

A close-up photograph of a person's eye, showing the iris and pupil. The reflection in the pupil shows a bright light source, possibly a camera flash or a solar panel. The skin around the eye is wrinkled and textured.

# SMARTER USE OF ENERGY

ANNUAL REPORT 2013

## SMA AT A GLANCE

<b>SMA Group</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Sales	in € million	932.5	1,463.4	1,676.3	1,920.1
International share	in %	71.0	56.3	53.6	44.9
Inverter output sold	MW	5,361	7,188	7,591	7,750
Capital expenditure	in € million	53.2	100.2	160.2	158.3
Depreciation	in € million	83.6	69.9	50.4	31.3
EBITDA	in € million	- 5.5	171.9	290.7	548.1
EBITDA margin	in %	- 0.6	11.7	17.3	28.5
Consolidated net result	in € million	- 66.9	75.1	166.1	365.0
Earnings per share <sup>1</sup>	€	- 1.92	2.16	4.79	10.52
Employees <sup>2</sup>		5,545	5,662	5,050	3,783
in Germany		4,233	4,724	4,426	3,443
abroad		1,312	938	624	340
					176

<b>SMA Group</b>	<b>12/31/13</b>	<b>12/31/12</b>	<b>12/31/11</b>	<b>12/31/10</b>	<b>12/31/09</b>
Total assets	in € million	1,259.9	1,328.7	1,374.3	1,251.5
Equity	in € million	724.4	820.7	789.3	728.4
Equity ratio	in %	57.5	61.8	57.4	58.2
Net working capital <sup>3</sup>	in € million	247.6	268.0	281.7	284.6
Net working capital ratio <sup>4</sup>	in %	26.6	18.3	16.8	14.8
Net cash <sup>5</sup>	in € million	308.1	446.3	473.3	523.4
					344.8

<sup>1</sup> Converted to 34,700,000 shares

<sup>2</sup> Average during the period; without temporary employees

<sup>3</sup> Inventories and trade receivables minus trade payables

<sup>4</sup> Relating to the last twelve months (LTM)

<sup>5</sup> Liquid funds and securities contained within working capital less interest-bearing financial liabilities

## SMA WORLDWIDE



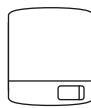
- Headquarters
- Foreign companies

SMA Solar Technology AG is a global leader in the development, production and sale of PV inverters and, as an energy management group, offers innovative key technologies for future power supply structures. SMA is represented in all important photovoltaic markets in 21 countries. The company has a staff of over 5,000 and reached a sales volume of €933 million in 2013.

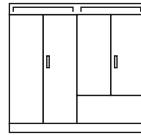
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**SMA Group**

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**Medium Power Solutions**  
The Medium Power Solutions division (MPS) distributes inverters, system solutions and communication products for intelligent energy management and the monitoring of PV systems. The product families comprise 65 types of inverters and 14 communication products in total. In the 2013 fiscal year, MPS generated around 52% of the SMA Group's total sales.



**Power Plant Solutions**  
The Power Plant Solutions division (PPS) addresses the global market for large-scale PV power plants with outputs ranging from 500 kW to the three-digit megawatt range with central inverters and system solutions. In 2013, PPS sold nearly the same inverter power as in 2012. The division's sales constituted around 40% of the total sales of the SMA Group.



**Service**  
SMA offers customers in Germany and abroad comprehensive support and after-sales services. The product portfolio includes warranty extensions, maintenance contracts, operational management, remote system monitoring and spare parts business. SMA's output of more than 30 GW installed worldwide to date gives the Service division great potential for growth.

**65**

types of inverters

**40**

% share in sales

**30**

GW

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**Zeversolar**

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With products launched under the Zeversolar brand (central and string inverters), SMA primarily addresses the Chinese photovoltaic market and the budget market (low-price segment) in foreign markets.

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**Railway Technology**

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Railway Technology GmbH and its Brazilian subsidiary manufacture converters as individual devices and complete energy supply systems for railway coaches and multiple-unit trains for short- and long-distance railway traffic.



32

**YEARS OF VISIONARY TECHNOLOGY DEVELOPMENT**  
GIVE HUNDREDS OF THOUSANDS OF PEOPLE AND  
COMPANIES WORLDWIDE THE OPPORTUNITY TO USE  
ENERGY INDEPENDENTLY AND INDIVIDUALLY.

Since 1981, SMA has developed intelligent system technology for sustainable and efficient energy management. Our innovative solutions give our customers worldwide more independence in their energy supply.

Dear Shareholders,

The market and competitive environment in the photovoltaics sector has changed a lot since the record-breaking year 2010. While at that time only a few European markets dominated the global solar industry, last year nearly half of new installations took place in Asian markets. China alone installed new photovoltaic systems with a capacity of approximately [13 GW](#) in 2013. This equates to new installations nearly tripling year on year. No country in the world has ever before installed so much capacity in one year. In addition, Japan and North America showed positive growth and demand increased in countries in the world's [Sunbelt](#) region. However, Europe has seen a downturn due to political decisions and the euro crisis. The installation of new photovoltaic systems declined by half within only 12 months. Taking into account high price pressure, the decline in demand was even higher when measured in euros. In total, around 40 GW of inverter capacity were installed in 2013. The 25% of newly installed capacity was not enough to be considered for market growth when measured in euros. Compared to 2012, market volume fell by 10% to €4.5 billion in the last fiscal year.

GW, Sunbelt  
See also Glossary  
page 172 et seqq.

The regional shift in demand was accompanied by a change in system size. While the global picture used to be dominated by small- to medium-sized PV systems, system technology solutions for large-scale PV power plants and service products are now becoming increasingly important. In addition, our customers' interest in integrated solutions for energy management and PV systems combined with stationary diesel gensets has grown.

As the world's leading specialist in system technology, we depend on growth in international photovoltaic markets. In 2013, SMA sold 25% less inverter output. Our sales fell even more sharply by 36% to €933 million resulting from a decline in prices and shifts in the product mix. Earnings before interest, taxes, depreciation and amortization (EBITDA) only reached the negative mark at €-6 million. For the first time in the Company history, we had to post an annual net loss of nearly €90 million. The significant loss resulted mainly from devaluations of assets due to the massive slump in the European market, start-up losses at Zeversolar and one-time items resulting from personnel changes. Despite the high loss, our equity ratio was 58% and our net liquidity totaled €308 million.

In 2013, SMA had a global market share of about 13%, and more than 20% excluding the Chinese market. The loss of market share is also attributable to the regional shift in demand. Furthermore, rapidly growing foreign markets like China and Japan have high barriers to entry. Although SMA is still just starting to tap into these markets, we will maximize the opportunities they offer with a product portfolio customized to meet the requirements of each country's regulations.

In a market environment characterized by fierce competition, the ability to systematically reduce costs, technological leadership and a global presence will be determinants of success. Therefore, SMA has tailored its strategy to meet these new challenges early on.

#### **SMA INVESTED MORE THAN €100 MILLION IN DEVELOPMENT**

SMA continued to extend its lead in system technology in 2013 by investing more than €100 million in development. In 2013, we once again demonstrated our technological leadership in the large-scale PV power plant segment with numerous pioneering projects. Whether at India's largest PV power plant; Europe's largest thin-film PV power plant in Templin, Germany; the first PV project of the South African REIPP program; or the largest PV power plant in Kagoshima in Southern Japan: All of these projects were equipped with system technology from SMA. We will continue setting standards in the PV inverter

industry by developing completely new product generations. We will reduce material costs while increasing power with technological innovations. In fact, we have already presented the first product of the new generation, a Sunny Central inverter, to select customers. By the middle of this year, we will erect a ground-based PV system at our headquarters in Niestetal to better demonstrate to customers our new inverter and medium-voltage technology and energy management solutions on an industrial scale.

We are also using our technological competence to consistently tap into the market potential of storage and hybrid applications. With the SMA Smart Home, we offer comprehensive energy management at the household level with which users can considerably increase their self-consumption of solar power. Alongside household appliances like washing machines and dishwashers, our system solution also integrates heat pumps and storage. Within the system, the Sunny Boy Smart Energy, a wall-mountable PV inverter with an integrated battery, enables efficient use of solar power even in the evening. Our concept also convinced the Intersolar AWARD jury, which named the Sunny Boy Smart Energy as the best product in its "Photovoltaics" category. We also implemented more than 15 major projects around the world in the field of photovoltaic diesel hybrid systems in 2013. We thus gained a clear position in an important future market. We also plan to expand our range of services for stationary diesel generators combined with PV systems and storage this year so that we can consistently cultivate this high-growth market segment.

#### **SMA IS TARGETING A FOREIGN SHARE IN SALES OF MORE THAN 75%**

We recognized the enormous growth potential of the Chinese photovoltaic market before the boom that's currently taking place. This is why SMA acquired a majority in the Chinese inverter manufacturer Zeversolar in March 2013. Thanks to this strategically important acquisition, SMA is now in a position to serve the Chinese photovoltaic market. In addition, the SMA Group benefits from the purchasing and development resources obtained in China. We expect Zeversolar to break even as early as in 2014.

We also recognized the appeal of the Japanese photovoltaic market at a similarly early stage and founded a subsidiary company in Tokyo in 2012. Our production site in Germany was certified by Japan Electrical Safety & Environment Technology Laboratories (JET) and meets the high standards of our Japanese customers. Despite the market's high barriers to entry, SMA received an order to equip Japan's largest PV power plant in Kagoshima. The technologically complex project was inaugurated on time in November 2013. We also added a Sunny Tripower to our product portfolio in order to offer our Japanese customers the best technical solution for medium-sized PV systems. The considerable interest shown by both Japanese and other international customers at the PV Expo 2014 trade fair at the end of February confirmed the success of our strategy of tapping into new markets.

In 2013, we successfully defended our position as market leader in the U.S. The largest PV power plants in the U.S. were equipped with turnkey solutions from SMA. For the important market segments of small- and medium-sized PV systems, SMA expanded its product portfolio with the new Sunny Boy and Sunny Tripower inverters. And we can meet American demand quickly thanks to our production site in Denver. In order to develop our products and solutions even faster and better for the North American market, we established another development site in Denver in 2013.

In young markets, SMA's strategy is to be one of the first inverter manufacturers to found its own sales and service company. If local market conditions make it necessary, we also augment our local presence with a production site. For example, we established a production site near Cape Town in South Africa this year, which is the only way we can benefit from the expected growth of the South African market.



Pierre-Pascal Urbon, Chief Executive Officer, SMA Solar Technology AG

#### **SMA HAS SUCCESSFULLY EXPANDED ITS SERVICE BUSINESS**

We have successfully expanded our service business and thus developed one of our most important and unique selling propositions. Alongside comprehensive after-sales services at home and abroad, SMA Service successfully established itself as a universal service provider for the 50.2 Hz modification of PV systems in Germany. As such, SMA supports electric utility companies in data collection and deals with the entire modification process. Over the course of the year, we have already converted more than 7,000 systems. At the end of 2013, we achieved yet another success: E.ON Mitte commissioned SMA to perform the 50.2 Hz modification of approximately 13,000 PV systems. In addition, we successfully established our complete plant service for PV power plants on the market alongside the primary services we already offered. Starting in 2014, SMA America will take on complete operational management of a **100 MW** PV system in Ontario, Canada. The 10 year service contract is SMA's largest operation and maintenance contract worldwide so far.

MW  
See also Glossary  
page 172 et seqq.

#### **SMA WILL RETURN TO PROFITABILITY IN 2014**

In order to increase the SMA Group's profitability long term, we have introduced comprehensive measures to facilitate continuous process improvement. In 2013 alone, SMA cut its material expenses by €100 million and reduced investments to €53 million. For the current fiscal year, we expect improvements in production and logistics work sequences and further reductions in material costs to result in additional savings of between €80 million and €100 million.

Since 2010, our consolidated sales have declined by half due to market changes. For this reason, the Managing Board was forced to adjust the number of employees to align with the decrease in sales levels. We discussed structural changes and negotiated a voluntary program with the Works Council in Germany. By the end of 2014, the number of full-time equivalent positions will be reduced by 802 to 3,100. Thanks to the high level of transparency and constructive collaboration with the Works Council, we succeeded in implementing the unfortunate but necessary downsizing in a short time. We are very pleased that we did not need to resort to involuntary layoffs and that nearly all affected employees have now found new employment.

In order to increase our long-term competitiveness, we announced a strategic partnership with Danfoss A/S at the end of February 2014. Danfoss is a successful family-owned company that specializes in the field of drive converters. This market has been dominated by fierce competition for many years. Accordingly, Danfoss has focused its strategy on continuous cost reduction by using global procurement opportunities and technological innovations. We are certain that we will benefit from this experience and from economies of scale. Additional positive impetus is provided by the planned acquisition of Danfoss' solar inverter business. SMA can use these new products to better serve the high-growth market segment of medium-sized PV systems in Europe, the U.S. and China. With the planned 20% equity interest in SMA, Danfoss will emphasize the importance of the photovoltaic market and lend SMA additional stability.

#### **SMA IS WELL POSITIONED FOR THE FUTURE**

Dear Shareholders, as a specialist in system technology, SMA is excellently positioned in a high-growth market. The SMA Managing Board recognized the need for change and acted accordingly. That was not easy for us, especially the necessary decisions regarding personnel. After the structural changes, we have put ourselves in an even better position for the future and are concentrating on our strengths and goals:

SMA has the technical expertise to equip the largest PV projects around the world with inverters and medium-voltage solutions. With our integrated solutions for intelligent energy management and hybrid applications, we are exceedingly well prepared for the future requirements of the energy supply sector. Our Sales and Service is trusted and relied upon by our customers and is unparalleled in the industry. We have an international presence that remains unsurpassed by any competitor and we benefit from our extraordinarily flexible production in a dynamic market environment. Last, but not least, SMA stands for financial strength and a sound balance sheet.

Our strengths clearly distinguish us from others in the solar industry. We will build on these strengths and design product solutions that allow for a decentralized energy supply on the basis of renewable energy. For the current year, our goal is to increase sales to at least €1 billion and to break even. Above all, our employees make a crucial contribution here. I would like to thank all employees on behalf of the entire Managing Board for their extraordinary commitment and trust. 2013 has shown that our cooperative corporate culture is a stable foundation for our success even in difficult times. We will continue to rely on this foundation.



Pierre-Pascal Urbon  
Chief Executive Officer  
SMA Solar Technology AG

# Contents

6	— <b>To Our Shareholders</b>
6	— The Managing Board Team
8	— Supervisory Board Report
14	— The Share
21	— <b>Corporate Governance</b>
35	— <b>Consolidated Management Report</b>
36	— Basic Information about the Group
60	— 2013 Fiscal Year
84	— Supplementary Report
85	— Risk and Opportunities Report
104	— Forecast Report
113	— <b>Consolidated Financial Statements</b>
120	— Notes SMA Group
168	— Responsibility Statement
169	— Auditor's Report
171	— <b>Other Information</b>
172	— Glossary
176	— Registered trademarks
176	— Disclaimer

# The Managing Board Team

## **ROLAND GREBE**

### **Chief Technology Officer**

Roland Grebe (b. 1960) studied electrical engineering and has been working in various management positions in the development area at SMA since 1984. He developed the first PV inverters that form the basis of SMA's Sunny Boy and Sunny Central inverters. Roland Grebe transformed the central inverter area from an individual project processor into a serial manufacturer for power plant technology and developed SMA's grid integration competence to secure the future commercial viability of our products. Since June 2009, Roland Grebe has been the member of the Managing Board responsible for Technology.

