taxes. Taxes on income are recognised in the income statement with the exception of taxes relating to items recognised directly in equity, in which case the respective taxes are also recognised in equity.

Actual tax refund claims and tax liabilities for current and prior periods are measured at the amount at which the refund from or payment to the tax authorities is expected. The calculation of the amount is based on the tax rates and legislation in force at the balance sheet date.

Deferred tax assets may only be recognised as assets to the extent that it is probable that future taxable income will be available to realise the respective claim. Deferred taxes are stated for all temporary differences between the tax base for the assets/liabilities and their carrying amounts in the IFRS financial statements (so-called liability method). However, the tax deferral is omitted both upon initial recognition and subsequently if an asset or a liability arises in the context of a transaction which is not a business combination and, at the time of the transaction, affects neither the accounting profit or loss nor the taxable profit or loss.

Deferred tax assets and liabilities are measured at the tax rates expected to apply in the period in which the asset is realised or the liability settled. These are based on the tax rates (and tax laws) valid at the balance sheet date. Account is taken of future changes in tax rates to the extent that substantive conditions precedent have been met within the legislative procedure as of the balance sheet date. Application has been made of a tax rate of 29.2% for German group companies. As well as the standard corporate income tax rate and solidarity surcharge, this also includes the average trade tax rate.

Deferred tax assets have been netted against deferred tax liabilities in cases where they refer to income taxes due to the same tax authority and if a right exists to offset actual tax refund claims against actual tax liabilities. No distinction has been made between current and non-current in the case of the deferred tax assets and liabilities recognised in the consolidated balance sheet.

### 1.5.4. Earnings per share

Basic earnings per share have been calculated by dividing the share of earnings attributable to shareholders in Roth & Rau AG by the average number of shares in circulation.

### 1.5.5. Business combinations and goodwill

Business combinations are accounted for using the purchase method laid down in IFRS 3. The cost of a company acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities incurred or assumed at the date of exchange, plus costs directly attributable to the company acquisition. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at fair value on the date of acquisition. Goodwill is initially measured at cost, this being the excess of the cost of the business combination over the Group's share of the net assets acquired. After initial recognition, the goodwill is measured at cost less any accumulated impairment losses. For the purpose of the impairment test, the goodwill acquired in a business combination is allocated from the date of acquisition to each of the Group's cash generating units expected to benefit from the synergies of the business combination, irrespective of whether other assets or liabilities of the company acquired are assigned to these cash generating units.

#### 1.5.6. Impairment of non-financial assets

The Group assesses at each balance sheet date whether there are any indications of impairment of non-financial assets. If any indications exist or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. The recoverable amount of an asset is the higher of the fair value of the asset or cash generating unit (CGU) less disposal costs or its value in use. For assets excluding goodwill, an assessment is made at each balance sheet date as to whether there are any indications that previously recognised impairment losses no longer apply or have decreased. There were no such indications in the financial year under report.

#### 1.5.7. Intangible assets

Intangible assets not acquired in a business combination are measured at cost on initial recognition. The costs of intangible assets acquired in a business combination correspond to their fair value on the date of acquisition. In subsequent periods, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses. Internally generated intangible assets, excluding development expenses eligible for capitalisation, are not capitalised, but are rather recognised as expenses in the income statement in the period in which they are incurred. The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite useful lives are amortised over their useful economic lives and assessed for impairment should there be any indications that the intangible asset might be impaired. The period and method of amortisation for assets with finite useful lives are reviewed at least at the end of each financial year. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortisation period or method, as appropriate, and are treated as changes in accounting estimates.

Intangible assets with indefinite useful lives are tested for impairment at least annually either individually or on the level of the cash generating unit. These intangible assets are not subject to scheduled amortisation. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable.

Gains or losses arising from derecognition of intangible assets are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised through profit or loss in the period in which the asset is derecognised.





### Research and development expenses

Pursuant to IAS 38, research expenses are recognised as expenses in the period in which they are incurred. Development expenditure on individual projects is only recognised as an intangible asset when the Group can demonstrate:

- the technical feasibility of completing the intangible asset so that it will be available for internal use or sale
- its intention to complete and its ability to use or sell the asset
- how the asset will generate future economic benefits
- the availability of resources to complete the asset
- the ability to measure reliably the expenditure during development.

At Roth & Rau, this relates to a series of development projects partly subsidised with grants from various federal and state ministries and from the European Union, as well as projects with private cooperation partners which are in the development stage, or already in the pilot stage. In particular, development expenses include direct costs and overhead shares of personnel and material expenses for proprietary and third-party application technology, engineering technology and other departments, provided that these perform corresponding services, and costs of test facilities and technology used in this area of research and development.

Public subsidies are in principle deducted from the costs of acquisition or manufacture. Following initial recognition, development expenses are measured using the cost model, which requires the asset to be carried at cost less any accumulated amortisation (estimated useful life of three years) and any accumulated impairment losses. Amortisation begins when development is complete and the asset is available for use. It is amortised over the period of expected future benefit. During the period of development, the asset is tested for impairment annually. An impairment loss is recognised through profit or loss as soon as the asset's carrying amount exceeds its recoverable amount. Such impairment losses amounted to € 121k in the financial year under report.

### Licences

The licence acquired for the use of intellectual property is subject to scheduled amortisation over a period of three years in line with the term of the cooperation and licence agreement.

### Brand, customer relationships and orders on hand

The Roth & Rau Group has identified and determined the fair values of the brand, customer relationships and orders on hand pursuant to IFRS 3 "Business Combinations". Reference is made to 4.1.1.2.

#### 1.5.8. Property, plant and equipment

Property, plant and equipment is stated at cost, net of any accumulated depreciation and/or any accumulated impairment losses. Repair and maintenance costs are recognised in the income statement as incurred. The present value of the expected cost for the decommissioning of the asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

Depreciation is calculated on a straight-line basis over the useful life of the asset as follows:

- Buildings: 25 to 57 years
- Technical equipment, plant and office equipment: 5 to 15 years.

An item of property, plant and equipment is derecognised either upon disposal or when no economic benefits are expected from its further use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is recognised through profit or loss in the period in which the asset is derecognised. The residual values, useful lives and method of depreciation of the assets are reviewed at the end of each financial year and adjusted prospectively if appropriate.

Assets whose costs amount to between € 150 and € 1,000 are pooled and depreciated over five years. Assets costing less than € 150 are fully expensed in the year of addition. "Traditional" rules of depreciation over a defined useful life are only applied for assets whose costs exceed € 1,000. This is consistent with German tax law. This regulation has been applied to assets acquired or manufactured later than 31 December 2007.

#### 1.5.9. Investment property

Investment property is measured initially at cost, including transaction costs. The carrying amount does not include the costs of day to day servicing. Subsequent to initial recognition, properties held as financial investments are measured at amortised cost, net of scheduled depreciation and any impairment losses. Land and buildings held to generate rental income (investment property) are recognised at amortised cost separately from other items of property, plant and equipment, although the useful lives on which depreciation is based correspond to those for internally used property, plant and equipment.

#### 1.5.10. Government grants

Government grants received in connection with investments in non-current assets are deducted from costs on the asset side pursuant to IAS 20.24.

Government grants are recognised when there is reasonable assurance that the company will comply with the conditions attached to the grants and that the grants will be received.

Grants relating to expense items are recognised as income over the period necessary to match the grant to the costs that it is intended to compensate.

#### 1.5.11. Leases

The determination of whether an arrangement contains a lease is based on the economic substance of the arrangement at inception date and requires an estimation of whether the fulfilment of the contractual arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset. The Group has no leasing contracts which could be deemed to represent finance leases.

#### 1.5.12. Inventories

Raw materials and supplies, work in progress and finished products are recognised as inventories. Current prepayments made for inventory items are recognised at face value.



Raw materials and supplies are measured at the lower of average cost (average cost method) and net realisable value. Costs of inventories are determined using the average cost method and include costs of acquisition and those costs incurred in bringing the inventories to their present location and condition.

Work in progress and finished products are recognised at cost. Specifically, as well as directly allocable costs, production costs also include production-related material and manufacturing overheads, including production-related depreciation and a commensurate share of necessary overhead costs. Consistent with IAS 23.11, borrowing costs have not been capitalised as part of acquisition or production costs. Production costs of internally produced work in progress and finished products include production-related overheads based on normal capacity utilisation.

Where necessary, inventories have been stated at their lower net realisable value. The net realisable value is equivalent to the expected selling price less costs necessary to make the sale.

#### 1.5.13. Construction contracts

Future receivables from long-term construction contracts are recognised using the percentage of completion (POC) method laid down in IAS 11 to the extent that a customer-specific construction contract exists. This involves the prorated portion of profit being recognised in line with the percentage of completion, provided that it is possible to reliably determine the percentage of completion and the total costs and total revenues of the respective contracts in a way permitted by IAS 11. The percentage of completion of individual contracts is calculated using the cost-to-cost method. Prorated earnings are recognised from the beginning of construction work. When the earnings cannot yet be reliably estimated, sales are only recognised at the level of contract costs probably collectible.

Contract costs include directly attributable costs and a share of overheads. Borrowing costs are recognised as expenses.

Prepayments received for the individual order are deducted from the prorated contract revenues calculated in this way. The resultant net balance is stated as appropriate as a receivable or liability from long-term construction contracts.

#### 1.5.14. Trade and other receivables

Receivables and other assets are measured at face value. Foreign currency receivables are translated at the spot rate on the date of the transaction pursuant to IAS 21.21 and subsequently at the rate on the balance sheet date pursuant to IAS 21.23.

The tax receivables included in other receivables mainly involve corporate income tax refunds, VAT prepayments and commission payments measured at face value.

#### 1.5.15. Cash and cash equivalents

This balance sheet item includes cash holdings, credit balances at banks and short-term deposits with an original term of less than three months. Cash and cash equivalents are recognised at face value. The development in funds constituting cash and cash equivalents pursuant to IAS 7 is presented in the cash flow statement. Moreover, this item also includes securities relating to investments in money market funds which are available on a daily basis. These securities have been assigned without exception to the available-for-sale category and are measured at fair value. Changes in value are recognised directly in equity through to disposal. Purchases and sales are recognised at the transaction date.

#### 1.5.16. Share capital

Ordinary shares are classified as shareholders' equity. Additional costs directly attributable to the issue of ordinary shares are deducted from shareholders' equity following deduction of tax effects.

#### 1.5.17. Share-based payment

To promote the achievement of its economic targets, Roth & Rau has introduced a share-based compensation programme (phantom stock programme or PSP) entitling managers to subscribe phantom stocks as a long-term compensation instrument of an incentive nature and, in the case of the Management Board, also involving risk. As of 1 September 2008, the company allowed a select group of employees, managers and the members of the Management Board of the Roth & Rau Group to participate for the first time in a share-based payment programme (PSP). The development in the value of the phantom stocks is linked to the development in the price of Roth & Rau's share. The phantom stocks thus allocated may be exercised following a lockup period of two years from allocation and subject to the achievement of the exercise hurdle (specified base price upon allocation + 10 % p.a.). The phantom stocks may not be traded and do not entitle their holders to share subscription rights.

The calculation of the fair value accounts for all market conditions linked to the exercising of virtual options. The exercise terms are factored into the calculation of the estimated number of exercisable options. The relevant personnel expenses are recognised as provisions over the vesting period, taking due account of the prorated work performed as of the balance sheet date. Pursuant to IFRS 2, share options are recognised at fair value on the basis of option price models and taking due account of the terms of the commitment and personnel turnover rates.

Roth & Rau issued 66,000 option rights as a second tranche on 1 September 2009. The following table shows the change in outstanding phantom stocks in the first and second tranches.

	Number 2009	Number 2008
Granted in 2008	57,000	57,000
Granted in 2009	66,000	0
Forfeited	0	0
Exercised	0	0
Lapsed	-4,000	0
Balance at end of period	119,000	57,000

Of the 119,000 phantom stocks outstanding, none were yet eligible to be exercised as of 31 December 2009. Of the options outstanding at the end of the period under report, those in the first tranche mature on 1 September 2010, while those in the second tranche mature on 1 September 2011. The volume of options declined by 4,000 on account of personnel turnover.

A total of 45,000 options are available to members of the Management Board, of which 21,000 are from 2008 and 24,000 from 2009. A provision of € 16k (cash-settled share) was recognised as of the balance sheet date. An amount of € 41k was added to the capital reserve as of 31 December 2009. Maximum compensation from the PSP for all participants is € 1,000k (PSP cap). A calculation of the provision by external experts was available for the annual financial statements as of 31 December 2009.



#### 1.5.18. Financial debt

Following initial recognition, financial debt is recognised at amortised cost (repayment amount). Financial debt with a term of more than 12 months is reported as non-current financial debt.

#### 1.5.19. Non-current provisions

This item includes pension provisions and the cash-settled share of the phantom stocks plan – c.f. 4.4.3. These items have been recognised at present value.

#### 1.5.20. Pensions and other post-employment benefits

The Group has assumed defined benefit pension plans as a result of its acquisition of AIS Automation Dresden GmbH. The pension commitment at AIS Automation Dresden GmbH was outsourced in the year under report by way of assignment to Deutscher Pensionsfonds (DPAG) pursuant to § 3 (66) of the German Income Tax Act (EStG) and to the ZDHUK pension fund pursuant to § 4d of the German Income Tax Act (EStG). This was financed with a one-off payment of € 934k as of 1 October 2009. In the income statement, current service cost is recognised as pension expenses, interest expenses are recognised in the net financial result and income on plan assets is recognised as other operating income.

Defined benefit pension plans are recognised as non-current provisions using the projected unit credit method pursuant to IAS 19. Future obligations are measured on the basis of actuarial surveys and take due account of the fair values of external plan assets. Company pensions are generally based on pension commitments (old-age, inability to work and surviving dependants' pensions). These are generally dependent on the respective salary. The Group has reinsurance policies pledged on behalf of the beneficiaries. As the requirements governing recognition as plan assets are met, the asset values are netted against the obligation. The calculation takes account not only of the vested rights known of at the balance sheet date, but also of expected future salary and pension trends and the inflation rate. Pursuant to IAS, the discount factor is based on long-term investment rates. The underlying discount factor reflects the interest rates paid at the balance sheet date for blue-chip fixed-income securities with congruent terms. The calculative interest rate for 2009 amounts to 5.25%. Application has been made of the corridor method. The calculation has also referred to the biometric probability figures included in the 2005G mortality tables compiled by Prof. Klaus Heubeck. The fair values of plan assets and the existing pension obligation are reported on a net basis. This led to an asset surplus as of 31 December 2009 which has been recognised under other receivables.

#### 1.5.21. Current provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Group expects some or all of a provision it has recognised to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset, but only when reimbursement is virtually certain. The expense relating to any provision is presented in the income statement net of any reimbursement. If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognised as a financial expense.

#### 1.5.22. Derivative financial instruments

The Group uses derivative financial instruments, such as forward currency contracts and interest swaps, to hedge against interest and exchange rate risks respectively. These derivative financial instruments are recognised at fair value upon the conclusion of the respective contract and are subsequently remeasured at fair value. Derivative financial instruments are carried as financial assets when their fair values are positive and as financial liabilities when their fair values are negative. Gains or losses arising within the financial year from changes in the fair value of derivative financial instruments that do not qualify for hedge accounting are recognised directly through profit or loss, as is the ineffective portion of an effective hedge. The fair value of forward currency contracts is the difference between the forward exchange rate and the contractually agreed rate. The forward exchange rate is referenced to current forward exchange rates for contracts with similar maturity profiles. The fair value of interest swap contracts is determined by reference to valuation models based solely on empirical market data.