## **LYDIA SOMMER**

### **Chief Financial, Legal and Compliance, Human Resources and IT Officer**

Lydia Sommer (b. 1960) has served in a number of management capacities over the past 30 years, with a focus on finance and controlling at internationally active companies, both in Germany and abroad. Before joining SMA, Lydia Sommer led the Nokia Siemens Networks business unit in Germany as Country Director and General Manager. As Chief Financial Officer at SMA, she has been responsible for the Financial, Legal and Compliance business areas since November 2012. In May 2013, she also took over Human Resources and IT. Here, Lydia Sommer's focus is on process optimization for systematic cost reduction and development of the Group's compliance system.

## **PIERRE-PASCAL URBON**

### **Chief Executive and Strategy Officer**

Pierre-Pascal Urbon (b. 1970) studied business administration and was active in mergers and acquisitions (M&A) consulting until 2005 – when he joined SMA. In 2006, he was appointed to the Managing Board. Pierre-Pascal Urbon planned SMA's initial public offering and has decisively advanced the Group's internationalization. As Chief Executive Officer, he has been responsible for the Company's strategic direction and driving internationalization since 2011. Since the beginning of 2013, Pierre-Pascal Urbon has also been in charge of Operations.

## **MARKO WERNER**

### **Chief Sales Officer**

Marko Werner (b. 1963) is an electrical engineer and started his career at SMA in 1987. Until 2009, he worked in various management positions in the areas of Product Management, Sales and Marketing. He has built a global sales organization and successful key account sales and also developed innovative marketing concepts at SMA. In addition, he supported the Managing Board by expanding the corporate internationalization strategy. In 2009, Marko Werner was appointed Chief Sales Officer.

## RESIGNED IN 2013:

### **JÜRGEN DOLLE**

#### **Chief Human Resources and Operating Officer**

Jürgen Dolle (b. 1954) headed SMA's Human Resources as Vice President starting in 2011. He was instrumental in initiating SMA's prize-winning corporate culture and helped develop and firmly anchored SMA's mission statement within the Company. In 2010, Jürgen Dolle took over responsibility for the areas of Human Resources and Operations on the Managing Board. He stepped down from his duties at SMA for health reasons, which included resigning from the Managing Board, effective May 15, 2013.



**PIERRE-PASCAL URBON**  
Chief Executive Officer

**MARKO WERNER**  
Chief Sales Officer

**ROLAND GREBE**  
Chief Technology Officer

**LYDIA SOMMER**  
Chief Financial and  
Human Resources Officer

# Supervisory Board Report

Dear Shareholders,

The Supervisory Board continuously monitored and regularly advised the Managing Board with regard to the management of the Company during the 2013 fiscal year in accordance with the law, the Articles of Incorporation and the Rules of Procedure. To this end, the Supervisory Board was involved early on in all decisions of fundamental importance for SMA. The Managing Board kept the Supervisory Board regularly, promptly and comprehensively informed by means of written and oral reports about all strategy issues relevant to the company, the market and competitive situation, business developments, the Company and the Group's position, turnover and results of operations, the proposed business policies and other important questions concerning corporate planning, in particular financial, investment, production and personnel planning, as well as about significant transactions. Any deviations in the actual evolution of events with respect to previously reported objectives were provided with reasons for deviation.

In addition, information was provided about the Company's and the Group's profitability, in particular the return on equity, risk and opportunities management, position of risk and compliance. Furthermore, the Managing Board reported on market situations of particular relevance to SMA, on product developments and on the quality level of products. Between meetings, the Chairman of the Supervisory Board and his deputy were in regular and frequent contact with the Managing Board, especially the Chairman of the Managing Board, and discussed issues concerning strategy, planning, business development, position of risk, risk management and compliance as well as significant business transactions and upcoming decisions. The members of the Supervisory Board took the training and specialized training measures necessary for their tasks on their own responsibility, whereby they received appropriate support from the Company.

## Supervisory Board Consultations

The Supervisory Board examined all material events and discussed them with the Managing Board at six regular meetings and two extraordinary meetings and adopted necessary resolutions in accordance with the law, Articles of Incorporation and Rules of Procedure. Two members of the Supervisory Board did not attend one meeting, while another member was only able to attend one meeting due to illness.

In order to prepare for the meetings, the Supervisory Board received written reports from the Managing Board on a regular basis and on time. At each meeting, the subject matter of the deliberations was current business developments, the evolution of markets of particular importance for the SMA Group and corporate planning. Members of the Managing Board participated in all Supervisory Board and Audit Committee meetings.

At its meeting on February 13, 2013, the Supervisory Board focused on the provisional balance sheet and income statement and discussed the possible appropriation of profits for 2012. It also dealt with the Corporate Governance Report and the Supervisory Board Report included in the 2012 Annual Report, as well as the 2012 Personnel Report. In addition, the Supervisory Board discussed the acquisition and integration of Jiangsu Zeversolar New Energy Company Limited.

At the meeting on March 5, 2013, the Supervisory Board acknowledged the 2012 Annual Financial Statements and approved the 2012 Consolidated Financial Statements. It also dealt with the proposal for the selection of the Financial Statements and the Consolidated Financial Statements auditor for 2013 as well as vocational training and development of personnel costs. In addition, the Supervisory Board passed the proposal to the Annual General Meeting on profit appropriation for 2012, the change of the remuneration system for the Supervisory Board, the Supervisory Board Report, Corporate Governance Report and discussed the agenda and invitation to the Annual General Meeting on May 23, 2013.

At the suggestion of the Chairman, the Supervisory Board also agreed by way of written resolution on May 13, 2013, on the composition of the Managing Board and particularly on the resignation of Mr. Jürgen Dolle and the assumption of the roles of Chief Human Resources Officer by Ms. Sommer and Chief Operations Officer by Mr. Urbon.

On May 22, 2013, the Supervisory Board specifically discussed the Managing Board's report on the restructuring of SMA, necessary personnel adjustments and changes in the allocation of responsibilities on the Managing Board and business development to date in 2013.

In a Supervisory Board meeting directly following the Annual General Meeting on May 23, 2013, the audit mandate was granted to the auditor for 2013 and the establishment of a second subsidiary in South Africa was resolved.

On June 27, 2013, at the suggestion of the Chairman, the Supervisory Board also agreed by way of written resolution on the arrangement of financing for Zeversolar.

On August 26, 2013, the course of the 2013 fiscal year up to that point and the company's strategy were discussed, the Managing Board presented foreign activities and product innovations and reported on product quality. Furthermore, the Managing Board reported in detail on the company's technological development and the strategy of Jiangsu Zeversolar New Energy Company Limited. The Supervisory Board had an in-depth discussion on the strategy presented by the Managing Board, which accounts for a changed market environment. In particular, the Supervisory Board discussed the strategy for retaining innovation leadership, increasing productivity and internationalization.

In its meeting on December 4, 2013, and after detailed discussion, the Supervisory Board approved the budget for the 2014 fiscal year presented by the Managing Board. The Managing Board reported to the Supervisory Board on the strategy for tapping the Chinese market and on the status of restructuring at Jiangsu Zeversolar New Energy Company Limited. The Supervisory Board discussed the measures presented in detail. The Supervisory Board also reviewed the Managing Board remuneration system and the appropriateness of the remuneration of the Managing Board and resolved a new structure for Managing Board remuneration and new target values for the 2014 fiscal year. In addition, the Managing Board and the Supervisory Board adopted a new Declaration of Conformity pursuant to Section 161 (1) sentence 1 of the German Stock Corporation Act (AktG) in order to comply with the recommendations of the German Corporate Governance Code.

At its meeting on February 11, 2014, the Supervisory Board chiefly dealt with the 2013 Annual Financial Statements and the associated reports. In addition, current cooperation and restructuring plans were also discussed.

An extraordinary meeting of the Supervisory Board was held on February 25 and 26, 2014, at which the strategic cooperation with the Danfoss Group, including the acquisition of Danfoss's solar inverter business, was discussed and agreed upon.

## Committee Meetings

See also  
[www.IR.SMA.de](http://www.IR.SMA.de)

See also Corporate  
Governance Report  
page 22 et. seqq.

In order to improve the efficiency of the work carried out by the Supervisory Board, the Supervisory Board maintains four permanent committees: A Presidial Committee, an Audit Committee, a Nomination Committee and a Mediation Committee. You will find the names of the persons appointed to these committees on our website [www.IR.SMA.de](http://www.IR.SMA.de) as well as in the Corporate Governance Report 2013.

The committees prepare the topics and resolutions to be dealt with by the full Supervisory Board and, within the framework of the competencies transferred to them, they resolve those matters they have been assigned to deal with instead of the Supervisory Board. The content of the committee meetings is reported by the respective committee chairman at the next plenary session of the Supervisory Board. All members of the Supervisory Board receive the minutes on the content and resolutions of the committees.

The **Presidial Committee** met three times in 2013.

At its meeting on February 12, 2013, the committee resolved to recommend that the Supervisory Board amend the structure of Supervisory Board remuneration starting from 2013. In addition, the committee dealt with the Corporate Governance Report and the Supervisory Board Report drafts for 2012.

At its meeting on April 16, 2013, the Presidial Committee discussed the composition of the Managing Board and proposals for an additional Managing Board member and held interviews with candidates.

At the meeting on December 3, 2013, the Presidial Committee resolved to propose a new structure of Managing Board remuneration to the Supervisory Board and examined the consent provisos set out in the Rules of Procedure for the Managing Board for any necessary changes.

The **Audit Committee** convened seven times in 2013, three times via telephone conference.

On February 12, 2013, the Audit Committee took a report regarding the progress of the financial audit from the auditor. The Committee also discussed the possible appropriation of profits for 2013 and passed a resolution on the proposal for the selection of the auditor to be adopted by the Supervisory Board.

On March 4, 2013, the Audit Committee discussed the Annual Report of the Internal Auditing department for the 2012 fiscal year. It also dealt with the Financial Statement Report and Consolidated Financial Statement Report drafts in the presence of the auditor and discussed topics including their main points and auditor findings. Another topic was monitoring the quality and independence of the financial audit. In addition, the proposal for the election of the auditor for the 2013 fiscal year was discussed and a recommendation was made to the Supervisory Board on the appropriation of profit for 2012. The Audit Committee also discussed the Risk Report for the 2012 fiscal year.

At its meeting on August 26, 2013, the Audit Committee dealt with the half-yearly reports prepared by the Internal Auditing department and risk management and informed itself about the current status of the cost reduction and investment measures.

At its last meeting in the fiscal year on December 3, 2013, the Head of Compliance presented the 2013 Compliance Report. The Audit Committee then discussed the report in detail and acknowledged the work done so far. In addition, the financial audit plans for the 2013 fiscal year were presented to the Audit Committee by the auditor. Moreover, the Internal Auditing department's audit plans for the 2014 fiscal year were presented by the Head of the Internal Auditing department, and risk categories and thresholds were explained. The Audit Committee, together with the auditor, also discussed the effectiveness of the Internal Control System (ICS), the Risk Management System and the Internal Auditing System. In addition, the Audit Committee discussed the measures to reduce inventory.

In addition, the Audit Committee discussed the relevant Quarterly and Half-Yearly Financial Reports with the Managing Board before their publication, in three telephone conferences on May 10, 2013, August 6, 2013, and November 5, 2013.

The **Nomination Committee** and **Mediation Committee** did not convene in 2013.

## Corporate Governance

The Supervisory Board also dealt with the content of the German Corporate Governance Code in 2013, particularly the amendments to the Code from May 2013. In December 2013, the Supervisory Board and the Managing Board issued a Declaration of Compliance pursuant to Section 161 of the German Stock Corporation Act (AktG) in compliance with the recommendations of the German Corporate Governance Code. Two deviations were declared. The joint report issued by the Supervisory Board and the Managing Board in compliance with the rules of the German Corporate Governance Code pursuant to clause 3.10 of the Code (Corporate Governance Report) has been made permanently available on our website [www.IR.SMA.de](http://www.IR.SMA.de) and is mentioned additionally on

See also  
[www.IR.SMA.de](http://www.IR.SMA.de)

See also Corporate Governance Report page 22 et. seqq.

## Annual Financial Statements and Consolidated Financial Statements

The Annual Financial Statements prepared by the Managing Board as of December 31, 2013, and the Management Report for the 2013 fiscal year as well as the Consolidated Financial Statements as of December 31, 2013, and the Consolidated Management Report for the 2013 fiscal year were audited by the accounting firm Deloitte & Touche GmbH, Hanover. The Supervisory Board granted the audit assignment in accordance with the resolution adopted by the General Meeting on May 23, 2013. Prior to submitting the corresponding proposal to the General Meeting regarding the appointment of the auditors, the Supervisory Board had obtained the auditor's certificate of independence pursuant to clause 7.2.1 of the German Corporate Governance Code. The Supervisory Board also monitored the independence of the auditor. In addition, it dealt with the assignment of orders to the auditor for non-audit-related services.

The Consolidated Financial Statements of the Company were prepared in line with Section 315a of the German Commercial Code (HGB) on the basis of the International Financial Reporting Standards (IFRS) as applicable in the EU. The auditor granted an unqualified audit opinion for the Annual Financial Statements and the Management Report as well as for the Consolidated Financial Statements and the Consolidated Management Report.

The reporting documents and the Managing Board's proposal on the appropriation of profits as well as the audit reports were made available to the Supervisory Board in good time. These were first discussed by the Audit Committee at its meetings on February 11, 2014, and March 6, 2014, with the auditors and then by the Supervisory Board at its meeting on March 6, 2014, on each occasion also in the presence of the auditor's representatives. The auditor's representatives reported on the findings of the audit and provided detailed explanations of the assets, financial position and results of operations of the Company and the Group. The questions posed by the Supervisory Board were answered and the reporting documents were reviewed in detail with the auditor's representatives and discussed and examined by the Supervisory Board. The Supervisory Board raised no objections after concluding its examination. Thereafter, the findings of the audit were approved. Accordingly, the Supervisory Board approved the Financial Statements prepared by the Managing Board and the related Management Reports for the 2013 fiscal year at its meeting convened to adopt the accounts on March 6, 2014. Hence, the Company's Annual Financial Statements have been approved as set out in Section 172 of the German Stock Corporation Act (AktG).

Finally, at its meeting held on March 6, 2014, the Supervisory Board approved the Managing Board's proposal on the appropriation of the balance sheet profit. In this respect, the Supervisory Board discussed the Company's liquidity position, the financing of planned investments and estimated business development. In doing so, the Supervisory Board came to the conclusion that the proposal was in the interests of the Company and the shareholders.

## Changes to the Managing Board and Supervisory Board

Jürgen Dolle retired from the Managing Board as of May 15, 2013. As Chief Human Resources & Operations Officer and Labor Director, Jürgen Dolle had a major influence on SMA's public face and culture and also maintained this in times of rapid growth. The Supervisory Board would like to take this opportunity to thank Mr. Dolle for his dedication. In addition, Mr. Ulrich Messmer left the Supervisory Board as of May 23, 2013. Mr. Messmer also rendered outstanding services to SMA with his defining work on the Supervisory Board and his impetus. The Supervisory Board likewise wishes to thank him for his dedication. On May 24, 2013, Mr. Oliver Dietzel succeeded the retired member via judicial appointment.

In the opinion of the Supervisory Board, the Managing Board tackled the challenges arising from a rapidly changing market and competitive environment actively and systematically. Pressing ahead with tapping new markets and developing new product platforms, well-balanced streamlining of the corporate structure and reducing costs on a sustainable basis are the right way to build on SMA's success. The Managing Board presented the measures taken for this purpose to the Supervisory Board transparently and in good time.

The Supervisory Board would like to thank the Managing Board and all employees for their outstanding work and great dedication in the unusually difficult 2013 fiscal year.

Niestetal, March 6, 2014

The Supervisory Board  
Dr.-Ing. h. c. Günther Cramer  
Chairman



**DR.-ING. H. C.  
GÜNTHER CRAMER**  
Shareholder Representative  
(Chairman)



**OLIVER DIETZEL**  
Employee Representative



**PETER DREWS**  
Shareholder Representative



**DR. ERIK EHRENTRAUT**  
Shareholder Representative  
(Deputy Chairman)



**DR. GÜNTHER HÄCKL**  
Employee Representative



**JOHANNES HÄDE**  
Employee Representative



**DR. WINFRIED HOFFMANN**  
Shareholder Representative



**PROF. (EM.) DR.-ING.  
WERNER KLEINKAUF**  
Shareholder Representative



**ALEXANDER NAUJOKS**  
Employee Representative



**JOACHIM SCHLOSSER**  
Employee Representative



**REINER WETTLAUFER**  
Shareholder Representative



**MIRKO ZEIDLER**  
Employee Representative

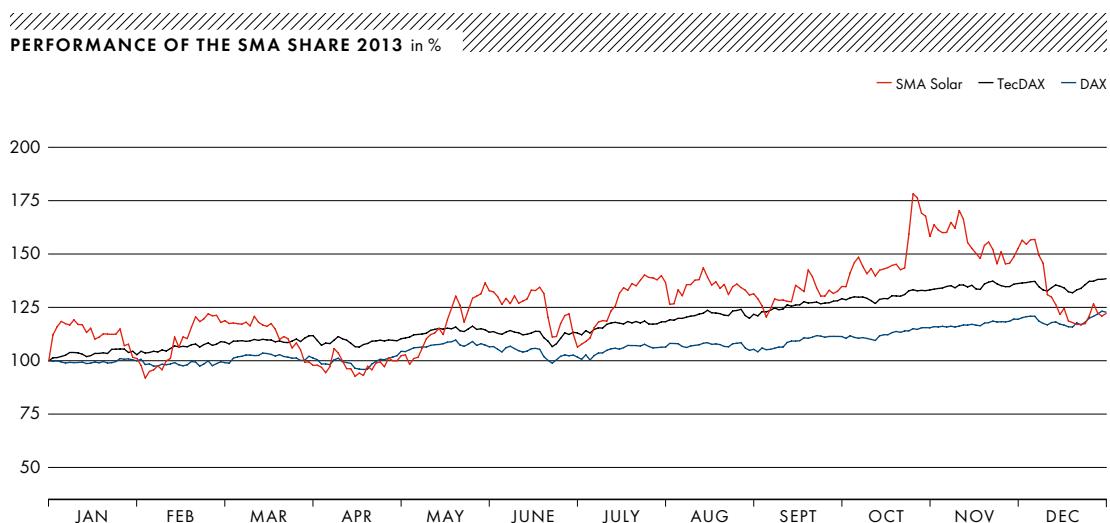
# The Share

## Capital Market Environment

In 2013, the global stock markets posted significant price gains and, despite considerable fluctuation at times, mostly reached new record highs. In the reporting period, the stock markets were particularly influenced by positive data from important economic regions, the easing of the sovereign debt crisis in the euro zone and the low-interest policies of the central banks in the U.S. and Europe.

The leading German index DAX started the 2013 stock market year at 7,689.46 points (opening price). In the first two months of the year, prices largely stagnated. As a result of the banking crisis in Cyprus, the DAX began to fall in March. On April 19, 2013, the leading index marked its annual low at 7,459.96 points (closing price) but then rose considerably until the end of May. Positive impetus primarily came from interest rate cuts by the European Central Bank (ECB) and positive economic data from the U.S. Towards the middle of the year, the DAX fell slightly again but continued its upward trend at the start of the third quarter and posted a new interim high of 8,694.18 points (closing price) on September 19, 2013. The markets were buoyed above all by the U.S. Federal Reserve's decision not to change its monetary policy for the time being. Subsequently, the DAX lost momentum slightly for a short period, ending the third quarter at 8,594.40 points (closing price on September 30, 2013). In the final quarter of the year, the market indicator posted significant gains, breaching the 9,000-point mark for the first time on October 29, 2013. The DAX climbed to 9,552.16 points at the end of December (closing price on December 30, 2013) after a new all-time high of 9,589.39 points on December 27 (closing price). Positive stimuli were provided by the latest ECB interest-rate reduction to the record low of 0.25%, the agreement between the CDU and SPD political parties on a Grand Coalition and positive economic data from the U.S. and Germany. The DAX closed 2013 with growth of nearly 25% on the start of the year.

The German technology index TecDAX performed even better, starting 2013 at 831.16 points (opening price) and continuing its upward trend from the previous year. Compared to the DAX, the TecDAX was less prone to fluctuation over the course of the year. Up to the end of the first quarter, the technology indicator rose only slightly. Then in the middle of the year, the TecDAX climbed towards 1,000 points, finally breaking through this barrier for the first time since November 2007 on August 1, 2013. Positive economic data from the U.S. in particular allowed the TecDAX to rise to 1,083.51 points at the end of September (closing price on September 30, 2013).



**BASIC DATA**

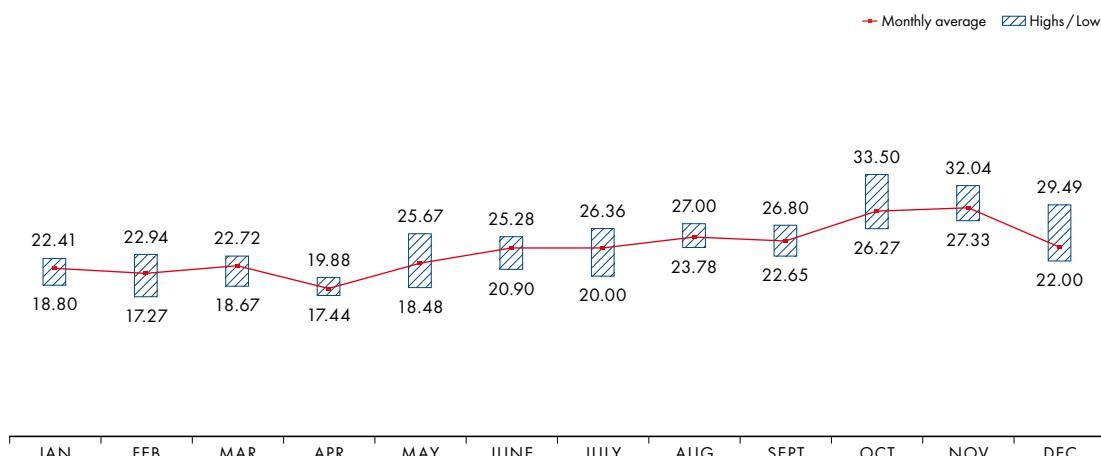
Security code number	A0DJ6J9
ISIN	DE000A0DJ6J9
Stock market symbol	S92
Reuters	S92G.DE
Bloomberg	S92 GR
Listing	Prime Standard of Frankfurt Stock Exchange
Initial public offering	June 27, 2008
Share class	No-par-value ordinary bearer shares
Share capital	€34.7 million
Total number of shares	34.7 million
Index	TecDAX, ÖkoDAX, CDAX, Prime All Share

In the final quarter, the index increased again and posted significant price gains. On the last trading day of the year, the TecDAX not only reached its annual high, but also a new record at 1,166.82 points (closing price on December 30, 2013). The TecDAX thus achieved a price increase of more than 40% over the course of the year.

**Performance of the SMA Share**

The SMA share started 2013 at €19.15 (opening price on January 2, 2013, [Xetra](#) trading platform) and performed very positively for long periods of the year. This was aided by the optimistic stock market sentiment and sector-specific events. For example, the investor Warren Buffett announced his interest in a Californian solar project and boosted German solar stocks at the start of the year. On the other hand, the German Federal Minister for the Environment Peter Altmaier's announcement on electricity price protection on January 28, 2013, had a negative influence. The SMA share price sank considerably and reached its lowest point in the reporting period at €17.27 (closing price, [Xetra](#) trading platform) on February 4, 2013. The share was boosted in mid-March by SMA's

Xetra  
 See also Glossary  
 page 172 et seqq.

**HIGHS AND LOWS OF THE SMA SHARE IN 2013 in €**

Xetra  
See also Glossary  
page 172 et seqq.

announcement of its acquisition of a majority interest in Jiangsu Zeversolar New Energy Co., Ltd. (Zeversolar). The acquisition secured SMA access to the rapidly growing Chinese market. At the start of the year, the Chinese government amended its expansion targets to 10 GW a year for the next three years. The share closed the trading day at €22.72 (closing price on March 12, 2013, Xetra trading platform).

On March 27, 2013, SMA published the final figures for the 2012 fiscal year and confirmed the forecast for 2013. At this time, the SMA Managing Board expected sales of between €0.9 billion and €1.3 billion in 2013 and in the best case scenario to break even before one-off items from personnel adjustments, but did not rule out making a loss. At the end of the first quarter, the SMA share was priced at €18.67 (closing price on March 28, 2013, Xetra trading platform), slightly lower than at the start of the year.

By mid-May, the share was given positive impetus by the results of the first quarter of 2013, in which sales and earnings were in the range forecasted by the SMA Managing Board. In addition, the share was aided by the intensive new installation in Japan with newly installed PV capacity of 1.5 GW within the first three months of the year. On May 31, the SMA share was priced at €25.67 (closing price, Xetra trading platform).

In the context of the Capital Markets Day on June 20, 2013, the SMA Managing Board released the outlook for the second quarter and for the second half of 2013. Despite renewed confirmation of the forecast for 2013 as a whole, the share price declined to €20.26 (closing price on July 3, 2013, Xetra trading platform), but managed to stay above the €20 mark.

In the third quarter, the figures for the first half of 2013 published on August 8, 2013, and the continued positive development on the major non-European PV markets of China, Japan, the U.S., South Africa and Australia drove the SMA share to an interim high in the reporting period (€27.00, Xetra trading platform closing price on August 13, 2013). In mid-September, SMA announced further cooperations in the field of electric vehicle charging infrastructure in relation to energy management. On September 17, SMA also announced that the necessary staff reduction could take place as a voluntary severance program without any involuntary layoffs. At the end of the third quarter, the SMA share reached a price of €25.33 (closing price on September 30, Xetra trading platform).

In the last quarter of the fiscal year, the SMA share intermittently grew considerably. The share reached its highest level of the reporting period at €33.50 on October 22 (closing price, Xetra trading platform). On this date, the SMA share price was nearly 80% higher than at the start of the year, but subsequently fell again. The forecast for the 2014 fiscal year published in early November, which predicted sales of €1.0 billion to €1.3 billion and positive operating earnings of up to €20 million, mitigated the fall in price. Investors also responded positively to the news that the largest Japanese photovoltaic power plant, equipped with SMA system technology, commenced operation at the start of November. In addition, the SMA share was again boosted for a short time by SMA's announcement of a major order from E.ON Mitte AG. The electric utility company commissioned SMA to modify 13,000 PV systems for the 50.2 Hz upgrade.

At the end of the year, the SMA share came under pressure. Discussions about the electricity price privileges of energy-intensive companies in Germany, which the European Commission criticized as anti-competitive, gave rise to uncertainty. The SMA share closed the fiscal year at €22.96 on the last trading day of 2013 (closing price on December 30, 2013, Xetra trading platform). This is an increase of about 20% in comparison to the price at the start of the year.

**To Our Shareholders** ————— The Share

- Corporate Governance
- Consolidated Management Report
- Consolidated Financial Statements
- Other Information

**RESEARCH-COVERAGE**

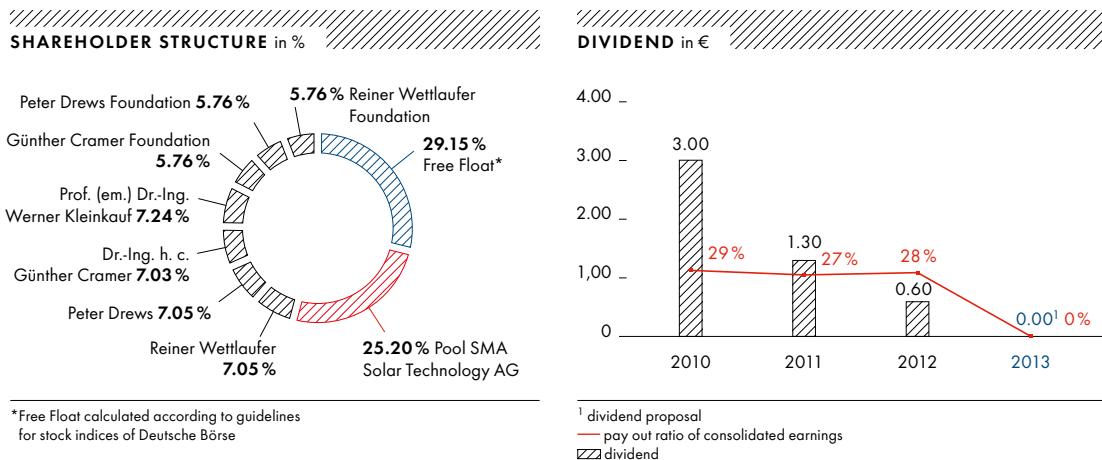
Institution	Name
Citi	Jason Channell
Commerzbank	Georg Remshagen
Deutsche Bank	Alexander Karnick
Equinet Bank	Stefan Freudenberg
HSBC Trinkaus & Burkhardt	Christian Rath
Independent Research	Sven Diermeier
Kempen & Co	Serena Zuidema
Landesbank Baden-Württemberg	Erkan Ayçiçek
Macquarie Group	Robert Schramm-Fuchs
Main First	Andreas Thielen
Natureo Finance	Ingo Queiser
Warburg Research	Christopher Rodler

**Shareholder Structure**

The shareholder structure remained unchanged in the reporting period. 29.15% of the shares are in free float and 25.20% are bundled in a pooling agreement. Approximately 28% of the shares are held by the founders of SMA Solar Technology, Dr.-Ing. h. c. Günther Cramer, Peter Drews, Reiner Wettlaufer and Prof. (em.) Dr.-Ing. Werner Kleinkauf. The first three of those named hold voting rights as sole Managing Board members for their foundation cdw with a further approximately 17% of the shares.

**Coverage of the SMA Share**

As a worldwide leading PV inverter manufacturer and energy management Group, SMA operates in a challenging market. In recent years, listed solar stocks posted significant falls with regard to their market capitalization worldwide. Many investment banks adjusted their research activities for the solar sector accordingly. Despite difficult conditions, the number of banks and securities firms producing regular reports was 12 in the reporting period.



## Annual General Meeting

The Annual General Meeting of the SMA Group was held at Kongress Palais Kassel on May 23, 2013, with nearly 500 shareholders attending. The shareholders granted discharge to the Managing Board and Supervisory Board for the 2012 fiscal year by a majority of over 99%. Furthermore, the Annual General Meeting followed the Managing and Supervisory Boards' proposal to distribute €0.60 per qualifying bearer share. With a payout ratio of 27.7% of consolidated net profit, SMA is within its target shareholder participation of between 20% and 40%. All relevant information and documents regarding the 2013 Annual General Meeting as well as the speech of Pierre-Pascal Urbon, CEO, are available on the website at [www.SMA.de/AnnualGeneralMeeting](http://www.SMA.de/AnnualGeneralMeeting). The next SMA Solar Technology AG Annual General Meeting will be held at Kongress Palais Kassel on May 27, 2014.