For hedge accounting purposes, hedging instruments were classified within the financial year as cash flow hedges when they involved hedging the risk of fluctuations in the cash flow allocable to the risk associated with an asset or liability recognised, or with a highly probable future transaction or to the exchange rate risk associated with a firm commitment not recognised in the balance sheet.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship and its risk management objectives and strategies for undertaking the hedge. The documentation includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the company will assess the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated. Hedges meeting the strict criteria for hedge accounting are accounted for as follows:

#### Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised directly in equity, while any ineffective portion is recognised immediately in the income statement. Amounts recognised in equity are transferred to the income statement when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast sale occurs. Where the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognised in equity are transferred to the initial carrying amount of the non-financial asset or non-financial liability. If the forecast transaction or firm commitment is no longer expected to occur, amounts previously recognised in equity are transferred to the income statement. If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, or if its designation as a hedge is revoked, amounts previously recognised in equity remain as a separate item in equity until the forecast transaction or firm commitment occurs. The Group uses forward exchange contracts as hedges of its exposure to foreign currency risk in firm commitments and forecast transactions.

Since the fourth quarter of 2009, for reasons of materiality hedge relationships have no longer been depicted using hedge accounting. Changes in the values of hedges have rather been recognised through profit or loss. Existing hedges as of 31 December 2009 have therefore no longer been presented by way of cash flow hedges. All hedge relationships within the financial year were terminated upon occurrence of the hedged transaction.

#### 1.5.23. Non-derivative financial instruments

Available-for-sale financial assets are non-derivative financial assets that are designated as available-for-sale or not classified in any other of the categories presented. They are assigned to non-current assets unless the management has the intention of selling them within twelve months of the balance sheet date.

Regular purchases and sales of financial assets are recognised on the trading day, i.e. on the day on which the Group commits itself to purchase or sell the asset in question. Financial assets not belonging to the "measured at fair value through profit or loss" category" are initially recognised at fair value plus transaction costs. Financial assets belonging to this category are initially recognised at fair value, with the related transaction costs being recognised through profit or loss. Financial assets are derecognised when the rights to payments from the financial assets have expired or been assigned and the Group has assigned all major risks and opportunities involved in ownership. Available-for-sale financial assets and assets in the "at fair value through profit or loss" category are measured at fair value following initial recognition.

Loans and receivables are non-derivative assets with fixed or determinable payments that are not quoted on an active market. Following initial recognition, loans and receivables are carried at amortised cost, accounting where necessary for allowances and discounts (effective interest method). Allowances are stated for loans and receivables when there are objective indications that the amount is no longer collectible in full. Such allowances are chiefly recorded in allowance accounts. Loans and receivables are derecognised upon classification as highly unlikely to be collectible.

Changes in the fair values of monetary and non-monetary securities classified as available-for-sale are recognised directly in equity. Where securities classified as available-for-sale are sold or impaired, the accumulated changes in the fair value previously recognised in equity must be recognised under "Other income" in the income statement as "Gains/(losses) on securities". Interest income resulting from application of the effective interest method for securities in the "available-for-sale" category is recognised in the income statement under "Other income".

The fair values of quoted shares are measured on the basis of current bid prices. The fair values of financial assets for which there is no active market or which are unlisted are measured using suitable valuation methods. These include reference to recent transactions between independent business partners, the use of current market prices of other assets which are basically the same as the asset in question, discounted cash flow (DCF) methods and option models based as far as possible on market data and as little as possible on company-specific data.

The Group assesses at each balance sheet date whether there are any indications of impairment for each financial asset or group of financial assets.



## 2. Key accounting judgements, estimates and assumptions

The preparation of the annual financial statements requires assumptions and estimates to be made to a certain extent. These have affected the amounts recognised for assets and liabilities, as well as for income and expenses. All estimates and assumptions are continuously reassessed and are based on empirical values and other factors, including expectations as to future events, which appear reasonable in the circumstances. These assumptions and estimates principally involve assessing the ongoing value of intangible assets (research and development and goodwill; c.f. 4.1.1.), the determination of uniform useful lives for property, plant and equipment and assets let, the collectibility of receivables and the recognition and measurement of provisions.

The assumptions and estimates are based in each case on the information currently available. In particular, the expected future business performance has been based on the circumstances prevalent upon the preparation of the annual financial statements and on future developments in the global and sector-specific environment which are assumed to be realistic. Should the developments in the underlying framework lying outside the control of the management deviate from these assumptions, the amounts actually arising may differ from those originally expected. Should actual developments deviate from those expected, the assumptions and, if necessary, the carrying amounts of the assets and liabilities thereby affected will be adjusted accordingly. Upon the preparation of the annual financial statements, the underlying assumptions and estimates were not subject to any significant risks. Based on the information currently available, no substantial adjustment is therefore to be expected in the carrying amounts of the assets and liabilities stated in the balance sheet in the following financial year.

In particular, future receivables from long-term construction contracts are accounted for using the percentage of completion method (POC) pursuant to IAS 11. The percentage of completion of individual contracts is calculated using the cost-to-cost method. Longstanding experience and improved preliminary costing mean that the company can now reliably estimate the results of construction contracts. Where in exceptional cases the result of a construction contract cannot be reliably estimated, contract revenues are recognised at the level of contract costs incurred (zero profit margin method).

Given the improved means of estimating project costs, prorated earnings have been recognised for the first time from the start of construction onwards in the consolidated financial statements for the 2009 financial year (previous year: prorated earnings recognition from 50 %). As a result of the change to prorated earnings recognition from the start of construction onwards, a higher volume of prorated earnings, amounting to € 1,151k, could be recognised under POC sales in the 2009 financial year.

Furthermore, the measurement of financial instruments also requires assumptions and estimates to be made in some cases. Further details can be found in Note 4.6.



### 3. Segment report

Operating segments represent the primary segment reporting format of the Group, as its risks and its return on equity are primarily affected by differences in the products manufactured and services offered. Geographical segments represent the secondary reporting format. The business divisions are organised and managed separately in line with the nature of the products and services offered. Each segment thus represents a strategic business division whose range of products and markets are distinct from those of other segments. Segment information has in principle been based on the same methods of recognition and measurement as those applied in the annual financial statements.

In contrast to the previous year, the spare parts and service business has been reclassified from the photovoltaics and plasma and ion beam technology segments into the other activities segment. Unlike in the previous year, in the 2009 annual financial statements the other activities segment thus includes software products, the spare parts and service business and other products and services (miscellaneous). The regional distribution of sales is included in internal reporting, as a result of which there have been no reporting amendments in this respect. The comparable figures for the previous year have been adjusted accordingly.

In line with internal management reporting structures, segment earnings have been presented prior to consolidation and purchase price allocation items. Consolidation chiefly involves the elimination of intercompany profits under inventories. The accounting principles for the segments correspond to those outlined for the Group under Accounting Policies. "Earnings before taxes" as presented in the income statement represent the benchmark used to measure the earnings strength of the Group's individual segments.

Sales between segments are invoiced and settled at transfer prices customary in the market.

### 3.1. Primary segment report by business field

01.01.–31.12.2009 € 000s	Photo- voltaics equipment	Photo- voltaics turnkey	Plasma and ion beam technology	Software	Spare parts and services	Other	Total	Margin in %	Consoli- dation	Group figure after consol.	Margin in %
External sales	85,102	72,983	9,690	15,349	10,383	4,396	197,903		0	197,903	
Intercompany sales	8,361	9,515	772	1,226	4,106	0	23,980		-23,980	0	
Total sales	93,463	82,498	10,462	16,575	14,489	4,396	221,883		-23,980	197,903	
EBITDA	12,464	2,582	1,440	4,639	2,021	1,039	24,185	12.2 %	-1,008	23,177	11.7 %
Depreciation and amortisation	2,381	1,079	1,138	787	172	138	5,695		0	5,695	
EBIT	10,083	1,503	302	3,852	1,849	901	18,490	9.3 %	-1,008	17,482	8.8 %
Investments	10,602	6,017	1,253	2,804	1,350	1,442	23,468				

01.01.–31.12.2008 € 000s	Photo- voltaics equipment	Photo- voltaics turnkey	Plasma and ion beam technology	Software	Spare parts and services	Other	Total	Margin in %	Consoli- dation	Group figure after consol.	Margin in %
External sales	172,760	68,988	13,536	8,040	8,798	0	272,122		0	272,122	
Intercompany sales	2,075	4,643	0	139	556	0	7,413		-7,413	0	
Total sales	174,834	73,632	13,536	8,180	9,353	0	279,535		-7,413	272,122	
EBITDA	23,574	4,052	2,058	2,200	2,947	0	34,831	12.8 %	-221	34,610	12.7 %
Depreciation and amortisation	1,378	481	1,022	414	53	0	3,348		0	3,348	
EBIT	22,196	3,571	1,036	1,786	2,894	0	31,483	11.6 %	-221	31,262	11.5 %
Investments	12,123	3,369	2,251	27,827	1,988	3,925	51,483				

The reconciliation with consolidated net income is as follows:

€ 000s

Operating earnings after consolidation	17,482
Income from goodwill on purchase price allocation	1,141
Depreciation/amortisation on purchase price allocation	-2,523
<b>Earning before Interest and Taxes</b>	<b>16,100</b>
Financial income	1,824
Financial expenses	-1,217
Taxes on income	-3,735
<b>Earnings after taxes</b>	<b>12,972</b>

Sales of € 25,751k were generated with a single customer in the photovoltaics segment equipment business. These sales therefore account for 13 % of the Group's total sales of € 197,903k.



### 3.2. Secondary segment report by region

The secondary reporting format is based on geographical considerations and shows the distribution of external sales by customer location. Segment assets are allocated to the respective location.

Roth & Rau AG manages its activities by reference to the results of its business fields, rather than to regional earnings contributions. No further segmentation is therefore required.

01.01. – 31.12.2009 € 000s	Photo- voltaics equipment	Photo- voltaics turnkey	Photo- voltaics total	Plasma and ion beam technology	Software	Spare parts and services	Other	Total	Share
Germany	7,716	5,295	13,011	5,736	10,519	2,434	2,295	33,995	17.2 %
International	77,386	67,688	145,074	3,954	4,829	7,949	2,102	163,908	82.8 %
Europe	15,188	19,666	34,854	2,046	2,334	4,570	1,378	45,182	22.8 %
Asia	62,198	35,333	97,531	647	434	2,610	271	101,493	51.3 %
USA	0	12,688	12,688	1,256	2,061	633	134	16,772	8.5 %
Other	0	1	1	5	0	136	319	461	0.2 %
<b>Total</b>	<b>85,102</b>	<b>72,983</b>	<b>158,085</b>	<b>9,690</b>	<b>15,348</b>	<b>10,383</b>	<b>4,397</b>	<b>197,903</b>	

01.01. – 31.12.2008 € 000s	Photo- voltaics equipment	Photo- voltaics turnkey	Photo- voltaics total	Plasma and ion beam technology	Software	Spare parts and services	Other	Total	Share
Germany	15,039	4,006	19,045	9,246	6,731	1,628	0	36,650	13.5 %
International	157,721	64,982	222,703	4,290	1,309	7,170	0	235,472	86.5 %
Europe	58,333	24,851	83,184	1,210	558	4,487	0	89,439	32.9 %
Asia	94,083	36,164	130,247	1,050	521	2,527	0	134,345	49.3 %
USA	5,272	3,967	9,239	1,609	230	113	0	11,191	4.1 %
Other	33	0	33	421	0	43	0	497	0.2 %
<b>Total</b>	<b>172,760</b>	<b>68,988</b>	<b>241,748</b>	<b>13,536</b>	<b>8,040</b>	<b>8,798</b>	<b>0</b>	<b>272,122</b>	

The regional distribution of assets is as follows:

01.01. – 31.12.2009

€ 000s

	Germany	Europe	Asia	USA	Other	Total
Intangible assets	48,986	53	0	546	0	49,585
Property, plant and equipment	27,210	400	359	52	7	28,028
Investment property	160	0	0	0	0	160

01.01. – 31.12.2008

€ 000s

	Germany	Europe	Asia	USA	Other	Total
Intangible assets	27,340	19	0	0	0	27,359
Property, plant and equipment	20,956	73	46	0	0	21,075
Investment property	171	0	0	0	0	171

## 4. Disclosures on individual items in the balance sheet

### 4.1. Non-current assets

Foreign exchange items relating to non-current assets denominated in foreign currencies were of immaterial significance as of 31 December 2009.

#### 4.1.1. Intangible assets

Intangible assets include acquired software and development expenses. The development in intangible assets has been presented in the Non-current Asset Schedule.

## Development in non-current assets

€ 000s	Historic Cost					
	Balance at 01.01.	Acquisitions	Additions	Disposals	Reclassifications	Currency effects
<b>Development in intangible assets</b>						
<b>2008</b>						
Industrial property rights and similar rights and values	361	454	691	131	0	0
Brand	0	0	0	0	1,240	0
Customer relationships	0	0	0	0	3,367	0
Orders on hand	0	0	0	0	1,848	0
Goodwill	0	0	0	0	12,767	0
Development expenses	6,089	4,302	3,292	305	0	0
	<b>6,450</b>	<b>4,756</b>	<b>3,983</b>	<b>436</b>	<b>19,222</b>	<b>0</b>
<b>2009</b>						
Industrial property rights and similar rights and values	1,375	240	668	38	0	0
Brand	1,240	0	0	0	0	0
Customer relationships	3,367	0	0	0	4,648	0
Technology	0	0	0	0	3,792	0
Orders on hand	1,848	0	0	0	200	0
Goodwill	12,767	0	24	0	6,912	0
Development expenses	13,378	1,702	10,886	721	0	9
	<b>33,975</b>	<b>1,942</b>	<b>11,578</b>	<b>759</b>	<b>15,552</b>	<b>9</b>
<b>Development in property, plant and equipment</b>						
<b>2008</b>						
Land	106	457	14	0	0	0
Buildings	6,604	3,492	4,759	0	0	0
Technical equipment and machinery	2,681	0	1,585	0	0	0
Other equipment, office and plant equipment	2,378	661	2,041	146	25	0
Prepayments made and assets under construction	25	0	713	0	-25	0
	<b>11,794</b>	<b>4,610</b>	<b>9,112</b>	<b>146</b>	<b>0</b>	<b>0</b>
<b>2009</b>						
Land	577	0	220	70	0	0
Buildings	14,855	2,260	187	-38	0	0
Technical equipment and machinery	4,266	631	3,217	318	713	0
Other equipment, office and plant equipment	4,959	879	1,910	165	0	0
Prepayments made and assets under construction	713	0	1,837	0	-713	0
	<b>25,370</b>	<b>3,770</b>	<b>7,371</b>	<b>515</b>	<b>0</b>	<b>0</b>
<b>Development in financial assets</b>						
Shares in non-consolidated subsidiaries						
2008	0	0	11,006	0	0	0
2009	11,006	205	270	99	10,998	0
Total non-current assets excluding investment property 2008	18,244	9,366	24,101	582	19,222	0
<b>Total non-current assets excluding investment property 2009</b>	<b>70,351</b>	<b>5,917</b>	<b>19,219</b>	<b>1,373</b>	<b>26,550</b>	<b>9</b>
Development in investment property						
2008	338	0	-3	0	0	0
2009	335	0	0	0	0	0
Total non-current assets including investment property 2008	18,582	9,366	24,098	582	19,222	0
<b>Total non-current assets including investment property 2009</b>	<b>70,686</b>	<b>5,917</b>	<b>19,219</b>	<b>1,373</b>	<b>26,550</b>	<b>9</b>