See Website  
[www.SMA.de/AnnualGeneralMeeting](http://www.SMA.de/AnnualGeneralMeeting)

## Capital Markets Day

Capital Markets Day 2013 took place during Intersolar in Munich on June 20, 2013. About 30 investors and analysts accepted the invitation and took part in the event. Capital Markets Day began with a tour of SMA's booth. This allowed the participants to gain an overview of SMA's product innovations in the fields of energy management, intelligent photovoltaic diesel hybrid systems and integrated solutions for the industrial segment. Subsequently, in a management presentation, CEO Pierre-Pascal Urbon and Lydia Sommer, Chief Financial and Human Resources Officer, informed the attendees about SMA's strategy and spoke about the most important PV markets this fiscal year. The Managing Board also addressed SMA's innovation strategy, which covers issues such as energy management, storage solutions and partnerships with leading manufacturers. The Managing Board also discussed SMA's internationalization activities and spoke about the current and planned cost reduction measures. Finally, the Managing Board presented the sales and earnings forecast for the second quarter of 2013, gave an outlook for the second half of 2013 and confirmed the forecast for the 2013 fiscal year.

**To Our Shareholders** ————— The Share

Corporate Governance  
 Consolidated Management Report  
 Consolidated Financial Statements  
 Other Information

**Investor Relations**

Credibility, transparency and up-to-dateness characterize SMA's communication culture and investor-oriented information policy. The company maintains regular dialog with the capital market. The Investor Relations website [www.IR.SMA.de](http://www.IR.SMA.de) provides comprehensive and up-to-date information about the Company. This includes, for instance, financial publications and a financial calendar. In addition, an interactive share chart enables comparisons between SMA share prices and selected stock market indices. On March 27, 2013, CEO Pierre-Pascal Urbon and CFO Lydia Sommer held the annual press conference on financial statements for journalists in Frankfurt, in parallel with the publication of the Consolidated Financial Statement for the previous fiscal year. The conference focused on topics of the future, such as the use of PV diesel hybrid systems in sunny off-grid regions and the optimization of self-consumption for private households and commercial enterprises. Following the press conference on financial statements, Lydia Sommer along with the SMA Investor Relations team held talks with investors at a roadshow in Frankfurt. In June and September, Pierre-Pascal Urbon took part in investor conferences in London. Key issues were the current situation and trends in the photovoltaics industry. At the end of the 2013 fiscal year, Lydia Sommer carried out roadshows in Germany and Switzerland. Key issues were SMA's quarterly results and cost-optimization strategy.

See  
[www.IR.SMA.de](http://www.IR.SMA.de)

**SMA SHARE KEY FIGURES**

	2013	2012
Year's Closing Price (XETRA) ————— €	22.96	19.01
Annual High (XETRA) ————— €	35.07	46.47
Annual Low (XETRA) ————— €	16.33	15.66
Number of Shares ————— million shares	34.70	34.70
Market Capitalization at the End of the Year ————— € million	796.71	659.65
Earnings per Share ————— €	-1.92	2.16
Dividend per Share ————— €	0.00 <sup>1</sup>	0.60
Dividend Amount ————— € million	0.00	20.80
Dividend Pay Out Ratio ————— %	0.00	27.70
Dividend Yield at the End of the Year ————— %	0.00	3.20
Price Earnings Ratio at the End of the Year ————— €	n.m.	8.80
Position on the TecDAX at the End of the Year —————		
According to Market Capitalization ————— 24		23
According to Trading Volume ————— 16		9

<sup>1</sup> Dividend Proposal

€100.5

### MILLION R&D INVESTMENTS\*

WE SPEND MORE THAN €100 MILLION ON RESEARCH AND DEVELOPMENT EACH YEAR AND EMPLOY ABOUT 1,000 PEOPLE IN THIS AREA. OUR GOAL IS TO SUSTAINABLY EXPAND SMA'S GLOBAL TECHNOLOGY LEADERSHIP WITH INNOVATIVE PRODUCTS.

\* Including capitalized R&D projects

# Corporate Governance

- 22 — Corporate Governance Report
- 27 — Corporate Governance Statement (Part of the Consolidated Management Report)
- 27 — Information Concerning Takeovers Required by Sections 289 Paragraph 4 and 315 Paragraph 4 HGB (Part of the Consolidated Management Report)
- 29 — Remuneration Report (Part of the Consolidated Management Report)

# Corporate Governance Report

SMA places great importance on adherence to the principles of good corporate governance and is guided by the recommendations and suggestions in the German Corporate Governance Code (DCGK). The Managing Board and Supervisory Board dealt comprehensively with its requirements, especially the amendments of May 2013. On December 4, 2013, following deliberations, the Managing Board and the Supervisory Board issued an amended Declaration of Conformity, reproduced below, pursuant to Section 161 (1), sentence 1 of the German Stock Corporation Act (AktG) replacing the Declaration of Conformity dated December 5, 2012, which was published on our website [www.SMA.de](http://www.SMA.de).

See also  
[www.SMA.de](http://www.SMA.de)

## Declaration of Conformity Concerning the German Corporate Governance Code

In accordance with Section 161 of the German Stock Corporation Act (AktG), the Managing Board and Supervisory Board of SMA Solar Technology AG declare:

Since the last Declaration of Conformity dated December 5, 2012, SMA Solar Technology AG has complied with the recommendations of the "Regierungskommission Deutscher Corporate Governance Kodex" (Government Commission German Corporate Governance Code) in the version dated May 15, 2012, published in the electronic Federal Gazette (Bundesanzeiger) on June 15, 2012, with the exceptions mentioned below in number (1) and number (2). The Company has complied with the recommendations of the "Regierungskommission Deutscher Corporate Governance Kodex" (Government Commission German Corporate Governance Code) in the version dated May 13, 2013, published in the electronic Federal Gazette (Bundesanzeiger) on June 10, 2013, with the exception mentioned below in number (1) and will continue to comply with them with the exception mentioned below in number (1):

(1) Notwithstanding Article 5.4.2, Sentence 3 of the German Corporate Governance Code, there are more than two former members of the Managing Board on the Supervisory Board, namely Dr.-Ing. h. c. Günther Cramer, Peter Drews and Reiner Wettlaufer.

The Supervisory Board thinks that it is very important for the Company to retain them as members of the Supervisory Board, even though they were previously Managing Board members, in order to continue the development work of the Company's founders. In light of the fact that they are main shareholders, it is justifiable for the Supervisory Board to include more than two former members of the Managing Board.

(2) According to Article 5.4.6 Sentence 5 of the German Corporate Governance Code, a performance-related remuneration component for members of the Supervisory Board should be based on sustainable corporate development. In addition to reimbursement of expenses and fixed remuneration, the members of the Supervisory Board also received variable annual remuneration based on the success of the Company for the 2012 fiscal year. According to the prevailing opinions of writers on this subject, this did not meet the sustainability requirements and thus represents a deviation from the recommendation of Article 5.4.6, Sentence 5 of the German Corporate Governance Code.

Effective January 1, 2013, the Supervisory Board remuneration system has been changed to comply with the recommendations of the German Corporate Governance Code.

Niestetal, December 4, 2013

The Managing Board

The Supervisory Board

To Our Shareholders

**Corporate Governance** ————— Corporate Governance Report

Consolidated Management Report

Consolidated Financial Statements

Other Information

## Transparency

Transparency is a key element of good corporate governance. Our aim is to provide all shareholders, financial analysts, media and interested members of the public at large with timely information about the business situation and significant corporate changes. All important information is also made available on our website [www.SMA.de](http://www.SMA.de). Reporting on the business situation and the results of operations takes place in the Annual Report, in the press conference on financial statements and in the Quarterly and Half-Yearly Financial Reports. Furthermore, the public is informed through press releases and, if stipulated by the law, by means of ad hoc statements. Moreover, social networks are used to provide information on business data and important events. Transparency is particularly important whenever deliberations and Company decisions might lead to conflicts of interest. Any conflicts of interest that may have arisen were disclosed by those members of the corporate bodies affected when discussion of this subject commenced. The member concerned did not participate in the adoption of any necessary resolutions by the Managing Board or the Supervisory Board. With respect to the fiscal year that has concluded, the following point should be mentioned:

See also  
[www.SMA.de](http://www.SMA.de)

SMA Solar Technology AG concluded a consultancy contract with Dr. Winfried Hoffmann that is limited in terms of content. According to this contract, Dr. Hoffmann shall receive reimbursement for travel costs and expenses for these duties for the duration of his Board membership on the European Photovoltaic Industry Association (**EPIA**). There is no remuneration for these duties. The Supervisory Board approved the conclusion of the contract at its meeting on August 27, 2012. Dr. Hoffmann did not participate in the vote.

EPIA  
 See also Glossary  
 page 172 et seqq.

At the end of the fiscal year and at the time this Report was published, the current members of the Managing Board and the Supervisory Board held, either directly or indirectly, 46.4% (2012: 46.4%) of all shares issued. The Managing Board members held a total stake of 0.6% (2012: 0.6%) in the share capital and the Supervisory Board members held a stake of 45.8% (2012: 45.8%) in the share capital.

## Remuneration Report

See also  
 Remuneration Report  
 page 29 et seqq.

The Remuneration Report is a constituent part of the audited Consolidated Management Report and is shown on page 29 et seqq.

## The Company's Corporate Bodies and Their Functions

SMA Solar Technology AG is a stock corporation governed by German law. Accordingly, it possesses a dual management structure in which one corporate body is devoted to managing the Company (the Managing Board) and is supervised by another corporate body (the Supervisory Board). Both bodies are endowed with different powers and work closely with one another in an atmosphere of trust when managing and supervising the Company. Electing the shareholder representatives to the Supervisory Board and the auditor as well as determining the appropriation of profits, along with making decisions that impact member rights of the shareholders, are the responsibility of the Annual General Meeting.

## Managing Board

The Managing Board is responsible for independently and jointly managing the Company. It is obliged to pursue the objective of the sustainable creation of value and is responsible for managing the business. It decides on fundamental issues of business policy and corporate strategy as well as on short- and medium-term financial planning. The Managing Board is responsible for preparing the Quarterly and Half-Yearly Financial Reports and the Annual Financial Statements of SMA Solar Technology AG and of the SMA Group as well as for adhering to all legal and official provisions and internal policies.

As a collective body, the Managing Board, in principle, strives to adopt resolutions unanimously. However, the Rules of Procedure for the Managing Board, adopted by the Supervisory Board (available on our website [www.IR.SMA.de](http://www.IR.SMA.de)) stipulate that individual members of the Managing Board shall be responsible for specific areas of responsibility. The Managing Board lays down how responsibilities are assigned. The members of the Managing Board notify each other on an ongoing basis about all material events in their area of responsibility and about any matters covering several areas of responsibility. If the desired unanimity cannot be reached when adopting resolutions, then the Managing Board decides on the basis of a simple majority of the members present. However, no resolutions may generally be adopted on matters that have been assigned to the area of responsibility of a member absent from a meeting. Under legal provisions or the Rules of Procedure, in certain transactions, a unanimous resolution of the Managing Board is mandatory. For a certain number of transactions, the Supervisory Board has a reservation of consent.

See also  
[www.IR.SMA.de](http://www.IR.SMA.de)

Jürgen Dolle (Chief Human Resources and Operations Officer) left the Managing Board on May 15, 2013. The Managing Board thus consists of four members: Roland Grebe (Chief Technology Officer), Lydia Sommer (Chief Financial and Human Resources Officer), Pierre-Pascal Urbon (Chief Executive Officer) and Marko Werner (Chief Sales Officer).

## Supervisory Board

The Supervisory Board advises the Managing Board in all matters and supervises its activity. It is involved with and consulted by the Managing Board in all matters of fundamental significance and whenever particularly important business decisions have to be made. Under the Rules of Procedure that apply to the Managing Board and adopted by the Supervisory Board, the Managing Board must obtain prior approval from the Supervisory Board for certain decisions. Such decisions include, for instance, approval of the annual budget including the investment plan, incorporation, acquisition or sale of companies and acquisition or sale of pieces of real estate, whenever certain threshold values are exceeded. The Supervisory Board must also approve the assignment of areas of responsibility.

The Supervisory Board is currently made up of 12 members and its composition complies with the provisions of the German Stock Corporation Act and the Co-Determination Act. Under these provisions, the employees of German Group companies and their shareholders (Annual General Meeting) each elect six representatives to the Supervisory Board. The current members of the Supervisory Board are: Oliver Dietzel, Dr. Günther Häckl, Johannes Häde, Alexander Naujoks, Joachim Schlosser and Mirko Zeidler as employee representatives and Dr.-Ing. h. c. Günther Cramer (Chairman), Peter Drews, Dr. Erik Ehrentraut (Deputy Chairman), Dr. Winfried Hoffmann, Prof. (em.) Dr.-Ing. Werner Kleinkauf and Reiner Wetzlaufer as shareholder representatives.

Mr. Ullrich Meßmer left the Supervisory Board effective May 23, 2013. Mr. Oliver Dietzel was appointed as his successor by the Registration Court.

To Our Shareholders

**Corporate Governance** ————— Corporate Governance Report

Consolidated Management Report

Consolidated Financial Statements

Other Information

THE COMMITTEES OF THE SUPERVISORY BOARD ARE MADE UP AS FOLLOWS

Presidial Committee ————— Dr.-Ing. h. c. Günther Cramer (Chairman), Dr. Erik Ehrentraut, Dr. Günther Häckl, Mirko Zeidler

Audit Committee ————— Dr. Erik Ehrentraut (Chairman), Johannes Häde, Alexander Naujoks, Reiner Wetzlauer

Nomination Committee ————— Peter Drews (Chairman), Dr. Erik Ehrentraut, Prof. (em.) Dr.-Ing. Werner Kleinkauf

Mediation Committee ————— Dr.-Ing. h. c. Günther Cramer, Dr. Erik Ehrentraut, Dr. Günther Häckl (Chairman), Joachim Schlosser

Dr. Ehrentraut, as an independent member of the Supervisory Board, possesses the necessary expertise in the fields of accounting or auditing as stipulated under Section 100 (5) of the German Stock Corporation Act (AktG).

The committees prepare topics and resolutions for the Supervisory Board that are due to be deliberated at the plenary session of the Supervisory Board. They regularly meet important informants such as, for instance, the Managing Board, the auditor or the heads of Internal Auditing or Compliance for this purpose. The content of the committee meetings is then reported by the committees' chairmen at the next plenary session of the Supervisory Board. Any member of the Supervisory Board may attend the meetings of a committee, provided the relevant committee chairman does not decide otherwise. The minutes of the content and resolutions adopted by committees are made available to all the members of the Supervisory Board.

See also Supervisory  
Board Report  
page 8 et seqq.

The Supervisory Board reports annually on the focus of its activities and deliberations in the Supervisory Board Report. You may refer to the Rules of Procedure of the Supervisory Board on our website [www.IR.SMA.de](http://www.IR.SMA.de). The members of the Supervisory Board take the training and specialized training measures necessary for their tasks on their own accord, whereby they receive appropriate support from the Company.

See also  
[www.IR.SMA.de](http://www.IR.SMA.de)

At its meeting on December 6, 2011, the Supervisory Board resolved objectives for its future composition. The objectives were edited on December 5, 2012, and remain as follows:

1. At least 25% of the Supervisory Board is to be women. In the process, both the shareholders and employees should aim to provide at least one female Supervisory Board member. The Supervisory Board also aims for a share of at least 25% when the Managing Board is appointed. The Managing Board has already set the same objective for recruitment to management positions in the entire Company. This ambitious objective brings great challenges to the Company and is to be realized with the regular new election after next at the latest.
2. Maintain the composition of the Supervisory Board of members with a background of international experience at least in the previous scope.
3. Consideration of particular knowledge and experience in the application of financial reporting standards and internal control processes as well as in the field of auditing.
4. Consideration of technical expertise, especially also in the field of renewable energies, preferably in the field of photovoltaics.
5. Consideration of Company knowledge.
6. At least half of the shareholder representatives are to be independent. At the same time, at least one member is to possess expertise in the field of accounting or auditing.
7. Consideration of the age limit of 75 years at the end of the term of office.

The term of office of all current members of the Supervisory Board ends with the conclusion of the Annual General Meeting 2015. Currently, the objectives are implemented as follows:

As regards 1: There are currently no women on the Supervisory Board. The four-person Managing Board now has one female member, Ms. Lydia Sommer.

As regards 2–5: In the opinion of the Supervisory Board, these objectives have now been achieved.

As regards 6: Currently, at least three shareholder representatives are to be viewed as independent; two members, one of whom is independent, possess expertise in the fields of accounting and auditing.

As regards 7: Currently, one member of the Supervisory Board will exceed the age limit of 75 years at the end of his term of office.

## Cooperation Between the Managing Board and the Supervisory Board

The Managing Board and the Supervisory Board work closely with one another in an atmosphere of trust for the good of the Company, thus fulfilling both the requirements of effective control of the enterprise and the need to be able to make decisions quickly. Their common goal is to secure the continued existence of the Company and steadily increase its value. To this end, the Managing Board keeps the Supervisory Board promptly and comprehensively informed, both in writing and by word of mouth and during regular meetings about the Company's position, current business developments and all relevant questions pertaining to strategic planning, risk management and important compliance matters. The Quarterly Financial Report and the Half-Yearly Financial Report are discussed with the Managing Board on a regular basis during meetings of the Audit Committee before their publication.

Outside meetings, the relevant Chairman of the Supervisory Board and his Deputy are also in contact with the Managing Board, discuss significant business transactions and upcoming decisions with it and are immediately informed of developments of key importance.

## Shareholders and Annual General Meeting

The shareholders of SMA Solar Technology AG discuss their co-determination and control rights at the Annual General Meeting which takes place at least once a year. The Annual General Meeting adopts resolutions with binding effect and each share grants one vote. Every shareholder who registers on time is entitled to participate in the Annual General Meeting. In addition, shareholders may have their voting rights exercised by a credit institution, a shareholder association, the proxies deployed by SMA Solar Technology AG and bound by the shareholder's instructions or by another authorized representative. The invitation to the Annual General Meeting and all reports and information necessary for adopting resolutions, including the Annual Report, are published in accordance with the provisions of the Stock Corporation Act and are available in the run-up to the Annual General Meeting on our website at [www.IR.SMA.de](http://www.IR.SMA.de).

See also  
[www.IR.SMA.de](http://www.IR.SMA.de)

## Corporate Governance Statement

The SMA Corporate Governance Statement (Section 289a of the German Commercial Code) has been posted on the website of SMA Solar Technology AG at [www.IR.SMA.de](http://www.IR.SMA.de).

## Information Concerning Takeovers Required by Sections 289 Paragraph 4 and 315 Paragraph 4 HGB

**Number 1:** The share capital of SMA Solar Technology AG amounts to €34.7 million. The capital is divided up into 34,700,000 no-par-value bearer shares. The rights and obligations associated with the shareholdings underlie the regulations under the German Stock Corporation Act.

**Number 2:** Each share has the right to one vote. On October 1, 2010, the four founders and main shareholders of SMA Solar Technology AG, Dr.-Ing. h. c. Günther Cramer, Peter Drews, Prof. (em.) Dr.-Ing. Werner Kleinkauf and Reiner Wetzlaufer, transferred equity stakes to the next generation within their families by way of a gift. The acquiring shareholders concluded a pool agreement for a period of seven years. During the term of this agreement, the voting rights emanating from the shares transferred may only be exercised as a block vote. In addition, the shares may only be sold to third parties with the consent of the other members of the pool or if narrowly defined prerequisites are satisfied. At the end of the fiscal year, the shareholders who coordinate their voting rights in "Poolvertrag SMA Solar Technology AG" hold a total of 8,744,470 shares or 25.20% of the Company's voting rights. Beyond this, the Managing Board is not aware of any restrictions affecting voting rights or the transferability of shares.

**Number 3:** Dr.-Ing. h. c. Günther Cramer has a stake of 7.03%, as well as 5.76% via the Günther Cramer Foundation, of which he is the sole Managing Board member, totaling 12.79% of the Company's share capital. Peter Drews has a stake of 7.05%, as well as 5.76% via the Peter Drews Foundation, of which he is the sole Managing Board member, totaling 12.81% of the Company's share capital. Reiner Wetzlaufer has a stake of 7.05%, as well as 5.76% via the Reiner Wetzlaufer Foundation, of which he is the sole Managing Board member, totaling 12.81% of the Company's share capital. Shareholders, who coordinate their voting rights in "Poolvertrag SMA Solar Technology AG" (see Number 2) hold 25.20% of the Company's share capital. No individual shareholder of the "Poolvertrag SMA Solar Technology AG" holds 10% or more of the Company's share capital.

**Numbers 4 and 5:** The shareholders do not have any special rights conferring them any particular powers of control.

**Number 6:** Appointment and dismissal of the Managing Board takes place pursuant to Sections 84 and 85 of the German Stock Corporation Act (AktG) together with Section 31 of the Co-Determination Act (MitBestG). Under Article 5 of the Articles of Incorporation, the Managing Board consists of at least two members and the exact number is laid down by the Supervisory Board. Under Section 179 of the AktG, the Articles of Incorporation may be amended by a resolution adopted by the Annual General Meeting with a majority of three-quarters of the share capital represented at the vote.

**Number 7:** The Articles of Incorporation include the provisions on the powers of the Managing Board regarding Authorized Capital II. The Managing Board, after obtaining the consent of the Supervisory Board, is entitled to increase the share capital on one or several occasions by up to a total of €10 million by issuing new bearer shares in return for cash contributions and/or contributions in kind in the period up to May 22, 2018. The Managing Board, with the consent of the Supervisory Board, is entitled to cancel the statutory subscription rights of shareholders a) in the case of capital increases in return for contributions in kind for the acquisition of or investment in companies, parts of companies or investments in companies, b) for the purpose of issuing shares to employees of the Company and companies affiliated with the Company, c) to exclude fractions and d) in the case of capital increases in return for cash contributions if the issue amount of the new shares does not fall significantly below the stock exchange price of shares of the same class and terms that are already listed at the time the Managing Board sets the final issue amount and the total pro rata amount of the issued capital attributable to the new shares in respect of which the subscription right is excluded may not exceed 10% of the issued capital available at the time the new shares are issued.

Furthermore, following a resolution adopted by the Annual General Meeting on May 27, 2010, the Managing Board, in the period up to May 26, 2015, is entitled to acquire its own shares up to a value of 10% of the existing capital stock, at the time the resolution is adopted by the Annual General Meeting, and to dispose of shares acquired in this way with the consent of the Supervisory Board by means other than through the stock exchange, or an offer made to all the shareholders, provided, the shares are sold in return for cash at a price that does not fall significantly below the stock exchange price of shares in the Company issued under the same terms or the shares are sold in return for in-kind contributions, or they are offered in return for shares held by persons that either had or have an employment relationship with the Company, or with one of its affiliated companies, or members of bodies in companies that depend on the Company. Furthermore, if the Managing Board sells its own shares by offering them to all the shareholders with the consent of the Supervisory Board, the Managing Board is entitled to exclude the shareholders' right of subscription for fractions. In addition, the Managing Board is entitled to cancel any shares it has acquired after obtaining the consent of the Supervisory Board.

**Number 8:** Credit lines agreed with banks with a volume of €33.9 million contain a change-of-control clause that includes the special termination right of the relevant bank.

**Number 9:** If the employment contract with a member of the Managing Board ends after being amicably cancelled within a period of nine months from a change of control, this member is entitled to severance pay amounting to his/her remuneration rights for the remaining term of the employment contract, however no longer than a period of one year.

# Remuneration Report

The Remuneration Report summarizes the principles that are decisive when it comes to determining the remuneration of the Supervisory Board and the Managing Board and also explains the structure and the emoluments payable.

## Managing Board Emoluments

The remuneration system for the Managing Board (including the most important contractual elements) is decided at a plenary session of the Supervisory Board. All the contracts concluded with Managing Board members currently in force have a term of five years. The Supervisory Board regularly examines the remuneration system for the Managing Board and lays down targets for the variable components of the emoluments. The criteria when determining the commensurateness of the remuneration include the tasks of the individual members of the Managing Board, their personal performance, the economic situation and success of the Company and the benchmark remuneration customary in the peer environment and the Company's usual remuneration structure. The Supervisory Board also included Managing Board remuneration in relation to the remuneration of the top-level executives and the workforce as a whole in its assessment, taking into account changes over time, and thus laid down comparable peer groups for top-level executives and the workforce. The remuneration is assessed in a way that ensures that it is competitive in the market for highly qualified managerial staff. Apart from statutory requirements, the remuneration system also complies with the stipulations of the German Corporate Governance Code and with case law and was approved by the Annual General Meeting on May 27, 2010. The remuneration of the Managing Board will consist of the following components in which the fixed component of the emoluments is 40% to 50% and the variable component and the long-term bonus in the case of good business performance amounts to 50% to 60% of the total remuneration before additional benefits. At least one half of the variable component of the emoluments must correspond to the long-term bonus.

### **NON-PERFORMANCE-BASED FIXED REMUNERATION**

The annual fixed emoluments are divided up into 13 monthly salaries. The 13th monthly salary is paid together with the salary for November, on a prorata basis in the case of persons taking up or leaving their posts during the year.

### **PERFORMANCE-BASED VARIABLE REMUNERATION**

The Managing Board members also receive a performance-based variable salary, which depends on earnings before taxes (EBT) as recorded in the Consolidated Financial Statements for a fiscal year audited by the auditor. In the case of negative earnings in any given fiscal year, they are set off against the earnings recorded for the next fiscal year. The target value (EBT) is adjusted annually by the Supervisory Board. If at least 100% of the target value is achieved, then the full agreed variable remuneration may be claimed. If less than 20% of the target value is achieved, no claim may be asserted for the variable component. Values in-between are determined on a linear basis. If the target value is exceeded, this does not entitle payment of a higher variable component of the emoluments (cap). A maximum of one half of the performance-based annual remuneration that is anticipated will be paid out after submission of the Half-Yearly Financial Report. The remainder is paid out after the approval of the Consolidated Financial Statements, which usually takes place at the end of March of the following year. If the Managing Board member's duties do not extend beyond one full fiscal year, then he/she receives one twelfth of the performance-based variable remuneration determined for the entire fiscal year for each month of the fiscal year in which he/she carries out his/her duties. Starting with the 2014 fiscal year, the variable salary component of Managing Board remuneration, excluding earnings before taxes, will also be dependent on sales generated by SMA and the attainment of personal objectives (personal performance). The relevant resolution by the Supervisory Board will be submitted for approval at the Annual General Meeting.

**LONG-TERM BONUS**

Managing Board members also receive a long-term bonus, which depends on the mean EBT margin as recorded in the Consolidated Financial Statements audited by the auditors over a period of three fiscal years. The target value (EBT margin) is determined annually by the Supervisory Board for the following three fiscal years. If 100% of the target value is achieved, then the full agreed long-term bonus may be claimed whereas if less than 50% of the target value is achieved, no bonus is payable. Values in-between are determined on a linear basis. If the target value is exceeded, this does not entitle payment of a higher long-term bonus (cap). The bonus is payable at the very earliest upon expiry of the three-year period. Payment takes place after the third Consolidated Financial Statements have been approved, usually at the end of March, even if the employment contract ends before the end of the performance period. If the employment contract still has a term of at least two years to run when payment becomes due, then the Managing Board member is expected to invest the net amount payable, in part, in shares in SMA Solar Technology AG and to hold these shares until his/her Managing Board duties in the Company have concluded.

**ADDITIONAL BENEFITS**

All Managing Board members are entitled to

- » a company car,
- » reimbursement of travel costs and any expenses incurred on company business,
- » the employer's contribution up to the contribution assessment ceiling of the statutory social insurance scheme (pension, health, nursing care), even in the case of voluntary insurance and without furnishing any proof,
- » and appropriate D&O insurance.

Any taxes due must be borne by the Managing Board member.

### OTHER CONTRACTUAL BENEFITS

In the event of death or permanent disability, the emoluments will continue to be paid for six months. In the event of early termination of duties on the Managing Board without a good cause, the compensation payable is limited to the total remuneration for the remaining term of the contract and up to a maximum of one year's emoluments (severance pay cap). If the employment contract with a member of the Managing Board ends because it is amicably cancelled within a period of nine months from a change of control, this member is also entitled to a severance payment amounting to his/her remuneration claims. The same calculation basis applies as in the case of the severance pay cap. All members of the Managing Board subject to a post-termination covenant not to compete for a period of two years that provides for a compensation payment amounting to 50% of the average gross monthly salary per month. The calculation basis is the annual salary (fixed and variable components) paid out for the last full calendar year. The Managing Board member must set off any monies earned while he/she is otherwise employed during the noncompete period. The maximum cash value of the compensation sums payable in the case of a covenant not to compete after conclusion of Managing Board duties amounts to €0.339 million for each of the Managing Board members Roland Grebe, Pierre-Pascal Urbon and Marko Werner (2012: €0.470 million) and €0.339 million for Lydia Sommer (2012: €0.385 million). Jürgen Dolle waives his rights to compensation payments for the post-contractual covenant not to compete upon conclusion of his Managing Board duties.

In the 2013 fiscal year, the total emoluments payable to all members of the Managing Board amounted to €1.615 million plus a single payment of €0.344 million (2012: €2.076 million). Performance-based variable emoluments were not paid to the Managing Board in 2013 (2012: €0.534 million). The Managing Board members receive no separate remuneration for carrying out tasks at subsidiaries.

### REMUNERATION OF THE MANAGING BOARD

	Non-performance-based remuneration	Performance-based remuneration	Long-term bonus <sup>1</sup>	Additional benefits <sup>2</sup> /Others	Total					
in €'000	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Jürgen Dolle (until May 15, 2013)	121	350	0	48	0	67	344 <sup>3</sup>	21	344 <sup>3</sup>	486
Roland Grebe	350	350	0	48	0	89	22	22	372	509
Lydia Sommer (from November 1, 2012)	350	58	0	8	0	0	24	9	374	75
Pierre-Pascal Urbon	350	350	0	48	0	89	15	10	365	497
Marko Werner	350	350	0	48	0	89	24	22	374	509
<b>Total</b>	<b>1,521</b>	<b>1,458</b>	<b>0</b>	<b>200</b>	<b>0</b>	<b>344</b>	<b>438</b>	<b>84</b>	<b>344<sup>3</sup></b>	<b>2,076</b>

<sup>1</sup> Related to the long-term bonus for fiscal years 2011 to 2013.

<sup>2</sup> The contributions to the D&O insurance totaling €124,950 in 2013 (2012: €126,140) are not included since they concern the members of corporate bodies of all companies of the SMA Group and an allocation to individual insured persons does not take place.

<sup>3</sup> Jürgen Dolle retired from the Managing Board as of May 15, 2013. In this connection, Jürgen Dolle was promised a single payment of €344,000. With this payment, all of Jürgen Dolle's claims resulting from his previous Managing Board duties and relating to his retirement from the Managing Board are satisfied, with the exception of possible claims resulting from the long-term bonus program for 2011 and 2012.

No credits were granted nor were any advances paid to Managing Board members during the fiscal year. There are no pension commitments.

## Supervisory Board Emoluments

The existing regulations on Supervisory Board remuneration from the 2008 fiscal year listed in Article 11 of the Articles of Incorporation were redefined by resolution of the Annual General Meeting on May 23, 2013. Under the old system, at the end of the fiscal year, the Supervisory Board members received a fixed remuneration of €10,000, in addition to reimbursement of their cash expenses. They also received annual variable emoluments based on the Company's success amounting to €200 per €1 million of net earnings as recorded in the Company's Annual Financial Statements, however, not exceeding €20,000. The variable remuneration was payable after the Annual General Meeting that resolved on granting discharge to the Supervisory Board for the fiscal year.