Depreciation and Amortisation							Carrying Amounts		
Balance at 31.12.	Balance at 01.01.	Acquisitions	Additions	Impairments	Disposals	Reclassifications	Balance at 31.12.	Balance at 31.12.	Balance at 01.01.
1,375	99	348	120	0	130	0	437	938	262
1,240	0	0	41	0	0	0	41	1,199	0
3,367	0	0	169	0	0	0	169	3,198	0
1,848	0	0	924	0	0	0	924	924	0
12,767	0	0	0	1,579	0	0	1,579	11,188	0
13,378	1,737	0	1,956	78	305	0	3,466	9,912	4,352
<b>33,975</b>	<b>1,836</b>	<b>348</b>	<b>3,210</b>	<b>1,657</b>	<b>435</b>	<b>0</b>	<b>6,616</b>	<b>27,359</b>	<b>4,614</b>
2,245	437	148	491	0	40	78	1,114	1,131	938
1,240	41	0	83	0	0	0	124	1,116	1,199
8,015	169	0	882	0	0	0	1,051	6,964	3,198
3,792	0	0	434	0	0	0	434	3,358	0
2,048	924	0	1,124	0	0	0	2,048	0	924
19,703	1,579	0	0	0	0	0	1,579	18,124	11,188
25,254	3,466	0	2,853	121	0	-78	6,362	18,892	9,912
<b>62,297</b>	<b>6,616</b>	<b>148</b>	<b>5,867</b>	<b>121</b>	<b>40</b>	<b>0</b>	<b>12,712</b>	<b>49,585</b>	<b>27,359</b>
577	0	0	1	0	0	0	1	576	106
14,855	349	480	285	0	0	0	1,114	13,741	6,255
4,266	997	0	366	0	0	0	1,363	2,903	1,684
4,959	1,007	374	543	0	107	0	1,817	3,142	1,371
713	0	0	0	0	0	0	0	713	25
<b>25,370</b>	<b>2,353</b>	<b>854</b>	<b>1,195</b>	<b>0</b>	<b>107</b>	<b>0</b>	<b>4,295</b>	<b>21,075</b>	<b>9,441</b>
727	1	0	0	0	0	0	1	726	576
17,340	1,114	625	481	0	0	0	2,220	15,120	13,741
8,509	1,363	285	829	0	0	0	2,477	6,032	2,903
7,583	1,817	679	920	0	146	0	3,270	4,313	3,142
1,837	0	0	0	0	0	0	0	1,837	713
<b>35,996</b>	<b>4,295</b>	<b>1,589</b>	<b>2,230</b>	<b>0</b>	<b>146</b>	<b>0</b>	<b>7,968</b>	<b>28,028</b>	<b>21,075</b>
11,006	0	0	0	0	0	0	0	11,006	0
384	0	51	0	0	51	0	0	384	11,006
70,351	4,189	1,202	4,405	1,657	542	0	10,911	59,440	14,055
<b>98,677</b>	<b>10,911</b>	<b>1,788</b>	<b>8,097</b>	<b>121</b>	<b>237</b>	<b>0</b>	<b>20,680</b>	<b>77,997</b>	<b>59,440</b>
335	154	0	10	0	0	0	164	171	184
335	164	0	11	0	0	0	175	160	171
70,686	4,343	1,202	4,415	1,657	542	0	11,075	59,611	14,239
<b>99,012</b>	<b>11,075</b>	<b>1,788</b>	<b>8,108</b>	<b>121</b>	<b>237</b>	<b>0</b>	<b>20,855</b>	<b>78,157</b>	<b>59,611</b>



#### 4.1.1.1. Development expenses

Development expenses of € 11,658k were capitalised in line with IAS 38 for new products and production processes in the period under report (previous year: € 4,884k). Following the deduction of grants of € 1,493k requested or received for these projects (previous year: € 1,592k), a net amount of € 10,165k was recognised as an addition to development expenses (previous year: € 3,292k). Development expenses of € 4,818k not eligible for capitalisation were recognised as expenses (previous year: € 449k). Write-downs of € 121k were charged to earnings in the financial year under report in connection with development expenses previously capitalised. These relate to a project which has been discontinued.

The expansion of research and development activities is intended to extend the product range and access new areas of activity. Research and development activities at Roth & Rau AG focused in the year under report on new systems and innovative technologies for use in crystalline photovoltaics aimed at raising efficiency and suitability for production and thus at attaining cost leadership. The process portfolio could be significantly expanded by cooperating with various international research and development institutions. The stepping up of research and development activities also involved the construction of a new Technology Centre in Hohenstein-Ernstthal. By expanding its personnel resources and launching operations with the cell line at the Technology Centre in 2010, the Group will further accelerate its research and development activities, thus enabling it to satisfy market requirements in future as well.

In the photovoltaics segment, capitalised development services include the enhancement of established systems and production concepts for plasma-assisted separation systems, the development of new system concepts for thermal processes and the launch of crystallisation activities, as well as of new system concepts for innovative processes and production technologies for multicrystalline and monocrystalline, highly-efficient solar cells. Products newly offered on the market include the SiNA R2, CALIPSO, CAMiNI and SiNUS product lines, as well as the turnkey solar cell lines PRiMELiNEc-Si and PRiMELiNELDSE with higher cell efficiency levels.

Development expenses were mainly capitalised in connection with the following projects in the 2009 financial year:

##### Crystalline photovoltaics

Main focuses in the field of crystalline photovoltaics included:

- Further development of existing SiNA systems for SiNA Release 2 with new coating components
- Deployment of laser processes in new cell concepts based on the cooperation with the University of New South Wales in Australia
- Cooperation with the University of Neuchâtel to develop a production technology for high-efficiency crystalline solar cells
- Development and optimisation of inexpensive, environmentally-friendly thick film contacting processes, plasma-based coating and etching processes to increase the efficiency of crystalline silicon solar cells.

##### Thin film photovoltaics

Two new projects in the field of thin film photovoltaics dealt with the development of cadmium telluride and silicon-based technologies.

Within the other activities segment, expenses incurred on the further development of the VAC Version 5.0 product at AIS Automation Dresden GmbH have been capitalised as development expenses.

#### 4.1.1.2. Purchase price allocation

The goodwill remaining following purchase price allocation is attributable to various factors.

Goodwill represents the surplus balance at the date of acquisition of the costs of the company acquisition over the share of the fair value of identifiable assets and liabilities recognised at the Group. The goodwill arising from the acquisition of Roth & Rau Italy S.r.l. (previously: Tecnofimes S.r.l.), Roth & Rau MicroSystems GmbH (previously: Ion-Tech GmbH), Roth & Rau Muegge GmbH (previously: Muegge-electronic GmbH), Romaric Automation Design Inc. and Roth & Rau – Ortnier GmbH (previously: Ortnier cleanroom logistic systems GmbH) and their subsidiaries has been recognised under intangible assets.

In the case of Roth & Rau CTF Solar GmbH (previously: CTF Solar GmbH), the comparison of the fair values of assets and liabilities requiring recognition with the costs of the shares acquired resulted in badwill upon acquisition. This has been recognised under other operating income. The company thereby taken over had difficulties in obtaining financing for its business model at the time of acquisition. CTF Solar GmbH had leading expertise, but not the necessary system construction and project management competence. Moreover, CTF Solar GmbH did not have any proprietary systems production infrastructure, as a result of which it was highly dependent on suppliers.

The intangible assets and useful lives determined in the context of the purchase price allocation in 2009 are structured as follows:

Technology	€ 3,792k	Useful life	8 years
Customer relationships	€ 4,648k	Useful life	7–8 years
Orders on hand	€ 200k	Useful life	1 year
Goodwill	€ 6,912k		
Badwill	€ 1,141k		

The goodwill is mainly attributable to the human capital embodied by the employees at the companies acquired, which is not eligible for capitalisation, as well as to synergy effects expected from the transactions. The integration of these companies will help the Group achieve its target of standardising its product lines, a development which will enhance its profitability.

The results of the definitive purchase price allocation for AIS Automation Dresden GmbH led to the following adjustments to assets and liabilities. Compared with the preliminary purchase price allocation in 2008, the values of adjustments to intangible assets (goodwill) have increased by € 23k from € 12,767k to € 12,790k.

#### Pro forma disclosures

The pro forma accounts present the financial data of Roth & Rau AG, including the fully consolidated group companies acquired, on the assumption that these had been included in the consolidated financial statements from the beginning of the financial year already. These figures are supplemented by the actual figures recognised in the consolidated financial statements since initial consolidation. Due to the immateriality of the respective sales and earnings figures, the other company acquisitions have been presented in aggregate form.

	Material company acquisitions			Immaterial company acquisition	Group total
€ 000s	Roth & Rau Muegge GmbH	Roth & Rau Ortner GmbH	Roth & Rau CTF Solar GmbH		
<b>Sales</b>					197.903
Recognised	5,905	980	0	3,319	10,204
plus pro forma sales	0	2,098	0	234	2,332
Group pro forma	5,905	3,078	0	3,553	200,235
<b>Consolidated net income</b>					12,929
Recognised	1,131	-291	379	395	1,614
plus form forma income	0	-157	-202	56	-303
Group pro forma	1,131	-448	177	451	12,626
<b>Earnings per share (€)</b>					
Recognised					0.94
plus pro forma EPS					0.91

Material company acquisitions have been presented below together with the assets and liabilities thereby consolidated. Immaterial acquisitions have been summarised under other acquisitions.

€ 000s	Roth & Rau Muegge GmbH			Roth & Rau Ortner GmbH		
	Historic carrying amounts	Adjustments to fair values	Fair values upon acquisition	Historic carrying amounts	Adjustments to fair values	Fair values upon acquisition
<b>Non-current assets</b>						
Intangible assets	19	972	991	12	110	122
Property, plant and equipment	1,639	129	1,768	115	0	115
Financial assets and other loans	244	0	244	0	0	0
Deferred tax assets	9	0	9	0	43	43
<b>Total non-current assets</b>	<b>1,911</b>	<b>1,101</b>	<b>3,012</b>	<b>127</b>	<b>153</b>	<b>280</b>
<b>Current assets</b>						
Inventories	2,307	-773	1,534	1,023	-831	192
Receivables from long-term construction contracts	0	617	617	0	37	37
Trade receivables	1,232	0	1,232	438	0	438
Tax receivables	4	0	4	0	0	0
Other current receivables	459	0	459	205	0	205
Cash and cash equivalents	2,661	0	2,661	440	0	440
<b>Total current assets</b>	<b>6,663</b>	<b>-156</b>	<b>6,507</b>	<b>2,106</b>	<b>-794</b>	<b>1,312</b>
<b>Total Assets</b>	<b>8,574</b>	<b>945</b>	<b>9,519</b>	<b>2,233</b>	<b>-641</b>	<b>1,592</b>
<b>Non-current debt</b>						
Non-current interest-charging debt	1,125	0	1,125	0	0	0
Deferred tax liabilities	0	316	316	0	40	40
<b>Total non-current debt</b>	<b>1,125</b>	<b>316</b>	<b>1,441</b>	<b>0</b>	<b>40</b>	<b>40</b>
<b>Current debt</b>						
Other current provisions	392	0	392	306	0	306
Current tax liabilities	596	0	596	0	0	0
Prepayments received	0	0	0	1,064	-1,064	0
Liabilities from long-term construction contracts	0	113	113	0	60	60
Trade payables	2,550	-381	2,169	109	0	109
Other current liabilities	598	129	727	263	0	263
<b>Total current debt</b>	<b>4,136</b>	<b>-139</b>	<b>3,997</b>	<b>1,742</b>	<b>-1,004</b>	<b>738</b>
<b>Total debt</b>	<b>5,261</b>	<b>177</b>	<b>5,438</b>	<b>1,742</b>	<b>-964</b>	<b>778</b>
<b>Net Assets (Equity)</b>	<b>3,313</b>	<b>768</b>	<b>4,081</b>	<b>491</b>	<b>323</b>	<b>814</b>
Total purchase price			10,202			3,237
of which transaction costs			202			262

€ 000s	Roth & Rau CTF Solar GmbH			Other acquisitions		
	Historic carrying amounts	Adjustments to fair values	Fair values upon acquisition	Historic carrying amounts	Adjustments to fair values	Fair values upon acquisition
Non-current assets						
Intangible assets	10	0	10	51	620	671
Property, plant and equipment	2	0	2	112	313	425
Financial assets	29	0	29	0	0	0
Deferred tax assets	0	0	0	0	2	2
Total non-current assets	41	0	41	163	935	1,098
Current assets						
Inventories	0	0	0	273	-125	148
Receivables from long-term construction contracts	0	0	0	0	28	28
Trade receivables	0	0	0	1,483	0	1,483
Tax receivables	0	0	0	13	0	13
Other current receivables	16	0	16	65	0	65
Cash and cash equivalents	99	0	99	84	0	84
Total current assets	115	0	115	1,918	-97	1,821
Total Assets	156	0	156	2,081	838	2,919
Non-current debt						
Non-current interest-charging debt	0	0	0	212	0	212
Deferred tax liabilities	0	0	0	0	243	243
Total non-current debt	0	0	0	212	243	455
Current debt						
Other current provisions	56	0	56	106	0	106
Current tax liabilities	0	0	0	3	0	3
Trade payables	15	0	15	1,302	21	1,323
Other current liabilities	76	0	76	46	0	46
Total current debt	147	0	147	1,457	21	1,478
Total debt	147	0	147	1,669	264	1,933
Net Assets (Equity)	9	0	9	412	574	986
Total purchase price						
			1,553	2,786		
of which transaction costs						
			113	283		

#### 4.1.1.3. Impairment test

Goodwill is not subject to scheduled amortisation, but is rather tested annually for impairment pursuant to IAS 36. Goodwill amounting to € 12,790k has been allocated to the "AIS" cash generating unit (CGU). The recoverable amount of the "AIS" CGU has been determined as its fair value less disposal costs, calculated using a discounted cash flow method. The fair value was determined on the basis of an operating budget approved by the Management Board for the period up to and including 2014. The detailed budget phase was extrapolated in perpetuity. The detailed operating budget is based on detailed assumptions concerning key earnings and value drivers derived from past experience and future expectations. Goodwill of € 11,211k has been allocated to the "AIS" CGU (previous year: € 12,790k).

Due to the internal reorganisation of reporting structures, the allocation of goodwill on the company acquisitions made in 2009, namely Roth & Rau Italy S.r.l., Roth & Rau MicroSystems GmbH, Romaric Automation Design Inc., Roth & Rau Muegge GmbH and Roth & Rau Ortner GmbH, has not been finalised pursuant to IAS 36.84. Impairment tests were performed pursuant to IAS 36 on the level of each legal unit in the year under report to ensure that there were no impairment requirements for the respective goodwill.

A total of six goodwill-bearing CGUs have thus been identified at the Group. Total goodwill amounted to € 18,124k as of 31 December 2009 (previous year: € 11,188k).

The recoverable amount of a CGU is determined by calculating its "fair value less cost to sell" using the discounted cash flow method. Reference is made to the budgeted discounted cash flows after taxes in the five-year budget approved by the Management Board. The "fair value less cost to sell" is generally calculated on the basis of estimated rates of sales growth in the relevant markets. The calculation takes account both of past data and of expected future growth. The figures used in key assumptions are basically consistent with external sources of information.

CGU	Carrying amount of goodwill	Share of total goodwill	WACC	Terminal value growth rate	Assumption underlying corporate budgeting
AIS Automation Dresden GmbH	11,211 T€	62 %	11.6 %	1.5 %	Past and future market growth
Roth & Rau Muegge GmbH	3,737 T€	21 %	13.8 %	1.5 %	Past and future market growth
Roth & Rau Ortner GmbH	1,375 T€	8 %	10.5 %	1.5 %	Past and future market growth
Roth & Rau Italy S.r.l.	826 T€	5 %	11.6 %	1.5 %	Past and future market growth
Roth & Rau MicroSystems GmbH	532 T€	3 %	11.6 %	1.5 %	Past and future market growth
Romaric Automation Desingn Inc.	443 T€	2 %	11.6 %	1.5 %	Past and future market growth



No goodwill was critical. The 2009 impairment test did not identify any impairment requirement.

#### 4.1.1.4. Other business combinations

Roth & Rau Muegge GmbH acquired 40 % of the shares in R³T GmbH Rapid Reactive Radicals Technology GmbH on 25 February 2010. Reference is made to Note 7.6. The purchase price amounts to € 300k plus bonus payments of a maximum of € 350k. The assets and liabilities to be included in future due to this acquisition are presented below:

€ 000s	Historic carrying amounts	Adjustments to fair values	Fair values upon acquisition
<b>Non-current assets</b>			
Property, plant and equipment	22	0	22
<b>Total non-current assets</b>	<b>22</b>	<b>0</b>	<b>22</b>
<b>Current assets</b>			
Inventories	250	-119	131
Trade receivables	161	119	280
Other current receivables	22	0	22
<b>Total current assets</b>	<b>433</b>	<b>0</b>	<b>433</b>
<b>Total assets</b>	<b>455</b>	<b>0</b>	<b>455</b>
<b>Non-current debt</b>			
Non-current interest-charging debt	210	0	210
<b>Total non-current debt</b>	<b>210</b>	<b>0</b>	<b>210</b>
<b>Current debt</b>			
Other current provisions	38	0	38
Current tax liabilities	17	0	17
Trade payables	59	0	59
Other current liabilities	50	0	50
<b>Total current debt</b>	<b>164</b>	<b>0</b>	<b>164</b>
<b>Total debt</b>	<b>374</b>	<b>0</b>	<b>374</b>
<b>Net assets (equity)</b>	<b>81</b>	<b>0</b>	<b>81</b>
<b>Total purchase price</b>			<b>650</b>
of which transaction costs			4



The assets identified in the context of the purchase price allocation are as follows:

Customer relationships:	€ 731k	Useful life:	4 years
Technology:	€ 176k	Useful life:	8 years
Badwill:	€ 90k		

Roth & Rau is assuming a risk in this respect, as the future business still has to become established.