Starting in the 2013 fiscal year, Supervisory Board members now receive a fixed remuneration of €25,000 a year. Variable remuneration is no longer paid. The remuneration payable to the Chairman amounts to twice the amount mentioned above and the remuneration payable to his/her deputy amounts to one and a half times the aforementioned amount.

Members of the Supervisory Board Audit Committee receive an annual remuneration of another €7,500. For members of the Supervisory Board Presidial Committee, the total annual remuneration is another €5,000. The chairpersons of these committees receive twice the aforementioned amounts. Members of other committees do not receive any special remuneration for their committee duties.

Supervisory Board members receive an additional €750 per meeting day for participating in a meeting. If they take part in several meetings in one day, they receive a maximum payment of twice the aforementioned amount. The remuneration is payable at the end of the fiscal year. Supervisory Board members who have only sat on the Supervisory Board or a committee for part of the fiscal year receive remuneration pro rata temporis.

No other remuneration or benefits for personally rendered services, in particular consultancy and mediation services, were granted to Supervisory Board members. Similarly, in the year under review, the Supervisory Board members were granted no credits or advances.

As of December 31, 2013, nine of the members of the Supervisory Board held SMA shares.

The total emoluments payable to the members of the Supervisory Board amounted to a total of €0.482 million in the 2013 fiscal year (previous year: €0.388 million).

Beyond the remuneration of the Supervisory Board, the employee representatives that are employees of the Company receive fee payments unrelated to their Supervisory Board duties. From such duties, the employee representatives received a total of €0.371 million (previous year: €0.370 million). SMA Solar Technology AG also concluded a consultancy contract with Dr. Hoffmann that is limited in terms of content. There is no remuneration for these duties. However, other expenses totaling approximately €9,600 were incurred.

**REMUNERATION OF THE SUPERVISORY BOARD**

	Non- performance-based remuneration	Performance-based remuneration	Remuneration for committee duties	Total				
in €'000	2013	2012	2013	2012	2013	2012	2013	2012
Dr.-Ing. h. c. Günther Cramer (Chairman)	50.8	18.3	-	23.8	11.5	12.0	62.3	54.1
Oliver Dietzel (from May 24, 2013)	15.9	-	-	-	-	-	15.9	-
Peter Drews	28.8	10.0	-	13.0	2.3	-	31.1	23.0
Dr. Erik Ehrentraut (Deputy Chairman)	42.0	15.0	-	19.5	27.5	27.0	69.5	61.5
Dr. Günther Häckl	29.5	10.0	-	13.0	7.3	6.0	36.8	29.0
Johannes Häde	29.5	10.0	-	13.0	12.8	10.5	42.3	33.5
Dr. Winfried Hoffmann	29.5	10.0	-	13.0	-	-	29.5	23.0
Prof. (em.) Dr.-Ing. Werner Kleinkauf	29.5	10.0	-	13.0	-	-	29.5	23.0
Ullrich Meßmer (until May 23, 2013)	12.1	10.0	-	13.0	-	-	12.1	23.0
Alexander Naujoks	29.5	9.6	-	12.5	12.8	10.5	42.3	32.6
Joachim Schlosser	29.5	10.0	-	13.0	2.3	-	31.8	23.0
Reiner Wetzlauer	29.5	10.0	-	13.0	12.8	10.5	42.3	33.5
Mirko Zeidler	29.5	10.0	-	13.0	7.3	6.0	36.8	29.0
<b>Total</b>	<b>385.6</b>	<b>132.9</b>	<b>-</b>	<b>172.8</b>	<b>96.6</b>	<b>82.5</b>	<b>482.2</b>	<b>388.2</b>

## Other

The Company has taken out professional indemnity insurance (D&O insurance) for the members of the corporate bodies of all companies of the SMA Group. It is effected or extended every year. The insurance covers the personal liability risk of the members resulting from a breach of duty when exercising their duties in the event that any claims for economic losses are asserted against them. The deductible in the policy for the fiscal year 2013 was 10% of the damage, however, no higher than one and a half times the fixed annual emoluments of the member of the corporate body.

€308.1

**MILLION NET CASH**

WITH EXCELLENT LIQUIDITY RESERVES OF MORE THAN €300 MILLION, SMA HAS SUFFICIENT FINANCIAL STRENGTH TO ABSORB SHORT-TERM MARKET CHANGES AND ACHIEVE ITS STRATEGIC GOALS UNDER ITS OWN POWER.

# Consolidated Management Report

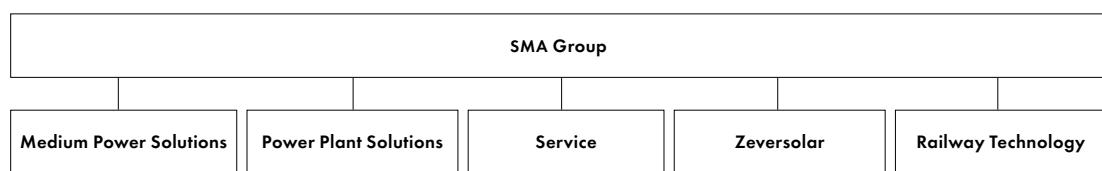
36	— <b>Basic Information about the Group</b>
36	— Business Activity and Organization
38	— Products and Services
40	— Important Sales Markets and Competitive Situation
42	— Organizational Structure
44	— Objectives and Corporate Strategy
46	— Research and Development
50	— Employees and Corporate Social Responsibility
58	— Enterprise Management
60	— <b>2013 Fiscal Year</b>
60	— General Economic Conditions and Economic Conditions in the Sector
62	— Impact of General Conditions on Business Development in 2013
63	— Comparison of the Actual with the Forecast Business Development
64	— Results of Operations
72	— Financial Position
75	— Net Assets
77	— SMA AG (Notes Based on the German Commercial Code – HGB)
81	— Overall Statement by the Managing Board on the Trend of Business 2013
84	— <b>Supplementary Report</b>
84	— Other Elements of the Consolidated Management Report
85	— <b>Risk and Opportunities Report</b>
85	— Risk and Opportunities Management
88	— Compliance Management System
88	— Internal Control System
92	— Individual Risks
104	— <b>Forecast Report</b>
104	— The General Economic Situation: Global Economic Recovery Continues
104	— Future General Economic Conditions in the Photovoltaic Sector
107	— Overall Statement by the Managing Board on the Expected Development of the SMA Group

# Basic Information about the Group

## Business Activity and Organization

SMA Solar Technology AG (SMA) and its subsidiaries (SMA Group) develop, produce and distribute PV inverters, transformers, choke coils monitoring and energy management systems for PV systems and power-electronic components for railway technology. SMA AG's structure includes the Medium Power Solutions, Power Plant Solutions and Service divisions. The Zeversolar and Railway Technology business divisions are also part of the SMA Group.

### ORGANIZATIONAL STRUCTURE



The **Medium Power Solutions** division distributes inverters, system solutions as well as products used for monitoring PV systems and energy management. It targets private and commercial customers with installations of up to **500 kilowatts (kW)**. Since the start of 2013, it also includes the operations of dtw and Off-Grid Solutions, which were previously combined under "Complementary Divisions." The **Power Plant Solutions** division supplies **central inverters** and system solutions to the global market for large-scale PV plants with outputs ranging from 500 kW to the three-digit megawatt range. With its **Service** division, SMA offers customers in Germany and abroad comprehensive support and after-sales services to guarantee the technical availability of SMA products during a service life of more than 20 years and create maximum yield stability. The service portfolio includes warranty extensions, service and maintenance contracts, operational management, remote system monitoring and spare parts business. The **Zeversolar** business division contains the majority holding, acquired in 2013, in the Chinese inverter manufacturer Jiangsu Zeversolar New Energy Co., Ltd. (Zeversolar) as well as its subsidiary companies. With products still launched under the Zeversolar name (central and string inverters), SMA primarily serves the Chinese photovoltaic market and the budget market (low-price segment) in foreign markets. The **Railway Technology** business division comprises the business activities of Railway Technology GmbH and its Brazilian subsidiary company. Both companies manufacture converters as individual devices and complete energy supply systems for railway coaches and multiple-unit trains for short- and long-distance railway traffic.

kW, Central Inverter  
See also Glossary  
page 172 et seqq.

Grid Management  
See also Glossary  
page 172 et seqq.

SMA is the world market leader in terms of production and sales of PV inverters – as measured by sales generated in 2013. As the central connection point, a PV inverter is the most important technological component of every PV system, converting the direct current generated in the photovoltaic cell into grid-conforming alternating current. At the same time, the PV inverter assumes important **grid management** functions and optimizes the energy yield of the PV system as a whole.

PV inverters from SMA stand out because of their especially high efficiency of up to 99% and are designed for a service life of over 20 years. This is a decisive factor for the economic efficiency of the whole system. SMA is the only manufacturer that can offer the technically appropriate type of inverter for every type of photovoltaic module and all power classes and for various regional requirements around the world – both for grid-connected applications and for stand-alone operation. SMA also offers integrated solutions for future energy supply structures and comprehensive services. The products of the Chinese Group subsidiary Zeversolar have fewer versions than SMA products, different functions and quality requirements, including a service that is adapted to the target audience.

SMA is well positioned to benefit from the growth potential of the global photovoltaic market in the long term and to promote efficient use of photovoltaics by developing innovative technologies. The growth markets in which SMA benefits from a strong increase in PV demand include the U.S. and China. With the acquisition of Zeversolar, SMA has secured direct access to the Chinese market. SMA also reported positive business development in the Japanese, Indian, Thai, Australian and South African markets in 2013. New sales markets included South America and the Middle East.

Self-consumption (i.e., the share of energy from the PV system that a household can use itself) will become more important in Europe and America in the future. SMA offers integrated systems for intelligent increased self-consumption and intermediate storage of solar electricity aimed specifically at this growth segment. The decentralized storage of surplus solar electricity makes a substantial contribution to grid stability, reducing the level of fluctuation (depending on the weather and the time of day) in the feed-in of solar energy into the utility grid. Hence, decentralized storage systems are an essential element in securing full supply with renewable energies.

SMA is entering into another market with its photovoltaic diesel hybrid solutions. In sunny regions, supplementing stationary diesel generators with photovoltaics contributes to significantly reducing a generator's fuel consumption and therefore its total operating costs.

## Key Locations

The SMA Group is represented by its own foreign companies in 21 countries on 6 continents in all important markets and is therefore benefiting from the international growth of the photovoltaic market. No other inverter manufacturer has a comparable international presence with a specialized, skilled workforce. Modern production sites with an overall annual capacity of up to 15 gigawatts (GW) make an important contribution to local added value in Niestetal and Kassel (Germany), Denver (U.S.), Mississauga near Toronto (Canada) and Yangzhong (China). SMA began a project aimed at expanding its inverter production equipment in South Africa in 2013. It is set to enter operation in the second half of 2014.

The competence center for coils (electromagnetic components) is based in Zabierzów, near Krakow (Poland). SMA maintains its own purchasing organizations in Germany, Poland, the U.S. and China. In March 2013, SMA acquired the majority shareholding in the Chinese inverter manufacturer Jiangsu Zeversolar New Energy Co., Ltd. (Zeversolar). At the end of September, SMA made itself a further share purchase of 16.7% and held 89.2% of the shares at that time. The shareholding increased further to 98.81% on October 25, 2013, due to a capital increase. With the acquisition of Zeversolar, SMA has secured a strong position in the world's largest photovoltaic market.

## Products and Services

**Off-grid system,**  
String Inverter,  
Central Inverter  
See also Glossary  
page 172 et seqq.

SMA offers a wide range of solar inverter products and system technology for grid-connected PV systems and **off-grid systems**. The product range covers **string inverters** with an output of between 240 watts and 24 kilowatts (kW) and **central inverters** with an output of 500 kW up to 1.8 megawatts (MW). This means that SMA is able to offer technically optimized inverter solutions for all size classes and system types. SMA's innovative key technologies also provide intelligent solutions that are perfectly tailored to future energy supply requirements.

The **Medium Power Solutions (MPS)** division is responsible for the Sunny Boy, Sunny Mini Central, Sunny Tripower and Sunny Island product families. The product families comprise a total of 65 inverter types. SMA offers single-phase and three-phase inverters with outputs ranging from 240 watts to 24 kilowatts (kW). With decentralized system concepts, SMA can serve the output levels of residential and commercial installations of up to 500 kW, as required. In the important markets of Japan and the U.S., the division expanded the product range in 2013, thus setting "German Engineering Standards" in these countries. In Japan, SMA is the first international inverter manufacturer to fulfill the demanding requirements for the JET<sup>1</sup> certification and is now able to offer a JET-certified three-phase inverter in this market. In the U.S., SMA successfully launched the Sunny Tripower TL-US (in a number of different versions), which is specifically tailored to U.S. requirements for medium to large PV systems, and the Sunny Boy 240 US. The Sunny Tripower TL-US comes with integrated **grid management** functions and state-of-the-art communication and monitoring technology as standard. The integrated additional function "Secure Power Supply" in the Sunny Boy TL-US enables it to draw electricity from the PV system even in the event of grid failure – without any additional backup functionality or a storage solution.

**Grid Management**  
See also Glossary  
page 172 et seqq.

The MPS division also develops and distributes a total of 14 communication products used for intelligent energy management and to monitor photovoltaic systems. These technologies enable end users to cover their power consumption largely with their own PV systems and to reduce their dependence on conventional energy carriers and rising energy prices by optimizing self-consumption. This is particularly interesting in markets in which self-generated solar electricity is already competing, with regard to price, both with conventionally produced electricity for household customers and with electricity tariffs in the area of commercial use. In addition to storage solutions, various heat pumps and household appliances can be connected to the intelligent energy management system. To enable seamless integration of various components, SMA works closely with renowned manufacturers such as Miele, Stiebel Eltron and Vaillant. SMA has also entered into research partnerships with VW, BMW, Belectric Drive, Mennekes Elektrotechnik, Phoenix Contact and Schleiter in order to take account of the increasingly important issue of electric mobility in intelligent energy management solutions.

The Sunny Portal – SMA's online platform that has been around for almost ten years – allows PV system operators and installers to maintain access to the most important operating and yield data for their PV systems, including analysis, at all times. About 140,000 PV systems in over 100 countries – from small grid-connected residential PV systems to multimegawatt PV plants – send their operating data to SMA. Sunny Portal analyzes, visualizes and stores this data, and makes it available to the relevant PV system operators. The systems for energy management and increased self-consumption are also configured and managed centrally via the Sunny Portal.

Under the right political conditions, SMA sees enormous potential in decentralized self-consumption of solar electricity in the medium- and long-term. With the SMA Smart Home, the division offers a system solution for energy management at a household level that is as yet unrivaled in the photovoltaic market. The innovative system consists

<sup>1</sup> Japan Electrical Safety & Environmental Technology Laboratories

of the Sunny Boy Smart Energy, the first wall-mountable PV inverter with an integrated lithium-ion battery that temporarily stores solar electricity, and the Sunny Home Manager, which monitors the consumption patterns of end users and intelligently manages household appliances or even heat pumps in the house. As a result, the SMA Smart Home enables consumers to use their own electricity and heat supply in a cost-efficient way at virtually any time of day. Especially thanks to the integrated storage system, consumers can cover their power consumption needs to a large extent using their own PV system, thus becoming increasingly independent from rising electricity prices. In the evening when the sun is no longer shining, a family of four can still draw about three more hours worth of solar electricity from the Sunny Boy Smart Energy system. Even before it was launched, the SMA Sunny Boy Smart Energy system was named the best product in the "Photovoltaics" category at the Intersolar Europe trade fair and received the Intersolar AWARD in June 2013.

Since the beginning of 2013, the division also comprises the divested operations of dtw Sp.z o.o. (dtw) and Off-Grid Solutions, which were formerly part of "Complementary Divisions." dtw concentrates on the manufacture of technologically innovative core components – such as chokes, coils and transformers – for inverter production. In the Off-Grid Solutions business area, SMA develops solutions for integrating photovoltaics and modern storage technologies into decentralized electricity generation systems for all power classes as well as into the utility grid. With the Flexible Storage Solution, SMA offers system solutions within the Sunny Island product family to ensure the completely independent energy supply of remote houses and villages. The technology is also used to expand larger storage systems for grid-connected operation in the SMA Smart Home. Operators can also add the Flexible Storage Solution to their existing systems in the future.

The **Power Plant Solutions** (PPS) division primarily targets the rapidly growing market for large-scale PV power plants with outputs ranging from the 500 kW to the three-digit megawatt range with central inverters from the Sunny Central product family, corresponding system technology and turnkey medium-voltage solutions for direct feed-in in global [medium-voltage](#) grids.

Medium-Voltage  
 See also Glossary  
 page 172 et seqq.

The Sunny Central CP Family product range includes a variety of different versions, providing an optimal technical solution and maximum investment security for any large-scale project and country-specific conditions. In addition to high efficiencies of up to 99%, the inverters are known for their extensive [grid management](#) functions. SMA central inverters are suited to outdoor use in regions with challenging climatic conditions thanks to their robust enclosure and the intelligent OptiCool cooling system. As the market leader in this segment based on sales, SMA offers comprehensive project support in addition to high-performance central inverters and turnkey medium-voltage solutions.

Grid Management  
 See also Glossary  
 page 172 et seqq.

With the SMA Fuel Save Solution, SMA also enables customers to integrate photovoltaics into their existing [diesel-powered grids](#). These photovoltaic diesel hybrid systems produce electricity much more cheaply and effectively than simple combustion generators. This helps industrial users in sunny regions with no stable electricity supply to become more independent from expensive fossil fuels and significantly reduce their operating costs.

Diesel-Powered Grid  
 See also Glossary  
 page 172 et seqq.

The **Service** division supports SMA customers in Germany and abroad with comprehensive after-sales services to guarantee the constant technical availability of SMA products during a service life of more than 20 years. In addition to project support and commissioning, the services include operational management and remote system monitoring, warranty services and service and maintenance contracts. Through a global network of 90 service sites, SMA Service can guarantee a rapid reaction time for the SMA inverters installed all over the world with a total capacity of more than 30 GW. No other inverter manufacturer has a comparable installed base. Our service structure enables rapid repairs during servicing, thus securing our customers' yields.

The Service division presents itself as a universal service provider for the 50.2 Hz-modification of PV systems in Germany. SMA supports electric utility companies with data collection and deals with the entire modification process – from first contact with the system operator to quality assurance and reporting. Major electric utility companies such as E.ON Mitte decided in favor of SMA in 2013.

SMA together with strong partners will increasingly offer complete system service in the North American market, in addition to the primary services for inverters and medium-voltage components already provided. By taking on all services relating to PV power plants, SMA significantly optimizes the performance of the total systems. The first project of this kind is the ten-year system management contract concluded in November 2013 for what is currently the largest PV power plant in Canada once it is complete in 2014.

The **Zeversolar** business division comprises Jiangsu Zeversolar New Energy Co., Ltd. (Zeversolar) – which was acquired in March 2013 – and its subsidiary companies and serves the Chinese photovoltaic market as well as the budget market (low-price segment) in foreign markets with its central and **String Inverters**. Zeversolar will focus on basic products with the relevant functions and services. To optimize access to the market, SMA has developed new distribution channels for Zeversolar and established partnerships with Chinese photovoltaic companies and financial institutions.

String Inverters  
See also Glossary  
page 172 et seqq.

The **Railway Technology** business division combines the operations of SMA Railway Technology GmbH and its Brazilian subsidiary company. Both companies manufacture converters as individual devices and complete energy supply systems for railway coaches and multiple-unit trains for short- and long-distance railway traffic.

## Important Sales Markets and Competitive Situation

Global demand for photovoltaic systems reached a new record level in 2013. According to SMA estimates, the output of globally installed PV systems rose to about 40 GW (2012: about 32 GW). The negative trend in Europe continued, whereas strong growth stimuli emanated from North America, Japan and China in particular.

In Germany, demand fell again in 2013. Newly installed PV power decreased to around 3.3 GW (2012: about 7.6 GW). Germany is thus no longer the world's largest photovoltaic market, but is now ranked fourth after China, the U.S. and Japan. The considerable decline in newly installed power can be attributed to the German Federal Government's decision in 2012 to cut solar subsidies, which already began in the second half of 2012 to negatively impact demand in Germany to a dramatic extent. At the end of June 2013, the former German Federal Government agreed to lessen the cut to solar subsidies. Nevertheless, the cuts are still proving serious and are having a considerable impact on the implementation of the energy transition in Germany.

The grand coalition announced its energy policy objectives in the coalition agreement at the end of 2013 after the Bundestag elections. By 2025, it hopes to generate between 40% and 45% of German electricity from renewable energies. By 2035, the share of renewable energies is to be increased to between 55% and 60%. At the same time, the German Federal Government is insisting on withdrawing compensation under the Renewable Energy Sources Act (EEG) for new PV systems once they reach 52 GW of total installed power. On January 20, 2014, the German Federal Government also adopted a draft by Federal Minister of Economics and Energy Sigmar Gabriel on reforming the EEG. The plans envisage charging the self-generation of electricity from PV systems at 70% of the EEG apportionment starting from an output of 10 kW.

## Growth Potentials Abroad

In the last calendar year, international photovoltaic markets continued to develop in a mixed fashion due to various changes in political conditions. Not only did subsidy tariffs decrease in some European markets, but the retroactive taxation of systems in countries like the Czech Republic, Bulgaria and Spain also unsettled investors. Overall, the share of Germany's neighboring countries in the global photovoltaic market decreased significantly. In the opinion of the Managing Board, Europe (not including Germany) accounted only for about 16% of global demand in 2013 (2012: 24%).

In the reporting period, the solar markets in the U.S. and China accounted for about the half of global demand and made a significant contribution to growth. Further growth stimuli emanated in particular from the Japanese, Indian and South African markets and for the first time from South America and the Middle East as well. These non-European markets are also likely to contribute significantly to growth in photovoltaics in the future. China is exhibiting particularly high growth potential. By 2015, the government plans to achieve cumulative installed power of over 40 GW. On an annual basis, the government produces exact guidelines listing the provinces in which PV power is to be installed. In 2014, about 60% of new installations are planned to be grid-connected PV systems.

Overall, a regional shift in demand can still be observed. In most foreign markets, medium-sized PV systems and large-scale PV power plants are being implemented to a greater degree. As a result, the international market for large-scale solar projects with a capacity up to the multimegawatt range, which is the area operated by the Power Plant Solutions division, gained further momentum in 2013. The foreign markets of the U.S., India, South Africa and Japan contributed significantly to this.

## SMA Defends Market Leadership and Successfully Positions Itself in Growth Markets

With its comprehensive range of products, high product quality and flexibility, presence in 21 countries and unique service structure, SMA is in an excellent overall position in the global photovoltaic market. With its broad international positioning, SMA has reduced its dependence on individual photovoltaic markets and can benefit from global growth in demand with highly efficient PV inverters, integrated system solutions for PV systems of all power classes, battery storage solutions for energy management systems as well as complete solutions for photovoltaic diesel hybrid applications.

In 2013, SMA sold an inverter output of 5.4 GW (2012: 7.2 GW) and is world market leader based on sales. We estimate that SMA accounted for nearly 13% of global demand in 2013 (2012: approximately 23%). Excluding China, SMA had a market share of approximately 20% (2012: approximately 26%). The main reason for the considerable decline in market share compared with the previous year is the aforementioned regional shift in demand over the past twelve months from Europe to Asia. Whereas SMA has been very well positioned in North America for some years now, market development in Japan and China is still in its early stages. SMA will continue to increase its market share by pursuing its two-brand strategy (SMA and Zeversolar as mutually independent brands). SMA is counteracting the increasing price pressure in the market with a number of measures aimed at reducing costs. These include optimizing processes and productivity, utilizing the international purchasing organizations to a greater extent and personnel changes in Germany, which took place during the reporting period. SMA continues to invest more than €100 million a year in research and development with a view to expanding its global technology leadership.

SMA is represented with its own service companies in all important photovoltaic markets. With an installed capacity of more than 30 GW worldwide, SMA increasingly leverages economies of scale that are created as a result to make its service business even more profitable over the medium term. With a broad service offering that includes not only project support and commissioning but also covers operational management, remote system monitoring and warranty services, SMA aims to acquire increasing numbers of service customers and benefit from this over the long term. In the future, service contracts are expected to be an important sales and earnings driver for SMA.

In addition to the targeted expansion of its service business, SMA is also continuously developing new business areas. In SMA's view, the combined use of renewable energies and fossil fuels, for example, is gaining considerable significance. SMA enjoys over 20 years of experience in this area and has a number of innovative products in the high-potential market segment of photovoltaic diesel hybrid systems. Furthermore, with its intelligent energy management solutions, SMA has developed solutions in advance that are tailored to the requirements of future energy supply systems and will enable the gradual conversion to a completely decentralized electricity supply. Thanks to this technology, SMA is able to secure an excellent position in a growing future market.

## Organizational Structure

### Legal Structure of the Group

As the parent company of the SMA Group, SMA Solar Technology AG (SMA) with its headquarters in Niestetal near Kassel, Germany, provides all of the functions required for the operative business. With the exception of Jiangsu Zeversolar New Energy Co., Ltd., the parent company holds, either directly or indirectly, 100% of the shares of all the operating companies that belong to the SMA Group. As of December 31, 2013, SMA has a 98.81% majority shareholding in Jiangsu Zeversolar New Energy Co., Ltd.

See also Scope of  
Consolidation  
page 121 et seqq.

The Consolidated Financial Statements include the parent company and, directly or indirectly, all 36 Group companies (2012: 29), including 7 domestic companies and 29 companies based abroad.

SMA founded two new companies in 2013 and included them in the scope of consolidation for the first time. These include the production company SMA Sub-Sahara Production Pty. Ltd. (South Africa) and the sales and service company SMA New Energy Technology (Shanghai) Co. Ltd. (China).

In addition, Jiangsu Zeversolar New Energy Co., Ltd. (China) and its subsidiary companies Australia Zeversolar New Energy Pty. Ltd. (Australia), Jiangsu ZOF New Energy Co. Ltd. (China), Shanghai ZOF New Energy Co., Ltd. (China) and Zeversolar GmbH (Germany) were also included in the scope of consolidation for the first time.

## Current Organizational Structure

SMA's structure includes the Medium Power Solutions, Power Plant Solutions and Service divisions. The Zeversolar and Railway Technology business divisions are also part of the SMA Group. The divisions were endowed with the functions required for operating business. They are also responsible for international business. SMA has specifically bundled Finance, Human Resources, Legal and Compliance, Internal Auditing, Corporate Communication, Information Technology, Technology Predevelopment and Facility Management in Corporate Functions. The divisions report directly to the Managing Board. To utilize synergies within the organization more effectively, the operations of dtw and Off-Grid Solutions were integrated into the Medium Power Solutions division on January 1, 2013. For reporting purposes, the operations of Zeversolar and Railway Technology are reported under the same segment names. The financial figures are given with those of the previous year, adjusted where necessary, to ensure transparent reporting.

## Management and Control

As required by the German Stock Corporation Act (AktG), the executive bodies consist of the Annual General Meeting, the Managing Board and the Supervisory Board. The Managing Board manages the Company; the Supervisory Board appoints, supervises and advises the Managing Board. The Annual General Meeting elects the shareholder representatives to the Supervisory Board or refuses to grant discharge to the Managing Board and Supervisory Board.

## Managing Board Downsized

Since May 15, 2013, the Managing Board of SMA Solar Technology AG has comprised the following members: Roland Grebe (Chief Technology Officer), Lydia Sommer (Chief Financial and Human Resources Officer), Pierre-Pascal Urbon (Chief Executive Officer) and Marko Werner (Chief Sales Officer). Jürgen Dolle stepped down from his duties at SMA for health reasons with effect from May 15, 2013, and resigned from the Managing Board team.

## Composition of the Supervisory Board

The SMA Supervisory Board, which represents shareholders and employees equally, consists of Dr.-Ing. h. c. Günther Cramer (Chairman), Peter Drews, Dr. Erik Ehrentraut (Deputy Chairman), Dr. Winfried Hoffmann, Prof. (em.) Dr.-Ing. Werner Kleinkauf and Reiner Wetzlaufer. The employees are represented by Dr. Günther Häckl, Oliver Dietzel (as of May 24, 2013), Johannes Häde, Ullrich Meßmer (until May 23, 2013), Alexander Naujoks, Joachim Schlosser and Mirko Zeidler.

# Objectives and Corporate Strategy

## Objectives

SMA is the world market leader for PV inverters and energy management systems. One of our most important objectives is to continuously improve our position in growth markets. With an international share of over 70%, we already generate a substantial part of our sales abroad. To increase this ratio, we continue to rigorously pursue the internationalization of the SMA Group.

With the constant development of new products and solutions, we also strive to achieve technology leadership. To accomplish this goal, we are persistently expanding our development activities. We will also ramp up our collaboration with strong collaborative partners in order to round off our service offering.

Optimal processes, which we constantly work to improve, are a decisive factor in ensuring the long-term profitability and growth of our company. With our operating processes, we strive to acquire a leading position by international comparison. By optimizing our processes, we will not only reduce the level of capital tied up, but also increase customer satisfaction and profitability over the medium term.

We know that we can only achieve our objectives if our employees are committed and satisfied. This is why we attach particular importance to our unique corporate culture, which revolves around the special values of fairness, respect and transparency. We also actively promote employee satisfaction through performance-based remuneration, internationally focused talent and skills management and comprehensive operational health management. By participating in the Great Place to Work competition, we will also be able to measure employee satisfaction in the future. Our aim is to rank among the top employers.

## Corporate Strategy

Our vision that millions of people will generate their own clean energy in a decentralized way and share it with others through intelligent utility grids is progressively becoming a global reality. SMA solutions play an instrumental role in this. Through continued cost reductions, further enhancements and innovations of our products and system solutions, we will continuously make the installation, operation and maintenance of PV systems simpler, more reliable and secure and, above all, more efficient. All over the world, our tailored and innovative energy management solutions advance the commercial viability of photovoltaics and thus help make the global energy transition a reality.

As a market and technology leader, we have focused our strategy on exploiting international growth opportunities at an early stage in a market environment characterized by strong competitive and price pressure, responding flexibly to demand fluctuations and reaping the benefits over the long term from the transition to a new supply system based on renewable energies. Key elements of the SMA Group strategy include opening up new business areas, developing new technologies and system solutions to increase sales, optimizing processes and costs to increase income and pursuing the two-brand strategy to increase our market share.

## INCREASE SALES

To increase sales, we will open up new business areas. We see significant sales potential, for example, in the marketing of battery storage solutions for energy management systems in all power classes. The integration of modern storage technologies into the system is an essential requirement to make full supply through renewable energies a reality and keep grid expansion costs as low as possible. SMA has developed the Sunny Boy Smart Energy as the core component of the SMA Smart Home especially for the private residential PV system segment with an output of up to **5 kWp**. The SMA Smart Home is the first wall-mountable PV inverter with an integrated battery. With this innovative product, consumers can substantially increase the proportion of electricity from a PV system that they can use themselves in their household. Furthermore, our solutions will not simply be limited to the small power range. Instead, we will also develop system and storage solutions for medium and large power ranges that make solar electricity useable at all times and help stabilize the utility grids.

Wp  
See also Glossary  
page 172 et seqq.