#### 4.1.2. Property, plant and equipment

The development in property, plant and equipment is presented in Note 4.1.

Additions to property, plant and equipment consist of investments of € 7,371k made in the customary course of business and additions of € 3,770 k due to acquisitions mainly attributable to Roth & Rau Muegge GmbH (land and buildings: € 2,311k).

A silicon crystallisation system for use in wafer production was capitalised at € 1,248k in the year under report. Moreover, an amount of € 2,832k was capitalised for infrastructure in the research and development department and for the extension and updating of the Technology Centre (construction section III).

Furthermore, within the framework of development projects, € 200k was invested in a wet process system, € 516k in a MAiA test platform and € 1,194k in an AK test platform for the first line at the Institute of Microtechnology at the University of Neuchâtel.

#### 4.1.3. Financial assets

The development in financial assets is presented in the table in Note 4.1.

Financial assets involve financial instruments in the "available for sale" category. The items reported under financial assets mainly relate to shares in subsidiaries consolidated using the equity method. As explained in Note 1.2.2., the prorated share of gains and losses at these companies is recognised in the income statement from the date of acquisition, while the share of changes in reserves is recognised in group reserves. Subsequent to acquisition, accumulated changes are offset against the carrying amount of the respective investment.

Financial assets include an amount of € 125k (previous year: € 0k) in connection with investments included using the equity method and which due to materiality considerations have not been reported separately in the balance sheet.

#### 4.1.4. Other non-current receivables

Other non-current receivables include the investment commission and arrangement commission of € 904k incurred in connection with the conclusion of the consortium agreement (previous year: € 966k), as well as deposits of € 44k paid on rental agreements entered into (previous year: € 19k).

#### 4.1.5. Investment property

The development in investment property is presented below.

This item relates to the land and building at "Gewerbering 10, Hohenstein-Ernstthal, Wüstenbrand District". This property is let out. The rental income amounted to € 42k in 2009 (previous year: € 43k). The maintenance expenses incurred in the year under report were immaterial.

Due to the lack of market or comparative data, the property has been measured at amortised cost.



The buildings are subject to straight-line depreciation of 4% p.a. No costs directly attributable to the financial investments were incurred in 2009. The current fair value amounts to between € 160k and € 300k.

#### 4.1.6. Deferred tax assets

Deferred tax assets are outlined in Note 5.10.

## 4.2. Current assets

### 4.2.1. Inventories

€ 000s	31.12.09	31.12.08
Raw materials and supplies	5,512	3,908
Work in progress	5,549	8,288
Finished products and goods	1,275	1,304
Prepayments made	9,664	15,196
<b>Total</b>	<b>22,000</b>	<b>28,696</b>

We expect finished products to be realised within a period of 12 months.

### 4.2.2. Receivables from long-term construction contracts

This position is structured as follows:

€ 000s	31.12.09	31.12.08
<b>ASSETS</b>		
Receivables	243,233	197,998
./. less prepayments received	-148,801	-122,197
<b>Net balance</b>	<b>94,432</b>	<b>75,801</b>
<b>LIABILITIES</b>		
Receivables	40,544	75,636
./. less prepayments received	-43,012	-83,808
<b>Net balance</b>	<b>-2,468</b>	<b>-8,172</b>

The respective orders are reported under "receivables from long-term construction contracts" on the asset side and under "liabilities from long-term construction contracts" on the liabilities side. In cases where the prepayments exceed the cumulative work performed, the excess balance is reported as a liability under liabilities from long-term construction contracts or under prepayments received.

This item is structured as follows:

Construction contracts in progress € 000s	31.12.09	31.12.08
Prorated sales recognised	283,777	273,634
Prepayments received	-191,813	-206,005
<b>Net balance</b>	<b>91,964</b>	<b>67,629</b>
Assets recognised in balance sheet	94,432	75,801
Liabilities recognised in balance sheet	-2,468	-8,172
<b>Net balance</b>	<b>91,964</b>	<b>67,629</b>
Costs	240,530	238,999
Prorated earnings	43,247	34,635
	<b>283,777</b>	<b>273,634</b>

#### 4.2.3. Trade and other receivables

€ 000s	31.12.09	31.12.08
Trade receivables	26,671	22,444
Receivables from affiliated companies	0	16
Other receivables and financial assets	6,714	3,410
<b>Total</b>	<b>33,385</b>	<b>25,870</b>

Trade receivables have terms of under one year. There are allowances of € 1,995k (previous year: € 1,998k). Individual allowances are recognised based on the assessment of the Management Board. Reference is made to criteria such as the number of days overdue and creditworthiness checks obtained from external institutions.

In the previous year, tax refund claims amounting to € 4,442k were reported under other receivables, resulting in total other receivables of € 7,852k in 2008. Tax refund claims have now been reported separately as tax receivables (c.f. Note 4.2.4).

#### Trade receivables

€ 000s	Balance at 01.01	Additions due to acquisitions	Utilised	Reversed	Added	Balance at 31.12.
Individual allowance	1,873	30	570	0	307	1,640
General portfolio allowance	125	22	0	80	288	355
<b>Total</b>	<b>1,998</b>	<b>52</b>	<b>570</b>	<b>80</b>	<b>595</b>	<b>1,995</b>



The Group had foreign currency receivables of € 117k at the balance sheet date (previous year: € 105k), which were written down by € 20k to the exchange rate on the balance sheet date.

Other receivables and financial assets are structured as follows:

€ 000s	31.12.09	31.12.08
Commission prepayments	0	160
Suppliers with debit balances	641	213
Deferred expense grants (research and development)	1,628	1,211
2008 investment grant	1,067	0
Deferred interest claims	43	441
Deferred bonuses	57	247
Financial derivatives	31	361
Receivables from insurance companies	1,368	239
Deferred expenses and accrued income	1,272	415
Miscellaneous	607	123
<b>Total</b>	<b>6,714</b>	<b>3,410</b>

Reference is made to Notes 1.5.22 et seq. and to Note 4.6. in respect of financial derivative and other financial instruments.

#### 4.2.4. Current tax receivables

This item includes tax refund claims in connection with VAT, corporate income tax, the solidarity surcharge and trade tax.

€ 000s	31.12.09	31.12.08
Taxes on income	2,848	2,668
VAT	369	1,774
<b>Total</b>	<b>3,217</b>	<b>4,442</b>

#### 4.2.5. Cash and cash equivalents

€ 000s	31.12.09	31.12.08
Cash holdings	11	6
Credit balances at banks	31,687	70,690
Marketable securities	34,343	20,819
<b>Total</b>	<b>66,041</b>	<b>91,515</b>

Cash and cash equivalents are recognised at face value.

In addition to cash holdings and short-term bank deposits with terms of less than three months, this item also includes time and overnight deposits as well as securities which are available on a daily basis and thus classified as cash equivalents. The securities belong without exception to the "available for sale" category and are measured at fair value. Changes in their value are recognised in equity until disposal. Purchases and sales are recognised as of the performance date. Reference is also made to Note 4.6.

### 4.3. Shareholders' equity

Reference is made to the Statement of Changes in Group Equity for further information on changes in shareholders' equity at the Roth & Rau Group in the 2009 financial year.

#### 4.3.1. Share capital

Share capital amounted to € 13,800k as of 31 December 2009 (31 December 2008: € 13,800k) and was divided into 13,800,000 individual non-par bearer shares. All individual shares are paid up in full. Reference is made to the information in the Management Report in respect of the resolutions adopted at the Annual General Meeting of Roth & Rau AG on 18 May 2009.

The Group did not own any treasury stock at the balance sheet date, neither did it have any conditional capital or share options. To promote the achievement of its financial targets, Roth & Rau has introduced a share-based compensation programme (phantom stock programme or PSP) entitling managers and selected employees to subscribe phantom stocks.

#### 4.3.2. Capital reserve

The capital reserve includes the equity-settled share of phantom stocks, amounting to € 47k (previous year: € 6k).

#### 4.3.3. Revenue reserves

No annual net surplus was generated pursuant to German commercial law in the 2009 financial year. No amount has therefore been allocated to revenue reserves.

#### 4.3.4. Other reserves

Other reserves contain changes in the value of available-for-sale securities, including allocable deferred taxes, recognised directly in equity. They also include the effective portions of cash flow hedges and allocable taxes.

€ 000s	Cash flow hedge	Available for sale	Foreign currency differences	Total
Balance at 01.01.2009	-250	495	0	245
Additions	400	167	8	575
Withdrawals	-47	-802	0	-849
Changes in deferred taxes	-103	186	0	83
Balance at 31.12.2009	0	46	8	54

€ 000s	Cash flow hedge (revised)	Available for sale (revised)	Foreign currency differences	Total
Balance at 01.01.2008	0	172	0	172
Additions	-374	680	0	306
Withdrawals	21	-169	0	-148
Changes in deferred taxes	103	-188	0	-85
Balance at 31.12.200	-250	495	0	245

#### 4.3.5. Unappropriated retained earnings

Unappropriated retained earnings developed as follows:

€ 000s	2009	2008
Earnings carried forward as of 1 January	34,815	15,798
Consolidated net income attributable to shareholders in Roth & Rau AG	12,929	23,024
Allocation to revenue reserves	0	-4,007
Unappropriated retained earnings as of 31 December	47,744	34,815

The Management Board proposes not paying any dividend to shareholders for the past financial year.

#### 4.3.6. Minority interests

The subsidiary SLS Solar Line Saxony GmbH ("SLS") was jointly established with USK Karl Utz Sondermaschinen GmbH ("USK") by notarised agreement dated 11 February 2008. The company's share capital amounts to € 4,000k. Roth & Rau AG holds 51% (€ 2,040k) and USK 49% (€ 1,960k) of the company's share capital.

Of the consolidated net income of € 12,972k, USK is entitled to earnings of € 43k.

### 4.4. Non-current debt

#### 4.4.1. Non-current loans

€ 000s	31.12.09	31.12.08	Repayment	Maturity
Sparkasse loan	500	700	quarterly	30.06.12
BW Bank loan	500	700	quarterly	30.06.12
BW Bank loan	1,600	2,000	quarterly	28.06.13
Deutsche Bank loan	513	586	half-yearly	30.09.16
Sparkasse Langen -Seligenstadt loan	715	0	monthly	30.10.12
Sparkasse Langen -Seligenstadt loan	409	0	monthly	31.10.13
Deutsche Bank loan	438	500	half-yearly	30.09.16
	4,675	4,486		
less current portion	-936	-736		
	3,739	3,750		

The loans from Sparkasse Chemnitz and Baden-Württembergische Bank (BW Bank) were concluded in June 2007 at a nominal value of € 1,000k. They have fixed interest rates of 5.15 % and require quarterly repayments of € 50k in each case. The repayment amounts due in 2009 have therefore been recognised as the current portion.

Roth & Rau AG took up a loan originally amounting to € 2,000k with a floating interest rate from BW Bank to finance the second stage of construction in Hohenstein-Ernstthal. The floating interest rate is hedged with an interest swap. The liabilities reported towards the Sparkasse and BW Bank are secured by land charges.

The loans from Deutsche Bank involve fixed-interest loans at AIS Automation Dresden GmbH, a company acquired in 2008. The loans are redeemed with total annual repayments of € 136k.

Financial debt is recognised at amortised cost using the effective interest method.

#### 4.4.2. Deferred tax assets and liabilities

Reference is made to Notes 1.5.3. and 5.10.

Deferred taxes have been calculated using a tax rate of 29.2 % (previous year: 29.2 %). The calculation of deferred taxes has been based on a corporate income tax rate of 15 %. Moreover, account has also been taken of a solidarity surcharge of 5.5 % of corporate income tax and an average trade tax multiplier of 382 %.

Temporary recognition and measurement differences for individual balance sheet items resulted in statement of the following taxes:

€ 000s	31.12.2009		31.12.2008	
	Assets	Liabilities	Assets	Liabilities
Non-current assets	1,035	9,144	1,015	4,847
Receivables	1,508	12,992	1,547	10,586
Provisions	42	23	31	23
Miscellaneous	14	1,140	0	1,146
Liabilities	40	3	598	2
Derivative financial instrument	0	18	104	203
Loss carryovers	1,418	0	165	0
<b>Total before netting</b>	<b>4,057</b>	<b>23,320</b>	<b>3,460</b>	<b>16,807</b>
<b>Netting</b>	<b>-3,406</b>	<b>-3,406</b>	<b>-2,967</b>	<b>-2,967</b>
<b>Amount recognised in balance sheet</b>	<b>651</b>	<b>19,914</b>	<b>493</b>	<b>13,840</b>

Of the deferred tax assets of € 4,057k (previous year: € 3,460k), € 2,459k (previous year: € 1,489k) are to be classified as non-current and € 1,598k (previous year: € 1,971k) as current.

Of the deferred tax liabilities of € 23,320k (previous year: € 16,807k), € 8,889k (previous year: € 5,335k) are to be classified as non-current and € 14,431k (previous year: € 11,472k) as current.

Deferred tax liabilities have not been recognised on outside basis differences of € 7,520k (previous year: € 1,582k) due to the control exercised by the parent company over distribution behaviour and the time of reversal. A permanent difference within the control of the parent company has therefore been assumed.



#### 4.4.3. Non-current provisions

This item includes the cash-settled share of the measurement of the phantom stock programme, amounting to € 109k (previous year: € 8k).

##### 4.4.3.1. Phantom Stock

To promote the achievement of its financial targets, Roth & Rau has introduced a share-based compensation programme (phantom stock programme or PSP) as a long-term compensation instrument entitling managers and selected employees to subscribe phantom stock. The virtual options are divided into up to five tranches and are allocated twelve months following allocation of the previous respective tranche. Each tranche may be exercised following expiry of a lockup period of two years. This corresponds to the vesting period. When the virtual options are exercised, Roth & Rau AG is obliged to pay the difference in value, corresponding to the difference between the reference price specified at the beginning of the option programme (1 September 2008 - € 32.69) and the average, unweighted closing price of the share on the sixty trading days preceding the exercising of phantom stocks in the given tranche (exercise price). Phantom stocks allocated within a given tranche are deemed to have been exercised as of the first trading day on Frankfurt Stock Exchange following expiry of the respective lockup period, provided that the exercise hurdle has been achieved. Phantom stocks may only be exercised when the exercise price has risen by 10 % p.a. on the reference price since allocation of the respective tranche (exercise hurdle). This has been accounted for in the measurement of the phantom stocks.

The aggregate total of gross PSP gains calculated in this way for all participants in the first tranche may not exceed € 1,000k; otherwise, the respective amounts are to be reduced proportionately per participant.

Members of the Management Board receive 50 % of the option gain on the first tranche in cash. The remaining 50 % of the net PSP gain must be used to acquire shares in Roth & Rau AG at the current market price (equity-based share). In respect of the second tranche, the use of option gains by Management Board members has been retrospectively adjusted. Accordingly, 100 % of the net PSP gain must now be used to acquire Roth & Rau shares. This amendment is based on the contractual terms governing the 2008 phantom stock programme for the Management Board of Roth & Rau AG, which were amended as of 30.09.2009. The implications of this contractual amendment, involving a € 17.3k reduction in the capital reserve and a € 17.0k increase in the provision, are deemed immaterial. The participant may dispose freely over these Roth & Rau shares after the expiry of one year following acquisition.

Roth & Rau issued 66,000 option rights as a second tranche on 1 September 2009. The reference price thereby determined amounts to € 22.61. The following table presents the change in phantom stocks outstanding in the first and second tranches.

	Number in 2009	Number in 2008
Granted in 2008	57,000	57,000
Granted in 2009	66,000	0
Forfeited	0	0
Exercised	0	0
Lapsed	-4,000	0
Balance at end of period	119,000	57,000

Of the 119,000 phantom stocks outstanding, none was yet exercisable as of 31 December 2009. Of these option rights, 28,000 are 100 % equity-settled, 17,000 in equal share equity-settled and cash-settled, and 74,000 100 % cash-settled.

The options outstanding at the end of the reporting period are due on 1 September 2010 in the case of the first tranche and on 1 September 2011 in the case of the second tranche. Due to personnel turnover, the number of phantom stocks reduced by 4,000.

The fair values of the phantom stocks have been calculated using a simulation programme (Monte Carlo model) specially adapted to the agreed strategy. Geometric Brownian motion was assumed for movements in the share price. Volatility has been calculated pursuant to IFRS 2 B25(b) as historic volatility based on the average performance of shares in Roth & Rau AG from 01.04.2009 to 31.12.2009 in line with the remaining terms of the option rights. The calculation has been based on the following valuation parameters:

#### 1st tranche

Risk-free interest rate in percent p.a.	0.77
Expected volatility of Roth & Rau's share in percent p.a.	57.85
Expected dividends	0
Relevant stock market price of Roth & Rau AG on balance sheet date	30.22 €
Base price	32.69 €
Exercise hurdle	39.55 €

The risk-free interest rate was taken from the time series WT3211: yield curve (Svensson-Methode) / listed federal bonds / 1.0 year remaining term / daily values of the German Bundesbank upon the valuation date (source: [www.bundesbank.de/statistik/statistik\\_zeitreihen.php](http://www.bundesbank.de/statistik/statistik_zeitreihen.php) under interest, return/yield curve on the bond market).

#### 2nd tranche

Risk-free interest rate in percent p.a.	1.33
Expected volatility of Roth & Rau's share in percent p.a.	78.5
Expected dividends	0
Relevant stock market price of Roth & Rau AG on balance sheet date	30.22 €
Base price	22.61 €
Exercise hurdle	27.35 €

The risk-free interest rate was taken from the time series WT3213: yield curve (Svensson-Methode) / listed federal bonds / 2.0 years remaining term / daily values of the German Bundesbank upon the valuation date (source: [www.bundesbank.de/statistik/statistik\\_zeitreihen.php](http://www.bundesbank.de/statistik/statistik_zeitreihen.php) under interest, return/yield curve on the bond market).



Cash-settled portion	Number at 31.12.2009	Intrinsic value per option in € = payment amount	Current value per option in €	Payment obligation	Provision as of 31.12.2009 € 000s
2008 tranche	40,500	0	2.825	0	76
2009 tranche	42,000	0	4.702	0	33

Equity-settled portion	Number at 31.12.2009	Intrinsic value per option in € = payment amount	Current value per option in €	Payment obligation	Allocation to capital reserve € 000s
2008 tranche	12,500	0	4.204	0	35
2009 tranche	24,000	0	3.012	0	12

A total expense of € 142k was recognised for the option programme in the year under report (previous year: € 14k). This has been reported under personnel expenses.

The cash-settled portion (82,500 options) has been recognised under non-current provisions. The equity-settled portion (36,500 options) has been recognised in the capital reserve within shareholders' equity in the balance sheet.

#### 4.4.3.2. Pension obligation

Alongside its own defined benefit pension plans, the Group also assumed defined benefit plans upon its acquisition of AIS Automation Dresden GmbH. Having already assigned the pension commitments at Roth & Rau AG to Deutscher Pensionsfonds in 2008, in 2009 the Group outsourced the pension commitments at AIS Automation Dresden GmbH by way of assignment to Deutscher Pensionsfonds (DPAG) pursuant to § 3 (66) of the German Income Tax Act (EStG) and to the ZDHUK pension fund pursuant to § 4d of the German Income Tax Act (EStG). This was financed by a one-off payment of € 934k on 1 October 2009. All pension claims are thus now fully fund-financed.

Furthermore, pension commitments have been made to two Management Board members, namely Carsten Bovenschen and Thomas Hengst. These are financed via a pension fund. As a small volume of risks remain at the Group, a defined benefit obligation still has to be recognised at the Group. The asset surplus of plan assets over the pension provision for Roth & Rau AG and AIS Automation Dresden GmbH, amounting to € 2,877k, has been recognised under other receivables as of 31 December 2009.

The following table presents the actuarial assumptions underlining the pension obligations recognised.

in %	31.12.09	31.12.08
Interest rate	6.00	5.25
Pension trend (2005G mortality tables by Klaus Heubeck)	2.00	2.00
Personnel turnover	0.00	0.00
Return expected on plan assets	5.00	0.00
Salary trend	0.00	0.00

Composition of pension provision € 000s	31.12.09	31.12.08 revised
Defined benefit obligation at end of year	2,539	2,285
Unrecognised actuarial gains/losses	-452	-90
less fair value of plan assets	-2,877	-2,223
Adjustment due to asset limit	310	54
Amount of provision (asset surplus)	-480	26

In the income statement, current service cost has been recognised under pension expenses, the interest expense in the net financial result and the return on plan assets under other operating income.

The development in the present value of pension obligations is presented in the following table:

€ 000s	2009	2008 revised
Balance at 01.01.	2,285	629
Service cost	199	61
Interest expense	128	52
Actuarial gains/losses	-73	138
Past service cost	0	663
Business combinations	0	742
Balance at 31.12.	2,539	2,285

The additional service cost relates to the change in the pension commitment to the CEO (retirement age, increase in compensation).

The following table presents the calculation of the annual expense for the provision recognised as of 31 December 2009.

€ 000s	2009	2008 revised
Service cost	199	61
Interest expense	128	52
Expected return	-122	-15
Past service cost	0	663
Impact of outsourcing of pension obligations	-325	-137
Impact of correction of asset limit	256	54
Balance at 31.12.	136	678

In the income statement, current service cost has been recognised under pension expenses, the interest expense in the net financial result and the return on plan assets under other operating income.



The Group has plan assets with a fair value of € 2,877k (31 December 2008: – revised – € 2,223k). The development in their fair value is presented in the following table:

€ 000s	2009	2008 revised
Balance at 01.01.	2,223	0
Expected return	122	15
Actuarial gains/losses	58	0
Contributions	474	1,606
Business combinations	0	602
Balance at 31.12.	2,877	2,223

The following amounts were recognised for defined benefit plans for the current and previous reporting periods.

€ 000s	2009	2008 revised	2007	2006	2005
Present value of obligation	2,539	2,285	629	575	512
Fair value of plan assets	2,877	2,223	194	153	112
Plan deficit / (surplus)	-338	62	435	422	400

No empirical adjustments were made to assets and liabilities. The Group expects to make payments of € 196k to defined contribution pension plans in 2010.

## 4.5. Current debt

### 4.5.1. Liabilities from long-term construction contracts

Reference is made to Notes 1.5.1., 1.5.18. and 4.2.2. in respect of liabilities from long-term construction contracts.

### 4.5.2. Trade payables and other liabilities

€ 000s	31.12.09	31.12.08
Trade payables	33,856	34,894
Liabilities to affiliated companies	0	367
Other liabilities	1,333	683
Total	35,189	35,944

Trade payables all have remaining terms of under one year. Tax liabilities of € 427k reported under other liabilities in the previous year have now been reported separately in the current tax liabilities

item (Note 4.5.5.). Excluding tax liabilities, other liabilities thus amounted to € 683k in the 2009 financial year.

The Group had foreign currency liabilities of € 1,846k at the balance sheet date. Foreign currency liabilities were measured at the reporting date rate; all other liabilities were measured at their respective repayment amounts. They include a large number of individual items. There are no material variances between carrying amounts and fair values.

Other liabilities € 000s	31.12.09	31.12.08
<b>Financial instruments</b>		
Customer credit balances	266	58
Derivative financial instruments	137	459
Miscellaneous	471	1
	874	518
<b>Other</b>		
Deferred income and accrued expenses	12	0
Personnel liabilities	447	165
	459	165
<b>Total</b>	<b>1,333</b>	<b>683</b>

Other liabilities all have remaining terms of under one year.

In the balance sheet, other liabilities have been reported together with trade payables in the trade payables and other liabilities item, amounting to € 35,189k in total (previous year: € 35,944k). This figure includes trade payables of € 33,856k and other liabilities of € 1,333k (previous year: € 683k). Tax liabilities of € 427k for 2008, which were reported under other liabilities in the previous year, have now been reported separately under current tax liabilities (Note 4.5.5.).

#### 4.5.3. Prepayments received

€ 000s	31.12.09	31.12.08
<b>Total</b>	<b>197,492</b>	<b>216,289</b>
Of which due within one year	197,492	216,289
Of which secured by bank guarantees	28,529	0
Of which netted with receivables	149,191	122,197
Of which netted with liabilities	43,012	83,808
Of which recognised as liabilities	5,289	10,284

#### 4.5.4. Current loans

Current loans consist of the repayment amounts for non-current loans due in 2009 (€ 936k). Reference is made to Note 4.4.1.



#### 4.5.5. Current tax liabilities

This item includes expected retrospective payments of € 607k for trade tax, corporate income tax and solidarity charge for 2009, as well as of € 655k (previous year: € 427k) for VAT and payroll taxes, amounting to € 1,262k in total (previous year: € 1,348k).

#### 4.5.6. Current provisions

€ 000s	Balance at 01.01.09	Addition due to acquisition	Utilised	Reversed	Added	Balance at 31.12.09
<b>Other provisions</b>						
Personnel	2,839	435	2,334	163	3,575	4,352
Outstanding invoices/ services	2,501	1	452	24	261	2,287
Guarantee	1,762	348	1,480	171	1,468	1,927
Miscellaneous	521	74	511	2	1,921	2,003
<b>Total</b>	<b>7,623</b>	<b>858</b>	<b>4,777</b>	<b>360</b>	<b>7,225</b>	<b>10,569</b>

Current provisions for personnel mainly involve overtime, bonuses, the employers' liability insurance association and vacation. Outstanding invoices and services chiefly relate to sales commissions and invoices still outstanding for materials and third-party services. The provision for warranties has been calculated on the basis of historic warranty expenses and estimates of future costs. The level of provision accounts both for guarantee expenses actually incurred in the past and for technical information concerning product weaknesses discovered in the construction or trial stages or upon installation of the product. The outflow of the amounts stated as provisions is expected to occur within one year.

## 4.6. Other disclosures on financial instruments

Financial instruments comprise primary and derivative financial instruments.

On the asset side, primary financial instruments mainly consist of receivables, other financial assets and cash and cash equivalents. On the liabilities side, primary financial instruments chiefly involve liabilities measured at amortised cost.

Holdings of primary and derivative financial instruments are reported in the balance sheet. Any default risks identified for financial assets are recognised in the form of impairments.

Furthermore, the company generally also makes use of derivative financial instruments, which are deployed to hedge foreign currency risk. The forward exchange transactions entered into by the Group are intended to hedge significant cash flows denominated in foreign currencies from the operating business. These are treated as cash flow hedges. Since the fourth quarter of 2009, no further hedging instruments have been designated as cash flow hedges. Depending on the significance of the transaction in the individual case, Roth & Rau concludes forward exchange transactions to hedge purchases of materials or sales of its systems in foreign currencies. To hedge interest rate risk, the Group concludes interest swaps in which the Group agrees to exchange with the counterparty, at specified intervals, the difference between fixed and floating rate interest amounts calculated by



reference to an agreed-upon notional principal amount. The underlying obligation is hedged with these interest swaps.

Financial instruments are initially measured at cost. Securities and publicly listed other investments held on a fair value basis are categorised and recognised at fair value pursuant to IAS 39. Changes in their value are recognised in the net financial result.

Other marketable securities are classified as “available for sale” and also measured at fair value. Changes in their value are recognised directly in equity, to the extent that their market value can be reliably determined. The Group has no financial assets allocable to the “held to maturity” category. Like all other financial assets, long-term lendings are categorised as “loans and receivables” and recognised at amortised cost.

Financial liabilities with fixed terms are measured at amortised cost using the effective interest method.

All derivative financial instruments entered into by the Group are initially recognised in the balance sheet at cost and subsequently measured at fair value at the balance sheet date. Gains and losses resulting from changes in the fair value are recognised in accordance with whether they meet the requirements governing recognition as hedges (hedge accounting) as defined by IAS 39. When hedge accounting is applied, derivative financial instruments are generally qualified as hedging future payment obligations (cash flow hedges). Changes in the fair value of cash flow hedges are recognised directly in equity, taking due account of their tax implications, to the extent that they are effective. Ineffective portions are recognised through profit or loss. The amounts recognised directly in equity are charged or credited to earnings in the period in which the hedged transaction is transferred to the income statement. In the year under report, the Group concluded cash flow hedges and retired items from equity through profit or loss, taking due account of deferred taxes. For reasons of materiality, hedge accounting was initially discontinued from the 4th quarter of 2009.

The fair values of forward exchange transactions are determined on the basis of current reference prices from the European Central Bank, taking due account of forward premiums and discounts. Currency options are measured on the basis of market listings or recognised option price calculation models. The fair values of interest hedges are determined on the basis of discounted expected future cash flows.

Depending on their fair values at the balance sheet date, derivative financial instruments are recognised as other financial assets (if their fair value is positive) or as financial liabilities (if their fair value is negative).

€ 000s	Face value		Positive fair value		Negative fair value	
	31.12.09	31.12.08	31.12.09	31.12.08	31.12.09	31.12.08
Forward exchange contracts and currency options (term < 1 year)	3,418	16,691	31	361	35	354
Of which designated as hedge accounting	0	11,939	0	0	0	354
Interest swaps	1,600	2,000	0	0	102	105
Summe	5,018	18,691	31	361	137	459

In the past year, the Group concluded forward exchange contracts and currency options for the sole purpose of hedging future cash flows in US dollars.

#### 4.6.1. Carrying amounts and fair values of financial instruments

The carrying amounts and fair values of the Group's financial instruments are presented in the following table. The fair value of a financial instrument is the price at which a party would acquire the rights and/or obligations resulting from such financial instrument from an independent third party.

31.12.09 in € 000s		Carrying amounts				Total	Fair value
Category	Held for Trading	Available for sale		Loans and receivables	Derivates in cash flow hedges		
Measurement standard	Fair value through profit or loss	At cost	Fair value in equity	At cost	Fair value in equity		
<b>Class</b>							
<b>ASSETS</b>							
Shares in unconsolidated affiliated companies	0	270	0	0	0	270	270
Receivables from financing measures	0	0	0	117	0	117	117
Deposits	0	0	0	44	0	44	44
Receivable from long-term construction contracts	0	0	0	94,432	0	94,432	94,432
Trade receivables	0	0	0	26,671	0	26,671	26,671
Securities	66	0	0		0	66	39
Other receivables	0	0	0	6,714	0	6,714	6,714
Currency-related derivatives – non-hedge	31	0	0	0	0	31	361
Cash and cash equivalents	0	0	34,343	31,698	0	66,041	66,041

31.12.09 in € 000s		Carrying amounts		Total	Fair value
Category	Held for trading, including non-hedge derivatives	Other liabilities			
Measurement standard	Fair value through profit or loss	At amortised cost			
Class					
LIABILITIES					
Non-current					
interest-bearing loans	0	3,739	3,739		3,837
Liabilities from long-term					
construction contracts	0	2,468	2,468	2,468	
Trade payables	0	33,856	33,856	33,856	
Miscellaneous					
other liabilities	0	1,333	1,333	1,333	
Interest-related derivatives – non-hedge		102	0	102	
Currency-related derivatives – hedging		35	0	35	

In the previous year, financial instruments were structured as follows:

31.12.08 in € 000s		Carrying amounts				Total	Fair value
Category	Held for Trading	Available for sale		Loans and receivables	Derivates in cash flow hedges		
Measurement standard	Fair value through profit or loss	At cost	Fair value in equity	At cost	Fair value in equity		
<b>Class</b>							
<b>ASSETS</b>							
Shares in unconsolidated affiliated companies	0	11,006	0	0	0	11,006	-
Receivables from financing measures	0	0	0	1,270	0	1,270	1,270
Deposits	0	0	0	39	0	39	39
Receivables from long-term construction contracts	0	0	0	75,801	0	75,801	75,801
Trade receivables	0	0	0	22,460	0	22,460	22,460
Securities	39	0	0	0	0	39	39
Other receivables	0	0	0	2,797	0	2,797	2,797
Currency-related derivatives – non-hedge	361	0	0	0	0	361	361
Cash and cash equivalents	0	0	20,819	70,696	0	91,515	91,515

31.12.08 in € 000s		Carrying amounts			Fair value
Category	Held for trading, including non-hedge derivatives	Other liabilities	Derivatives in cash flow hedges	Total	
Measurement standard	Fair value through profit or loss	At amortised cost	Fair value in equity		
<b>Class</b>					
<b>LIABILITIES</b>					
Non-current interest bearing loans	0	3,750	0	3,750	3,988
Liabilities from long-term construction contracts	0	8,172	0	8,172	8,172
Trade payables	0	35,261	0	35,261	35,261
Miscellaneous other liabilities	0	1,005	0	1,005	1,005
Interest-related derivatives - non-hedge	105	0	0	105	105
Currency-related derivatives - hedging	0	0	354	354	354

The fair values of the financial instruments have been determined on the basis of the market information available at the balance sheet date and of the methods and assumptions presented below.

Specified financial instruments € 000s	2009	2008
Securities	34,409	20,858
at fair value through profit or loss	66	39
at fair value in equity	34,343	20,819
Long-term loans		
at fair value through profit or loss	0	0
at amortised cost	117	1,270
	34,460	22,089

**Receivables from long-term construction contracts, trade receivables and cash and cash equivalents:** Given the short maturities of these financial instruments, it is assumed that their fair values correspond to their carrying amounts.

**Other financial assets:** Financial assets available for sale include:

- Equity components measured at fair value. The portions of equity measured at fair value were based on stock market prices on 31 December.
- Equity components measured at cost. No fair values could be determined for equity components measured at cost, as no stock market or other market values were available. This item involves shares in unlisted companies for which there were no indications of permanent impairment at the balance sheet date and for which the discounting of expected cash flows was foregone due to the impossibility of determining cash flows reliably.

Financial assets measured at fair value through profit or loss include:

- Derivative financial instruments not covered by hedge accounting.
- Securities held for trading. Securities held for trading and measured at fair value were valued on the basis of stock market prices as of 31 December.

**Other receivables and assets:** These financial instruments are recognised at cost. Given the short maturities of these financial instruments, it is assumed that their fair values correspond to their carrying amounts.

**Financial liabilities:** Loans are recognised at their respective repayment amounts. The fair values of loans are determined as the present value of expected future cash flows. They are discounted by reference to customary market interest rates based on congruent maturities.

**Liabilities from long-term construction contracts and trade payables:** Given the short maturities involved, it is assumed that the fair values correspond to the carrying amounts.

**Other financial liabilities:** Financial liabilities measured at fair value through profit or loss include derivative financial instruments not covered by hedge accounting. The fair values of interest hedges (interest swaps) were determined on the basis of their discounted expected future cash flows. Reference was made to the market interest rates applicable for the remaining terms of the financial instruments.

Derivative financial instruments mainly involve derivative currency hedging contracts. The fair values of forward exchange transactions were determined on the basis of their discounted expected future cash flows. Reference was made to the market interest rates applicable for the remaining terms of the financial instruments. Currency options were measured using market listings or option price models.

In the case of miscellaneous other financial liabilities, it was assumed given the short maturities of these financial instruments that their fair values correspond to their carrying amounts.

The fair values were structured as follows:

Fair value hierarchy	2009				2008			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>								
Held for trading	66	31	0	97	39	361	0	400
Available for sale	33,342	1,001	0	34,343	20,819	0	0	20,819
<b>Financial liabilities</b>								
Held for trading	0	137	0	137	0	459	0	459
of which cash flow hedges	0	0	0	0	0	354	0	354

Valuation level 1: use without amendment of quoted prices on active markets of identical financial assets or financial liabilities.

Valuation level 2: use of input factors not involving quoted prices such as those in level 1, but which are observable for the financial asset or financial liability either directly (i.e. as a price) or indirectly (i.e. based on prices).

Valuation level 3: use of input factors not based on observable market data to measure the financial asset or financial liability (non-observable input factors).

#### 4.6.2. Net gains or losses

€ 000s	2009	2008
Financial assets and financial liabilities measured at fair value through profit or loss	229	-914
Financial assets available for sale	802	1,085
Loans and receivables	1,995	1,113
Financial liabilities measured at cost	0	1

Net gains or losses on financial assets and liabilities measured at "fair value through profit or loss" include the results of changes in fair values.





Net gains or losses on "available for sale" financial assets mainly consist of interest income and the profit realised on the sale of these financial instruments.

Net gains or losses on "loans and receivables" mainly consist of the results of write-downs and write-ups, as well as interest expenses and interest income on these financial instruments.

#### 4.6.3. Total interest income and expenses

Total interest income and expenses from continuing operations for financial assets and financial liabilities not measured at fair value through profit or loss were structured as follows:

€ 000s	2009	2008
Total interest income	986	4,071
Total interest expenses	444	147

#### 4.6.4. Disclosures on derivative financial instruments

Deployment of derivatives. The Group uses interest swaps for the exclusive purpose of hedging interest rate risks. Foreign currency risks are primarily hedged by forward exchange transactions and options.

Cash flow hedges. The Group designates cash flow hedges primarily in connection with the hedging of foreign currency risks. The maturities of the financial instruments are congruent with those of the hedged item. In the 2009 financial year, the measurement of derivatives (before taxes) led to unrealised gains (losses) of € 400k (previous year: € -374k) being recognised directly in equity. During this period, net interest expenses (interest income) of € -47k (previous year: € 21k) were reclassified from equity to the net financial result. For reasons of materiality, no further application was made of hedge accounting from the fourth quarter of 2009.

Non-hedge derivatives. In the context of interest and value hedging, interest rate risks are limited by interest derivatives in the form of interest swaps. One interest swap has been concluded to hedge existing interest rate risk in connection with a floating-rate loan. The Roth & Rau Group does not recognise this derivative as a cash flow hedge pursuant to IAS 39, as the hedge accounting criteria set out in IAS 39 have not been met. The interest swap was recognised in the balance sheet at fair value. Changes in fair value are recognised through profit or loss in the net financial result. The nominal amount is € 1,600k, while the fair value of the interest derivative amounts to € 102k.

## 5. Disclosures on individual items in the income statement

The income statement has been prepared using the total cost method. An income statement prepared using the cost of sales method has been additionally presented for information purposes.

### 5.1. Sales

The company recognises its sales in accordance with IAS 18. Sales fell by 27.3 % compared with the previous year (previous year: increased by 86.1 %). The reduction in sales in 2009 was due to the decline in demand in the photovoltaics industry. This in turn was due to a decline in demand in the end consumer market, as well as to restrictive financing terms and the resultant reluctance among cell manufacturers to invest. A breakdown of sales by products and regions has been presented in Note 3.

The sales of € 197,903k (previous year: € 272,122k) include sales of € 7,236k from long-term construction contracts (previous year: € 137,479k).

### 5.2. Increase/decrease in stocks of finished products and work in progress

The change in stocks of finished products and work in progress by € 3,568k (previous year: € 8,024k) mainly involves SiNA systems produced in advance in 2008 to ensure short delivery times and which could be converted for use in customer-specific products in the year under report.

Alongside costs of materials, the costs of sales of € 118,059k (previous year: € 205,264k) also include personnel expenses of € 38,724k, which grew by 92.2 % (previous year: € 20,145k), and depreciation and amortisation.

### 5.3. Capitalised services rendered to own account

In addition to the costs of manufacturing proprietary systems and machines, the capitalised services rendered to own account of € 15,014k (previous year: € 5,456k) chiefly involve capitalised manufacturing costs for development work, expenses for research and development work performed in 2009 and the share of personnel expenses and depreciation and amortisation attributable to this area. Capitalised services rendered to own account include government grants of € 1,493k.

€ 000s	2009	2008
Capitalised services rendered to own account for publicly subsidised research and development projects	11,658	4,884
Capitalised services rendered to own account for internally used equipment	3,356	572
<b>Total</b>	<b>15,014</b>	<b>5,456</b>

### 5.4. Other operating income

Other operating income mainly includes income from the reversal of impairments and provisions and income from exchange rate movements and derivative currency hedging instruments. Moreover, a significant share of the income is attributable to the badwill of € 1,141k from the consolidation of CTF Solar GmbH.



€ 000s	2009	2008
Income from real estate letting (investment property)	42	43
Income from reinsurance	25	110
Income from reversal of provisions	360	84
Income from foreign exchange differences	1,413	1,622
Income from insurance compensation	96	42
Reduction in individual allowances	80	113
Badwill from purchase price allocations	1,141	0
Miscellaneous	1,793	523
<b>Total</b>	<b>4,950</b>	<b>2,537</b>

## 5.5. Cost of materials

€ 000s	2009	2008
Cost of raw materials, supplies and purchased goods	106,158	191,930
Cost of purchased services	11,901	13,334
<b>Total</b>	<b>118,059</b>	<b>205,264</b>

The materials quota amounted to 59.7 % as a percentage of sales (previous year: 75.4 %). Among other items, expenses for purchased services include the costs of contract staff, amounting to € 1,820k (previous year: € 5,989k). The expenses for raw materials, supplies and purchased goods include both system construction components and components for the turnkey business.

## 5.6. Personnel expenses

The composition of personnel expenses is presented in the following table.

€ 000s	2009	2008
Wages and salaries	32,879	16,591
Social security contributions	5,351	2,578
Pension expenses	494	976
<b>Total</b>	<b>38,724</b>	<b>20,145</b>

The average number of employees amounted to 762 during the 2009 financial year. The 874 employees at the balance sheet date (previous year: 606) were deployed as follows:

	2009	2008
Production	333	269
Research and development	109	33
Technology and sales	232	211
Administration	153	75
Other	13	2
Subtotal	840	590
Trainees	34	16
Total	874	606

## 5.7. Depreciation and amortisation

€ 000s	2009	2008
Scheduled depreciation and amortisation		
Intangible assets	5,867	3,210
Property, plant and equipment	2,230	1,195
Total	8,097	4,405
Impairments		
Development expenses	121	78
Goodwi	0	1,579
Total	8,218	6,062

## 5.8. Other operating expenses

Other operating expenses mainly consist of impairments of receivables, recognition of provisions, expenses for foreign exchange differences, derivative hedging instruments and cancellation agreements.

€ 000s	2009	2008
Premise expenses	1,854	912
Insurances, contributions and fees	996	374
Maintenance and repairs	705	295
Vehicle expenses	1,310	519
Advertising and travel expenses	6,789	3,838
Merchandise distribution expenses	5,745	12,695
Impairment losses on current asse	742	2,105
Non-period expenses	1,000	0
Legal and advisory expenses	6,478	2,418
Foreign exchange differences	1,346	896
Miscellaneous operating expenses	6,233	4,068
Total	33,198	28,120



The total amount of miscellaneous operating expenses consists of numerous items which are immaterial on an individual basis.

Non-period expenses mainly relate to a credit in connection with a delivery in 2008.

## 5.9. Net financial result

€ 000s	2009	2008
Gains on fixed income securities	839	258
Interest income	986	4,071
<b>Subtotal</b>	<b>1,825</b>	<b>4,329</b>
Interest expenses for banks	444	147
Other financial expenses	90	182
Guarantee fees	565	737
Abschreibung Investment Property	119	10
<b>Subtotal</b>	<b>1,218</b>	<b>1,076</b>
<b>Total</b>	<b>607</b>	<b>3,253</b>

Interest income mainly includes income on short-term money investments. The other financial expenses item includes interest expenses for pensions and write-downs of marketable securities.

## 5.10. Taxes on income

€ 000s	2009	2008
Current tax expenses	901	2,750
Deferred tax expenses	2,834	5,889
<b>Total</b>	<b>3,735</b>	<b>8,639</b>

The following reconciliation account presents the differences between the income tax expenses actually recognised and the income tax expenses expected. The expected income tax expenses correspond to earnings before taxes on income multiplied by the expected tax rate. The expected tax rate includes German corporate income tax, the solidarity surcharge and trade tax and was set at 29.2 % for the year under report (previous year: 29.2 %).

Reconciliation of tax expenses		
€ 000s	2009	2008
Earnings before taxes	16,707	31,801
Expected tax expenses at 29.2 %	4,878	9,286
Change in expected tax expenses		
Reduction in taxes for previous year	-99	-156
Tax impact of goodwill amortisation	0	423
Tax impact of badwill upon initial consolidation	-333	0
Tax reductions due to change in tax rate for previous periods	0	-155
Difference between group and local tax rates	63	22
Tax impact of tax-exempt income	-831	-902
Tax impact of business expenses not deductible	34	121
Deferred taxes on loss carryovers no longer utilisable	36	0
Other tax items	-13	0
Actual tax expenses	3,735	8,639

As in the previous year, a corporate income tax rate of 15 % was used to calculate current and deferred taxes on income at group companies in the 2009 financial year. Moreover, a solidarity surcharge of 5.5 % on corporate income tax and a trade tax multiplier of 382 % were assumed. Accordingly, deferred taxes were calculated at an average tax rate of 29.2 % in the 2009 financial year.

### 5.11. Earnings per share

Earnings per share are calculated as the quotient of the earnings attributable to shareholders and the weighted average number of shares in circulation during the financial year.

€	2009	2008
Net income for period	12,971,830.93	23,162,043.11
Earnings attributable to minority interests	43,045.14	137,697.27
Consolidated earnings	12,928,785.79	23,024,345.84
Average number of shares	13,800,000	12,683,934
Earnings per share (€/share)	0.94	1.82

Consolidated net income amounted to € 12,928,785.79 as of 31 December 2009 (31 December 2008: € 23,024,345.84). Accordingly, basic earnings per share calculated pursuant to IAS 33 amount to € 0.94 (31 December 2008: € 1.82).

No shares were outstanding either as of 31 December 2009 or as of 31 December 2008 which could have diluted earnings per share. On 10 February 2010 the share capital was increased by issuing 1,379,999 new shares. Further details can be found in Note 7.6 (Events after the Balance Sheet Date). →

## 6. Disclosures on the cash flow statement

The cash flow statement has been presented separately. The financial funds presented encompass the cash and cash equivalents reported in the balance sheet.

Investments are reported following the deduction of government grants. A sum of € 19,220k was invested in non-current assets. Of this total, € 11,578k involved investments in intangible assets. This figure includes capitalised development expenses of € 11,658k (previous year: € 4,884k) which, following the deduction of grants of € 1,493k (previous year: € 1,592k), led intangible assets to increase by € 11,165k.

A total of € 7,372k was expended on investments in property, plant and equipment (previous year: € 9,112k).

The company paid purchase prices, including transaction expenses, amounting to a total of € 6,781k for the acquisition of subsidiaries in the 2009 financial year. Liquid funds of € 623k were taken over in connection with the acquisition of these subsidiaries.

The cash flows for the financial year under report include interest paid amounting to € 482k (previous year: € 165k) and interest received of € 1,032k (previous year: € 3,896k). Payments of taxes on income amounted to € 2,915k (previous year: € 4,205k).

The inflow and outflow of funds for financing activities includes proceeds from the taking up of bank loans and from the capital increase (less costs), as well as outgoing payments for the redemption of bank loans and an outgoing payment for the issuing of a loan.

## 7. Other disclosures

### 7.1. Objective and methods of financial risk management

#### 7.1.1. Risk management

The Management Board has established a risk management system which enables risks to be handled deliberately and in a controlled manner and which is firmly integrated into existing organisational, reporting and management structures. The risk management system was substantially enhanced in 2009 and adjusted to meet the stricter requirements arising on account of the strong growth in the company's operations.

Apart from derivative financial instruments, the Group's principal financial liabilities involve interest-bearing loans, trade payables and other liabilities. The main purpose of these financial liabilities is to finance the Group's business activities. The Group has receivables resulting from loans issued, trade receivables and other receivables, cash and cash equivalents and short-term deposits, all of which directly result from its business activities. Furthermore, the Group also has financial assets available for sale and enters into derivative financial transactions.



The Group is exposed to credit, liquidity and market risks.

Managing these risks is the responsibility of the Group's management. Roth & Rau's risk management system is based on clearly specified organisational processes and approval procedures. These are based on the "Risk Management Handbook", a set of work instructions binding for all employees and forming an integral component of quality management. The Group's quality management is in turn certified under ISO 9001:2008. All operating departments identify their individual risks on a quarterly basis, referring to specified risk categories, and evaluate these risks in terms of their probability of occurrence and potential damages. Project risks are already analysed and evaluated along the same lines from the acquisition stage already. Risk management provides for three risk classes requiring tiered reporting. Depending on the risk class involved, decisions concerning the relevant measures are taken on the level of operating management or directly by the Management Board. All employees have been made aware of potential risks and called upon to provide reports accordingly. Based on these individual assessments, quarterly overall risk reports are compiled, enabling the Management Board to monitor and evaluate the current risk situation. In line with these evaluations, the Management Board also informs the Supervisory Board on an ongoing basis.

The Group has thus ensured that activities involving financial risks are performed in accordance with the relevant guidelines and procedures and that financial risks are identified, evaluated and managed in accordance with these guidelines, taking due account of the Group's risk propensity. In line with the Group's internal guidelines, no trading of derivatives takes place for speculative purposes. The guidelines for the management of those risks presented below have been inspected and adopted by the company's management.

One of the Roth & Rau Group's most important financial objectives involves sustainably increasing the value of the Group in the interests of its investors, employees, customers and suppliers while at the same time upholding and safeguarding its ability to meet its financial obligations at all times. The achievement of this objective is significantly supported by focusing on the Group's profitability. This does not exclude the possibility of external growth by way of acquisitions. All entrepreneurial decisions accord great priority to increasing the Group's earnings strength, as well as to the resultant increase in return on capital employed.

For the Roth & Rau Group, this form of capital management accords very great significance to creating adequate liquidity reserves, including a comfortable volume of free credit lines. Not only that, the maintenance of solid equity resources represents a key requirement for consistently upholding the Group's existing growth strategy. Liquidity reserves and free credit lines are continuously monitored within the framework of short and medium-term liquidity planning, as is the taking up of any credit facilities required as a result. The capital structure is regularly monitored on the basis of various key figures.

The ratio of net liquidity/debt to equity (gearing) and the equity ratio represent important key figures in this respect. Net financial liabilities correspond to liabilities to banks less cash and cash equivalents and marketable securities.

€ 000s	2009	2008
Liabilities to banks	-4,675	-4,486
Cash and cash equivalents	66,041	91,515
Net liquidity/debt	61,366	87,029
Shareholders' equity	219,278	206,456
Equity ratio in %	73.40	71.50
Gearing in %	-28.00	-42.20

The Group's capital structure continues to provide a very healthy foundation for financing its innovation and growth strategy.

#### 7.1.2.Credit risk

Credit risk involves the risk of a business partner failing to meet its obligations in the context of a financial instrument or a customer master agreement and of this leading to a financial loss. The Group is exposed to default risks within the framework of its operating business activities (trade receivables in particular involve risks), as well as to risks within the framework of its financing activities, including deposits at banks and financial institutions, foreign exchange transactions and other financial instruments.

Credit risk from receivables: In individual cases, the creditworthiness of specific customers and suppliers has deteriorated drastically in the course of the financial crisis. The Group is therefore stepping up its financial security measures. The Group faces general default risk in particular for new entrants to the sector in the turnkey business. Roth & Rau counters the risk of customers meeting their payment obligations late or not at all by performing detailed customer creditworthiness checks (internal and external financial information) before accepting any orders and by means of payment terms which link payment to progress made in processing the order. Credit risk involving receivables from customers is managed by the relevant business units on the basis of the Group's customer credit risk management guidelines, procedures and checks.

Outstanding receivables from customers are monitored regularly, with deliveries to major customers (export business) generally being covered by credit orders.

Based on total receivables of € 28,666k before impairment (previous year: € 24,442k), impairment losses of € 1,995k have been recognised (previous year: € 1,998k).

Receivables which are overdue but not impaired have been presented in the following schedule, broken down in terms of the period by which payment is overdue.

## Maturity structure of unimpaired receivables and financial assets

€ 000s	Total receivables excluding impairments	Neither overdue nor impaired	Overdue but not impaired (in days)			
			to 90	90 to 180	180 to 360	over 360
as of 31.12.2009						
Trade receivables	25,098	17,785	2,504	924	1,802	2,083
Other receivables and financial assets	9,917	9,917	0	0	0	0
as of 31.12.2008						
Trade receivables	20,463	4,992	10,816	3,789	639	227
Other receivables and financial assets	7,813	7,813	0	0	0	0

**Credit risk from financial instruments and deposits:** The credit risk relating to credit balances at banks and financial institutions is managed in accordance with the Group's guidelines. The capital resulting from issue proceeds is only invested at financial institutions of high creditworthiness. These funds are invested in financial assets which are not subject to any fluctuations in value, or only to a minor extent. They are invested in financial assets available at short notice to enable the Group to cover financing and liquidity requirements for planned investments and advance financing requirements for the operating business. Some procurement measures also require prepayments to suppliers. These can give rise to default risks. Prepayments made are covered in some cases by prepayment bonds/credit orders.

### 7.1.3. Liquidity risk

The treasury department was expanded by taking on new staff in the previous year. This department constantly monitors the risk of any liquidity bottleneck using a liquidity planning tool and reports to the Management Board. The Group's objective here is to maintain a balance between consistently covering its funding requirements and ensuring flexibility by drawing on overdraft facilities and bank loans. No liquidity bottlenecks have been identified based on our current planning.

As of 31 December 2009, 91.4 % of the carrying amount of debt capital recognised in the consolidated financial statements was due to mature within one year.

As of 31 December 2009, the Group's financial liabilities had the maturity structure presented below. The disclosures are based on contractually agreed, undiscounted payments.



## Maturity analysis of financial liabilities

€ 000s	2010		2011-2013		2014-2017	
	Interest	Repayment	Interest	Repayment	Interest	Repayment
<b>Primary financial liabilities</b>						
Loans	299	936	607	3,331	30	408
Trade payables	0	33,856	0	0	0	0
Other / miscellaneous liabilities	0	1,333	0	0	0	0
Derivative financial liabilities	0	77	0	60	0	0
	299	36,202	607	3,391	30	408

### 7.1.4. Market risk

Market risk involves the risk of fluctuations in the fair value or future cash flows of a financial instrument due to changes in market prices. Market risk also includes the following types of risk – interest rate risk, currency risk and price risk – and is monitored using sensitivity analyses.

#### 7.1.4.1. Interest rate risk

Interest rate risk involves the risk of fluctuations in the fair value or future cash flows of a financial instrument due to changes in market interest rates. The risk of fluctuations in market interest rates to which the Group is exposed primarily relates to non-current loans with floating interest rates.

To hedge interest rate risk, the Group concludes interest swaps in which the Group agrees to exchange with the counterparty, at specified intervals, the difference between fixed and floating rate interest amounts calculated by reference to an agreed-upon notional principal amount. These interest swaps hedge the underlying obligation.

Changes in the market interest rates of primary financial instruments with fixed interest rates only impact on earnings in cases where they are recognised at fair value. As a result, none of the financial instruments with fixed interest rates recognised at amortised cost are subject to changes in the interest rate as defined in IFRS 7. Interest rate risk is currently classified as low, as the Group only has non-current loans of € 4,675k, of which one loan of € 1,600k with a floating interest rate is hedged by an interest swap. The remaining loans have been agreed with fixed interest rates.

As the existing financial liabilities with floating interest rates were fully hedged by interest swaps at the balance sheet date, a hypothetical increase/reduction in market interest rates by 100 base points as of the balance sheet date would have no material impact on earnings after taxes, assuming all other variables remain unchanged; the other components of equity would remain unchanged. Were the interest or discount curve to change upwards (downwards) by 100 base points, then this would impact on earnings to the tune of € 16k (€ -16k).

#### 7.1.4.2. Foreign currency risk

Foreign currency risk involves the risk of fluctuations in the fair value or future cash flow of a financial instrument due to exchange rate movements. The objective of currency hedging is to fix prices based on hedging rates to protect against unfavourable future fluctuations in exchange rates.

Exchange rate risks play a subordinate role at the Roth & Rau Group, as the Group invoices a high share of its sales in euros. Moreover, the company generally receives a not inconsiderable share of the purchase price upon conclusion of the contract, so that the risk of foreign currency fluctuations is low even for orders invoiced in foreign currencies. The Group generally concludes project-related forward cover transactions.

The foreign currency risk resulting from remaining unhedged financial instruments in foreign currencies for which currency fluctuations would impact on earnings is therefore classified as low.

The following table presents the sensitivity of the Group's consolidated earnings before taxes (due to changes in the fair values of monetary assets and liabilities) and equity to any reasonable movements in the US dollar exchange rate. All other variables have remained unchanged.

Foreign currency risk USD	Change in EUR / USD exchange rate	Impact on EBT (€ 000s)
2009	9 %	-256
	-9 %	256
2008	9 %	2
	-9 %	1

Any hypothetical appreciation (depreciation) in the euro by 9 % compared with the US dollar as of 31 December 2009 would have led earnings before taxes to be € 256k lower (€ 256k higher), assuming all other variables remained unchanged.

The impact of any change in value has been presented on the basis of the Group's foreign currency sales and foreign currency procurement in the 2009 financial year.

#### 7.1.4.3. Price risks

The publicly listed equities held by the Group are exposed to market price risks resulting from the uncertainty surrounding the future development in the value of these securities. The Group faces price risks for the shares it holds in investment / money market funds for the purposes of liquidity management. Had the securities price been 10 % lower (higher) at the balance sheet date, then equity would have been € 2,452k lower (€ 2,452k higher).

Price risk	Price performance	Impact on equity (€ 000s)
2009	10 %	2,452
	-10 %	-2,452
2008	10 %	1,685
	-10 %	-1,685



## 7.2. Contingent liabilities

Contingent liabilities on the one hand include potential obligations whose actual materialisation is dependent on the occurrence of one or several uncertain future events which cannot be fully influenced. On the other hand, they are also deemed to include existing obligations which will probably not lead to any outflow of resources. Pursuant to IAS 37, contingent liabilities are not recognised in the balance sheet.

In respect of non-current assets subsidised by investment grants whose conditions for retention had not yet been met as of the balance sheet date, the company's tax consultants have issued written confirmation that no forms of utilisation detrimental to the respective grants (sale to a business operation not entitled to such grant) had been identified.

Due to a take-back obligation received in 2008 in respect of the sale of a coating system to a leasing company, the residual capital value as of 31 December 2009, corresponding to the buyback value upon extraordinary termination of the leasing contract by the leasing company, has been quantified as a financial obligation of € 216k as of 31 December 2009 (previous year: € 264k).

In 2006, the company concluded a contract with Conergy SolarModule GmbH (formerly HighSi GmbH) concerning the supply and assembly of four cell production lines at its location in Frankfurt/Oder. The supply and assembly work has been completed. In the case of the first two lines, this was already completed in early 2008. Completion of the third and fourth lines was temporarily suspended at the end of 2008 after instalments due for payment were not transferred in spite of numerous reminders. The terms of the contract entitle the company to suspend further services when the client is in default with payment of due instalments. In Roth & Rau's opinion, the company is still entitled to claims of around € 8 million in connection with the contract. Conergy SolarModule GmbH claims that the company failed to perform the relevant services in line with the terms of the contract.

It takes this as reason not to satisfy the company's payment claims and to allege that it has damages claims which supposedly exceed Roth & Rau's payment claims many times over. The parties have participated in arbitration negotiations in the meantime, but these have so far been fruitless. In parallel to these negotiations, Roth & Rau completed the third and fourth lines irrespective of the payment claims the company believes to be still outstanding. The final line commenced operations in November 2009. The possibility of a legal dispute cannot be excluded. The claims alleged by Conergy SolarModule GmbH are disputed in and of themselves. With regard to the level of the alleged claims, Conergy SolarModule GmbH has also so far failed to submit any written calculation, representation or evidence despite several requests to this effect from Roth & Rau. At present, therefore, the alleged claims cannot be evaluated in any detail in legal or economic terms.

As of 31 December 2009, the company had a guarantee facility of € 111,395k, of which € 28,624k was utilised (previous year: € 50,983k).

### Legal disputes

Legal risks may result from any unwitting infringement of third-party intellectual property rights. Due in particular to the fact that a not inconsiderable share of Roth & Rau's expertise is not protected by proprietary patents, the risk cannot be excluded that competitors will assert claims against Roth & Rau in connection with the infringement of property rights. No such legal disputes have materialised to date. Conversely, there is also the risk that third parties will copy Roth & Rau's expertise and infringe patents or other property rights. To protect its extensive expertise, the company regularly concludes confidentiality agreements with its employees, customers and partners in research and development projects.

Since June 2008, Roth & Rau has employed a Compliance Officer who is also responsible for communications with external lawyers. As part of this compliance function, the company has pressed consistently ahead with the introduction of various sets of guidelines and work instructions.

In an as yet unresolved legal dispute, an employee working in the USA for one of the company's customers who suffered substantial hand injuries due to a work-related accident in December 2004 in connection with the operation of a machine produced and supplied by Roth & Rau has filed a lawsuit against the company at an American court for damages and smart money. Based on an initial assessment by the US lawyers advising the company, if successful the lawsuit could lead to Roth & Rau being liable for an amount of between around US\$ 2,500k and US\$ 3,500k. The company has a business liability insurance which covers this third-party liability risk. The sum insured amounts to € 5,000k, with a deductible of € 25k. A provision of € 25k has been recognised for the deductible. The insurance company has provided confirmation of cover. However, it cannot be ruled out that Roth & Rau will be held liable in connection with this or other accidents in future.

### 7.3. Other financial obligations

#### Operating leases

The Group has concluded operating lease agreements for various items of technical equipment and plant and office equipment. Its other financial obligations in connection with lease, rental and service agreements amounted to € 526k in 2009 (previous year: € 414k). Of this sum, € 266k is due within one year and € 260k within one to five years.

#### Cooperation and licence agreement with the University of Neuchâtel, Institute of Microtechnology

A cooperation and licence agreement was concluded with the Institute of Microtechnology (IMT) at the University of Neuchâtel in the 2008 financial year. This agreement governs a cooperation in the development of the expertise required to implement a highly efficient cell using heterojunction technology (HJT). The three-year fixed term for the research and development work begins on 15 April 2008 and ends on 15 April 2011. IMT receives an annual fee of € 180k over the three-year term as consideration for all work, supplies and obligations of relevance to this research and development work. An annual fee of € 120k is paid in return for the transfer of expertise and the granting of rights of use for this expertise and the patent.

#### Licence agreement

In 2000, Roth & Rau AG acquired a technology licence for a period of 10 years. The licence fee payable is dependent on the net sales generated for the licensed system. Roth & Rau AG has entered into a further licence obligation with the Institute of Microtechnology (IMT) at the University of Neuchâtel (now EPFL École Polytechnique Fédérale de Lausanne). Roth & Rau AG undertakes therein to pay compensation amounting to 1 % of the new sales of HJT lines. This compensation is limited to a maximum of € 300k p.a. for the term of the cooperation agreement (until 15 April 2011). The licence fee obligation remains effective for five years following termination of the contract, but the € 300k threshold then no longer applies.

#### Ground rent

Roth & Rau AG is the beneficiary of heritable building rights with a term of 75 years. The company pays ground rent of 6 % p.a. for these heritable building rights. Accordingly, the other financial obligation amounts to € 42k for 2009 (previous year: € 42k) and to € 169k for 2010 to 2013 (previous year: € 169k) and to € 2,879k by the end of the term (previous year: € 2,919k).





## 7.4. Related party disclosures

Related parties of Roth & Rau AG are: members of the Management Board and Supervisory Board, including their family relatives, and companies over which Roth & Rau AG, members of the Management and Supervisory Boards and their close family relations can exercise significant influence.

### Management Board

The Management Board comprised the following individuals in the 2009 financial year:

Dr. Dietmar Roth (Chairman)

Carsten Bovenschen

Thomas Hengst (since 1 July 2009)

#### Dr. Dietmar Roth

Chief Executive Officer, Corporate Development,  
Research and Development, Production, Legal & Compliance

Member of the Supervisory Board of Silicon Sensor AG, Berlin (until 30 June 2009)

Member of the Plasma Technology Expert Committee at the  
Federal Ministry of Education and Research

Member of the Expert Committee of the "Otto von Guericke"  
Industrial Research Associations Working Group, Cologne

#### Carsten Bovenschen

Chief Financial Officer, Finance and Controlling, Investments, Supply Chain,  
Quality Management, Personnel, IT, Investor Relations

#### Thomas Hengst

Chief Sales Officer, Marketing, Global Customer Service,  
Product Management and Development

#### Management Board compensation:

The compensation of the Management Board for the 2009 financial year is as follows:

Management Board € 000s	Annual salary	Bonus	Total
Dr. Dietmar Roth	220 (197)	330 (330)	550 (527)
Carsten Bovenschen	180 (141)	180 (150)	360 (291)
Thomas Hengst (since 01.07.2009)	50 (0)	50 (0)	100 (0)
<b>Total</b>	<b>450 (338)</b>	<b>560 (480)</b>	<b>1,010 (818)</b>

The fringe benefits paid in the 2009 financial year amounted to € 8k for Dr. Dietmar Roth, € 27k for Carsten Bovenschen and € 7k for Thomas Hengst. Furthermore, contributions of € 172k were paid to the pension fund (2008: € 995k). Expenses of € 172k have been recognised in the income statement for the Management Board in connection with pension provisions (previous year: € 955k). No compensation was paid in connection with the phantom stock programme in 2009. Dr. Dietmar Roth, CEO, held

794,796 shares, or 5.76 % of the shares in Roth & Rau AG as of 31 December 2009. Other Management Board members did not own any shares in Roth & Rau AG at the balance sheet date.

### Supervisory Board

The Supervisory Board comprised the following individuals in the 2009 financial year:

Eberhard Reiche (Chairman)

Prof. Dr. Alexander Michaelis (Deputy Chairman)

Daniel Schoch

#### Eberhard Reiche

Chairman of the Supervisory Board

Director of the Internal Audit Department at envia Mitteldeutsche Energie AG, Chemnitz

#### Prof. Dr. Alexander Michaelis

Deputy Chairman of the Supervisory Board

Director of the Fraunhofer Institute of Ceramic Technologies and Systems, Dresden

Professor at Technische Universität Dresden,

Professor of Inorganic Non-Metallic Materials at the Institute of Material Science

#### Daniel Schoch

Member of the Supervisory Board

Director/Chief Financial Officer, Corestate Capital AG, Zug / Switzerland (since May 2008)

Chairman of the Supervisory Board of YOUNIQ AG (formerly Alta Fides AG), Frankfurt (since October 2008)

Member of the Supervisory Board of Suiteside AG, Frankfurt (since March 2010)

Chairman of the Supervisory Board of Campus Real Estate AG, Stuttgart (until June 2009)

Chairman of the Supervisory Board of Profecto AG, Leipzig (January 2009 until June 2009)

The members of the Supervisory Board of Roth & Rau AG did not hold any shares in the company as of 31 December 2009.

The compensation of the Supervisory Board of Roth & Rau AG for the 2009 financial year is as follows:

#### Supervisory Board

in € 000s

	2009	2008
Eberhard Reiche, Chairman (since 01.02.2008)	56	60
Prof. Dr. Alexander Michaelis, Deputy Chairman	33	38
Daniel Schoch	23	25
Harald Löhle, Chairman (until 31.01.2008)	0	5
<b>Total</b>	<b>112</b>	<b>128</b>

No agreements providing for compensation payments or other benefits for Supervisory Board members upon the conclusion of their membership of the Board have been reached between members of the Supervisory Board and the company. There are currently no conflicts of interest between their obligations towards the company and their private interests or other commitments.



No agreements governing the provision of pensions have been reached between members of the Supervisory Board and the company.

### Individuals in key positions

In addition to the members of the Management and Supervisory Boards listed above, individuals in key positions also include the following individuals with direct or indirect responsibility for planning, managing and supervising business activities, all of whom have been granted joint powers of representation.

#### Dr. Bernd Rau

Senior Vice President Research and Development

Dr. Rau held 752,964 shares, or 5.46 %, of Roth & Rau AG as of 31 December 2009 (previous year: 752,964 shares or 5.46 %).

#### Prof. Dr. Silvia Roth

Vice President Marketing & Investor Relations

Wife of Dr. Dietmar Roth

Prof. Dr. Silvia Roth held 292,360 shares, or 2.12 %, of Roth & Rau AG as of 31 December 2009 (previous year: 292,360 shares or 2.12 %).

#### Dr. Michael Zeuner (until 29.10.2009)

Vice President Plasma and Ion Beam Technology

#### Jana Meinel (from 29.10.2009)

Head of Finance

#### Wolfram Stoll (until 15.03.2009)

Vice President ASCM

#### Lutz Eismann

Vice President Operations & SiNA Department

#### Ruth Domin (until 29.10.2009)

Vice President Finance

#### Dr. Egbert Vetter (from 29.10.2009)

Director of Research and Development

#### Olaf-Matthias Isemer (from 29.10.2009)

Vice President Supply Chain

Compensation totalling € 809k was paid to the aforementioned individuals in key positions in the 2009 financial year (previous year: € 667k). Moreover, provisions totalling € 111k were also recognised in favour of these individuals at the balance sheet date (previous year: € 233k). The compensation includes payments totalling € 233k for 2008. A total of 50,000 phantom stocks were issued to individuals in key positions (previous year: 22,000).

#### Close family relatives

The individuals listed below are close family relatives of Dr. Dietmar Roth, member of the Management Board, or of Dr. Bernd Rau and Dr. Silvia Roth, individuals in key positions. These relatives work as employees of Roth & Rau AG and hold the following positions:

Kristin Roth-Lüdemann (daughter of Dr. Silvia Roth)  
Strategic Product Marketing

Sascha Roth (son of Dr. Dietmar Roth)  
Director of Group Controlling

Ulrike Uhlig (daughter of Dr. Dietmar Roth)  
Head of Accounts Department

Andrea Rau (wife of Dr. Bernd Rau)  
Personnel and Administration

Friedrich Rau (son of Dr. Bernd Rau)  
Sales and Customer Care

Compensation totalling € 189k was paid to these individuals in the 2009 financial year (previous year: € 192k). Furthermore, the company had also recognised provisions totalling € 35k at the balance sheet date in connection with the employment relationships of these close family relatives (previous year: € 40k). The compensation includes payments totalling € 40k for 2008

#### Roth & Müller GbR

Roth & Müller GbR is a closely related company of Roth & Rau AG, as its shareholder Stefan Roth is the brother of the CEO, Dr. Dietmar Roth. Roth & Müller GbR is responsible for varnishing the switch-boxes of the coating systems.

The volume of business with Roth & Müller GbR amounted to € 50k in the 2009 financial year (previous year: € 61k).

There were liabilities / provisions totalling € 1k in connection with this business relationship at the balance sheet date (31 December 2008: € 29k).

#### Advisory services

As in the previous year, Dicks-Domin Steuerberatungsgesellschaft mbH, a tax consultancy in Hohenstein-Ernstthal, was commissioned to provide advice on individual tax-related matters. The tax advisor Jürgen Dicks-Domin, 48 % shareholder in Dicks-Domin Steuerberatungsgesellschaft mbH, is married to Ruth Domin, who worked at Roth & Rau AG as Director of Financial Accounting and Controlling until 29 October 2009. In the 2009 financial year, tax advisory / bookkeeping expenses of € 28k were incurred towards Dicks-Domin Steuerberatungsgesellschaft (previous year: € 41k). As of 31 December 2009, the company had liabilities / provisions of € 10k towards Dicks-Domin Steuerberatungsgesellschaft (31 December 2008: € 5k). The contractual terms correspond to those agreed with independent third parties.

No further expenses were required or incurred for impaired or uncollectible receivables from closely related individuals or companies.



## 7.5. Auditor's fee

Fees of € 180k were recognised as expenses for the auditing services performed by the auditor, PricewaterhouseCoopers AG Wirtschaftsprüfungsgesellschaft (previous year: € 105k). Fees of € 58k were paid for advisory services (previous year: € 28k).

## 7.6. Events after the balance sheet date

### Joint venture agreement with Chinese company

The Roth & Rau Group announced on 3 February 2010 that it would be pressing ahead with the strategic expansion of its activities in its cadmium telluride thin film (CdTe) division. To this end, Roth & Rau AG and its subsidiary Roth & Rau CTF Solar GmbH (CTF) signed a joint venture agreement with a Chinese company for the construction and operation of systems to manufacture CdTe solar modules in China. The order for Roth & Rau's subsidiary CTF to supply the turnkey line to the joint venture company to be established is expected to be worth almost € 100 million. However, the terms governing the supply of the turnkey line still have to be negotiated in detail.

Performance of the joint venture agreement is subject to the conditions precedent of approval by the relevant bodies at the Chinese joint venture partner and the Supervisory Board of Roth & Rau AG, the agreement of terms for the supply of a turnkey line by CTF to the joint venture company, approval by the Federal Antitrust Office and the granting of approval by the relevant Chinese authorities for foreign investments.

### OTB acquisition

Roth & Rau AG announced on 10 February 2010 that it would shortly be taking over 100 % of the shares in OTB Solar B.V. (OTB) from OTB Group B.V., Eindhoven, Netherlands. No change of control had occurred upon the approval of these consolidated financial statements for publication.

OTB's product portfolio consists of systems and technologies for the solar industry, especially antireflective coating systems and turnkey production lines for use in the manufacture of crystalline silicon solar cells. Moreover OTB's core competencies also include high-rate PECVD coating processes and industrial ink-jet printing applications with interesting potential for use in the production of new, high-efficiency solar cells.

The acquisition will enable Roth & Rau AG to increase its market share as an equipment supplier for crystalline solar technology and in its turnkey business. Over and above this, the company has secured access to new competitive technologies and is thus pressing further ahead with expanding its product portfolio.

The purchase price will amount to € 35.5 million (including takeover of financial liabilities). Of this sum, an amount of € 30.0 million will be settled by issuing new Roth & Rau shares by way of a capital increase in return for non-cash contributions. The remaining € 5.5 million will be paid in cash. OTB had orders on hand of around € 50 million as of 31 January 2010.

### Capital increase from authorised capital

Roth & Rau AG successfully executed a share placement by way of an accelerated book building process on 10 February 2010. A total of 1,379,999 shares were placed at a price of € 26.00 per share within the framework of a private placement. The transaction provided Roth & Rau AG with gross

issue proceeds of around € 35.9 million, which will be used to reinforce the company's balance sheet structure and partly to finance the acquisition of OTB Solar B.V. The issue of 1,379,999 bearer shares with a prorated amount in the share capital of € 1.00 was executed as a capital increase from authorised capital. As a result, the company's share capital increased from € 13,800,000 to € 15,179,999. Existing shareholders' subscription rights were excluded.

#### R<sup>3</sup>T Rapid Reactive Radicals Technology GmbH

The purchase and assignment agreement dated 8 December 2009 was executed on 25 February 2010. Roth & Rau Muegge GmbH has thus acquired a further 40 % shareholding in R<sup>3</sup>T Rapid Reactive Radicals Technology GmbH. The purchase price amounts to € 300k plus expected bonus payments amounting to a maximum of € 350k.

## 7.7. Approval for publication

The Management Board of Roth & Rau AG approved these IFRS consolidated financial statements for publication on 26 March 2010.

Hohenstein-Ernstthal, 26 March 2010



Dr. Dietmar Roth  
CEO



Carsten Bovenschen  
CFO



Thomas Hengst  
CSO

## Responsibility Statement

We hereby affirm that, to the best of our knowledge, the consolidated financial statements provide a true and fair picture of the net asset, financial and earnings position of the Group in accordance with the accounting principles applicable and that the business performance, including the business results and situation of the Group, are depicted in the group management report so as to provide a true and fair picture of actual circumstances, as well as of the principal opportunities and risks involved in the expected development of the Group.

Hohenstein-Ernstthal, 26 March 2010  
Roth & Rau AG  
The Management Board



Dr. Dietmar Roth



Carsten Bovenschen



Thomas Hengst

## Auditor's Report

We have audited the consolidated financial statements prepared by Roth & Rau AG, Hohenstein-Ernstthal, comprising the statement of financial position, the income statement, the statement of comprehensive income, statement of changes in equity, cash flow statement and the notes to the consolidated financial statements, together with the group management report for the business year from January 1 to December 31, 2009. The preparation of the consolidated financial statements and the group management report in accordance with the IFRSs, as adopted by the EU, and the additional requirements of German commercial law pursuant to § (Article) 315a Abs. (paragraph) 1 HGB („Handelsgesetzbuch“: German Commercial Code) is the responsibility of the parent company's Management Board. Our responsibility is to express an opinion on the consolidated financial statements and on the group management report based on our audit. We conducted our audit of the consolidated financial statements in accordance with § 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of the entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the company's Management Board, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion based on the findings of our audit the consolidated financial statements comply with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315a Abs. 1 HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The group management report is consistent with the consolidated financial statements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development.

Dresden, 29 March 2010

PricewaterhouseCoopers  
Aktiengesellschaft  
Wirtschaftsprüfungsgesellschaft

Klaus Dornaus  
Wirtschaftsprüfer  
(German Public Auditor)

ppa. Frank Eichelmann  
Wirtschaftsprüfer  
(German Public Auditor)



For information: income statement (IFRS)  
prepared using the cost of sales method

€ 000s	01.01. – 31.12.2009
Total sales	189,714
Sales from long-term construction contracts	8,189
Total sales	197,903
Costs incurred to generate sales (COGS)	-146,879
Gross profit	51,024
Sales-related expenses	-13,562
Research expenses	-4,818
General administration expenses	-15,546
Other operating income	4,950
Other operating expenses	-5,948
Operating profit	16,100
Net financial result	607
Result of ordinary business activities	16,707
Taxes on income	-3,735
Earnings after taxes	12,972

## Financial Calendar 2010

Annual Results Press and Analysts' Conference, Frankfurt am Main	31 March
3-Month Report	14 May
Annual General Meeting, Hohenstein-Ernstthal	21 May
6-Month Report	13 August
9-Month Report	15 November
German Equity Forum (Eigenkapitalforum), Frankfurt am Main	22 – 24 November

## Forward-looking statements

This annual report contains certain forward-looking statements referring in particular to the business, financial performance and earnings of Roth & Rau, to the economic and regulatory framework, to the business fields in which the Group operates and other factors. Forward-looking statements relate to future facts, events or other circumstances which do not represent historical facts. Such statements can be identified by their use of words such as “expect”, “intend”, “plan”, “assume” or “probably”. Such statements merely reflect the current expectations of Roth & Rau AG and are subject to a series of risks and uncertainties. These forward-looking statements are based on current estimates and assumptions made by the company to the best of its knowledge. Although Roth & Rau AG believes that they are appropriate at the present time, they may prove to be erroneous. Numerous factors may result in the actual performance of the company, including the development in the net asset, financial and earnings position of the Group, significantly deviating from the developments explicitly or implicitly assumed in the forward-looking statements. Should one or several of these changes or uncertainties materialise, or should the assumptions made by Roth & Rau AG prove to be inaccurate, then the possibility cannot be excluded that actual events will deviate materially from those described in this report as being assumed, estimated or expected. The Group may thus be prevented from achieving its financial and strategic targets. Roth & Rau AG has no intention of updating the forward-looking statements and sector and customer information presented in this annual report over and above its legal obligation to do so.

## Imprint

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