In sunny regions, we will take advantage of the opportunities that present themselves in the field of photovoltaic diesel hybrid applications. With our complete solutions, we offer industrial consumers in areas with inadequate utility grids or without a connection to the utility grid the opportunity to combine their diesel electricity supply with photovoltaics and storage systems. This can help them significantly reduce their consumption of expensive diesel fuel. We will continue to ramp up our sales activities in this area and develop new sales specialists in the relevant markets.

So that we can serve the growing market of large-scale PV plants as effectively as possible, we are continually expanding our technical know-how in medium-voltage technology and developing turnkey solutions to meet international demand. As a turnkey solution with medium-voltage switchgear and a transformer, the Transformer Compact Stations enable highly flexible project planning and an even faster implementation of large-scale solar projects.

The service business also presents SMA with attractive growth opportunities with our globally installed power of more than 30 GW. In order to leverage the sales potential in the service business, we will further develop our service products, including remote system monitoring, guarantee of availability, modernizations and the assumption of operational management, to bring them into line with customer requirements and ramp up our previous marketing activities even higher. We will also place even greater emphasis on the service capability of our inverters during product development with a view to minimizing maintenance costs and system outages.

## INCREASE OF EARNINGS

In 2014, the SMA Managing Board plans to return the Company to profitability and to at least achieve a break-even result. To accomplish this goal, we are continuing to optimize our processes in Sales, Production, Purchasing, Logistics and Quality Management in order to increase efficiency over the long term. One concrete measure to increase the margin is the expansion of strategic purchasing. We use our purchasing offices in Germany, China, Poland and the U.S. to increase competition between suppliers and systematically reduce material costs. In addition, SMA sets up market-specific production centers and develops a standardized global logistics concept to optimize processes. We also take advantage of Zeversolar's resources to train new suppliers and accelerate our measures.

SMA is known for its unique corporate culture. We would like to use this strength through even more effective development of management staff. Concrete measures include developing a global system for talent and skills management as well as a performance-based remuneration system. Furthermore, we will conduct the "Great Place to Work" employee survey, which we firmly adhere to even in difficult times, at our international sites as well. It is important for us to learn from the results and derive potential for improvement.

### **INCREASING MARKET SHARE**

With the aim of increasing our market share as a global market leader even further, we have a clearly-defined two-brand strategy.

While SMA clearly positions itself worldwide as a technology leader and successfully expands its existing product range in key markets, such as the U.S., the Chinese inverter manufacturer Zeversolar, which SMA acquired in 2013, operates in the Chinese market and in what is referred to as the budget market (low-price segment) abroad.

The development of innovative technologies for decentralized energy supply has been an important cornerstone of our corporate strategy since SMA was founded. In the last three years alone, the Company has invested about €300 million in research and development. Our primary objective is to use unique technological selling propositions to further improve SMA's strong market position. To consolidate our innovation leadership, we focus on the development of system solutions that are precisely tailored to the specific requirements of the markets across all power ranges. To significantly reduce the production costs of our products, we also develop new modular product platforms. This focuses on using new technologies and a higher proportion of carry-over parts as well as integrating additional functions.

In tandem with this, Zeversolar acts as an independent brand with specific unique selling propositions. Zeversolar focuses on products with functions that are tailored to specific customer requirements. SMA expert teams have worked to improve the product and process quality. With the restructuring of Zeversolar nearing completion, SMA has laid the foundations early on to benefit from the considerable growth opportunities, particularly in the Chinese market.

## Research and Development

The global photovoltaic market is undergoing major structural changes. Whereas the European markets are either in decline or stagnating, the demand for photovoltaics in the Asian and American markets rose sharply in 2013. As the global market leader, we confront these changes and new challenges by developing innovative technologies for an energy supply that is viable long-term in emerging PV markets. We also work closely with local partners to fulfill the various connection conditions and ensure that our products are optimally suited to the relevant conditions. In the further development of our technologies, the integration of storage systems within complete PV systems, in particular, is gaining ever greater significance – across all power classes. This is one of SMA's major focal points for development. We benefit here not only from our many years of experience with energy storage systems but also from our competent development team and a global network that allows us to work together in a forward-looking way with other companies, project partners and institutions at an international level.

### **HIGH R&D EXPENDITURE**

As a technology leader in PV system technology, we attach a great deal of importance to forward-looking research and development work. This is why we strive to keep our product portfolio innovative and competitive over the long term. Approximately 1,000 employees are employed in this area on average, which equates to 18.5% of the workforce. In 2013, we invested about €103 million overall in research and development (R&D), including €22.9 million in capitalized development projects. The fact that this figure is down on 2012 can be attributed to various personnel cost reductions. At 8.5%, we sustain a high level of R&D expenditure in relation to

To Our Shareholders

Corporate Governance

**Consolidated Management Report** — Basic Information about the Group

Consolidated Financial Statements

Other Information

sales, despite the prolonged consolidation phase in the PV industry, in order to further consolidate our technology leadership and set new standards. After all, the global transformation in the energy sector to decentralized supply structures is only possible with innovative system technology.

#### // RESEARCH AND DEVELOPMENT EXPENSES OF THE SMA GROUP

in € million	2013	2012	2011	2010	2009
Research and development expenses	102.5	108.1	99.9	82.9	56.3
of which capitalized development projects	22.9	20.2	16.1	10.9	7.2
Depreciation of capitalized development projects (scheduled)	14.9	7.5	5.6	1.1	-
Research and development ratio in % in relation to sales	11.0	7.4	6.0	4.3	6.0

#### RENNED R&D PARTNER

SMA is a distinguished partner in different expert committees, associations and research projects. At a regional level, we work closely in Germany with the Competence Network Decentralized Energy Technologies, the Fraunhofer Institute for Wind Energy and Energy System Technology, the Centre of Competence for Distributed Electric Power Technology and the Institute for Decentralized Energy Technologies. SMA also has a broad international network of research and development partnerships. SMA is currently involved in 19 different collaborative research projects on new photovoltaic technologies. This ranges from testing new components and optimizing PV system technology to grid integration and electric mobility.

#### FURTHER DEVELOPMENT OF THE SMA SMART HOME

In the reporting year, a focal point of our research and development work was the further development of the intelligent energy management system in the SMA Smart Home and of photovoltaic diesel hybrid systems. The primary objective of an intelligent energy management system should be to use valuable resources as sensibly, effectively and economically as possible. An optimum solution can only be created with products and solutions that plan ahead, respond flexibly and are designed for a complete system. The SMA Smart Home increases self-consumption of solar electricity and makes PV system operators more independent from rising electricity prices. The system concept, which is the only one of its kind on the market to date, manages household devices on the basis of location- and system-specific PV generation forecasts, thus making the most effective use of the solar electricity generated. In this way, the system also learns the consumption pattern of the respective household. SMA is working closely with renowned manufacturers in other areas to ensure a seamless integration of different components into the intelligent energy management system. In 2013, SMA formed collaborations with Miele for the integration of household devices and with Stiebel Eltron and Vaillant for the integration of heat pumps. The goal of these collaborations is to develop efficient solutions that are suitable for everyday use and offer users the best possible convenience. SMA is also carrying out considerable research and development work for the planned integration of electric vehicles in the SMA Smart Home. For the research project INEES<sup>1</sup>, SMA developed a DC quick-charging station that allows solar electricity from electric vehicles to be fed back into the utility grid. Electric vehicles could therefore possibly act as electricity storage units in the SMA Smart Home. If there is a lot of solar electricity and a low demand, the electric vehicle stores the surplus energy. Likewise, the solar electricity flows back to operate electrical appliances if the PV system cannot cover the high electricity demand. In an additional step, the integration of electric vehicles into the electricity market could help to offset fluctuations in the utility grid. SMA completed the trial phase in March 2013. We expect the initial results from the field test in 2014.

<sup>1</sup> Intelligent grid connection of electric vehicles to perform grid management services

### **NEW DEVICE CONCEPT FOR SUNNY BOY SMART ENERGY**

At Intersolar Europe 2013 in June, SMA presented the new device concept for the Sunny Boy Smart Energy. The new wall-mountable PV inverter contains a battery that temporarily stores solar electricity. This means that the Sunny Boy Smart Energy is now perfectly suited for use in the SMA Smart Home. With a storage capacity of about two kilowatt hours, the device achieves an economically viable ratio between storage supply level and battery costs for household systems. With this, PV system operators can increase their self-consumption share by up to 50% all year round.

### **SAVE FUEL WITH PHOTOVOLTAIC DIESEL HYBRID SYSTEMS**

In terms of investment costs, diesel generators are still the cheapest method of supplying electricity to the world's sunny off-grid regions or supplementing unstable grids. With intelligent system technology from SMA, photovoltaics can be integrated simply into such [diesel-powered grids](#). The integrated solution, comprising an inverter, Fuel Save Controller and an optional storage system, not only saves on expensive fuel, but also lowers the operating and maintenance costs of the energy supply system over the long term.

Diesel-Powered Grid  
See also Glossary  
page 172 et seqq.

### **FUEL SAVE CONTROLLER USED WORLDWIDE**

The Fuel Save Controller manages the feed-in of photovoltaics to the [diesel-powered grid](#) in line with demand. It takes into account both the load profile and the PV array power. In 2013, SMA achieved an important accomplishment with this innovative technological solution, with the second photovoltaic diesel hybrid system going into operation in India in June. It provides a cotton mill in Palladam, where power outages occur almost daily and last for several hours, with a reliable supply of energy. This enabled the proprietors to significantly reduce production costs and they are now able to save about 50,000 liters of diesel fuel a year. Other projects in India are either already in operation or about to be commissioned.

Diesel-Powered Grid  
See also Glossary  
page 172 et seqq.

The first photovoltaic diesel hybrid system in the megawatt range comprising an energy storage system went into operation in the fall of 2013 on the Tongan island of Vava'u in the South Pacific. The PV system, which has an output of 512 kilowatts (kW), supports five diesel generators. During the midday hours, the hybrid system covers up to 70% of the total electricity demand on Vava'u and fulfills around 13% of the island's total energy demand for a year.

### **LARGE-SCALE PV POWER PLANTS: COMPACT SOLUTIONS FOR INTERNATIONAL MARKETS**

In the large-scale PV power plant segment, SMA focuses on turnkey medium-voltage solutions that can be deployed internationally and allow simple and direct connection to local medium-voltage grids. The main aim here is to meet the connection conditions of the relevant countries. In 2013, new certifications included system solutions for South Africa and Japan. The solutions for large-scale PV power plants comprise SMA inverters, transformers, communication products and a PV farm control.

### **INTRODUCTION OF NEW SYSTEM SOLUTIONS WITH CENTRAL INVERTERS**

With the introduction of the Medium Voltage Power Station and the Compact MV Power Platform for the North-American market, SMA offers investors and system planners all the advantages of turnkey system solutions for the large-scale PV power plant segment. Our main priorities during development were to reduce the system costs, achieve a high profit ratio and ensure a compact design. We managed to significantly reduce transportation costs as well as maintenance and commissioning outlay.

To Our Shareholders

Corporate Governance

**Consolidated Management Report** — Basic Information about the Group

Consolidated Financial Statements

Other Information

Sunny Central central Inverters have extensive **grid management** functions – an important precondition for the future viability of large-scale PV projects around the globe. Europe's largest thin film PV power plant in Templin, Germany, is equipped with 114 Sunny Central 900CP XT inverters, which are also used in the Compact MV Power Platform. The inverters make available leading or lagging **reactive power** at all times during regular feed-in operation. With the innovative "**Q at Night**", feature this is also possible at night and during quiet feed-in operation. Hence, in conjunction with intelligent PV farm control systems, SMA central inverters play an instrumental role in improving the stability of utility grids, thus allowing the expansion of renewable energies.

Grid Management,  
Reactive Power,  
**Q at Night**  
See also Glossary  
page 172 et seqq.

#### **JET CERTIFICATION FOR SUNNY TRIPower AND NEW U.S. PRODUCTS**

The ability to adapt our products to the variations between the different PV markets around the world is extremely important to us. As the technology leader, SMA finds itself in a very good position here. In October 2013, we were the first non-Japanese manufacturer to be awarded JET certification for a three-phase inverter for the Sunny Tripower 10000 TLEE-JP three-phase inverter. Already since 2012, SMA has been successfully offering JET-certified Sunny Boy inverters for residential PV systems as well as Sunny Central inverters tailored to the local requirements of the Japanese market. With the certification of the Sunny Tripower, we can now cover all of the market segments in this important market.

Another key success that is advancing our market entry in Japan is the 70 MW project in the city of Kagoshima led by the Kagoshima Mega Solar Power Corporation. This PV power plant, which is currently the largest in Japan, uses SMA inverters exclusively.

In the U.S., we launched the Sunny Tripower TL-US (in several different versions), which is specifically tailored to the U.S. requirements for medium to large PV systems. With the Sunny Boy 240 US, the module inverter for a flexible PV system, we are expanding our U.S. product portfolio considerably to provide the perfect solution for all applications.

#### **NEW RESEARCH PROJECTS FOR LARGE-SCALE STORAGE SYSTEMS AND HIGH CURRENT**

For a research facility in Tucson, Arizona, we developed a battery inverter with a capacity of 500 kilowatts (kW). Equipped with a lithium-ion battery, this battery inverter offsets fluctuations in solar electricity generation. Since the components are under observation in a real-life operating system on the University of Arizona premises, SMA benefits directly from the research results and can incorporate them in the development of new inverters and storage technologies. The research project (Energy Storage Management Research and Testing) will run for a five year period to start with and its aim is to integrate more renewable energies overall into the utility grid.

Another research project in the large-scale PV power plant segment involves improving the output and reducing the costs of PV inverters in the megawatt range. To this end, the partners in the joint research project HHK (high-frequency, high-current components for use in medical technology and PV inverters in the megawatt range) are working to harness the benefits of fast-switching semiconductor components for high-current applications in the high-power range as well. Besides SMA, CONTAG AG, the Fraunhofer IISB, the Fraunhofer IZM, Heraeus, SEMIKRON Elektronik GmbH & Co. KG, Siemens AG, TDK EPCOS AG and the University of Kassel are also participating in this three-year research project.

#### **AWARDS FOR INNOVATIVE DEVELOPMENT ACHIEVEMENTS**

Receiving the Smart Energy Award 2013 was another pleasing confirmation of our innovative development achievements in the reporting year. In May, we won what is advertised as the "German State of Hesse's Intelligent Energy" award in the "Energy Information Communication Technology" category for the SMA Smart Home. Hesse's acting Minister for the Environment at the time, Lucia Putrich, presented the award at the Second International Smart Energy Congress.

SMA also won the Intersolar AWARD in 2013 at Intersolar Europe in Munich. The jury chose the new Sunny Boy Smart Energy as the best product in the "Photovoltaics" category. The fact that SMA has now won the award three times underscores our innovative prowess and confirms to us that we have developed an economically viable storage system for the decentralized energy supply of the future with the Sunny Boy Smart Energy.

## Employees and Corporate Social Responsibility

### Employees

#### **FIRST-RATE CORPORATE CULTURE**

It is very important to us to have a corporate culture that promotes the involvement and integration of employees in the shaping of working conditions at all levels. Only by constantly working to develop this corporate culture can we secure the success of SMA as a company over the long term.

As part of the "Great Place to Work" employer competition, we use the instrument of an employee survey to regularly capture the current opinions of our corporate culture, which has received numerous awards. If we see potential areas for improvement, we implement these improvements with accompanying HR measures. After winning first place twice in 2011 and 2012, SMA was ranked in fourth place last year in the face of initial personnel reduction measures and difficult market conditions.

This year, although SMA currently occupies fifth place out of 16 companies in the category of companies with over 5,000 employees, in the rankings of all 600 companies taking part in the competition, we performed much more poorly than in previous years, ranking 112th. In the opinion of SMA's Managing Board, this can largely be explained by the ongoing personnel reduction measures at the Company at the time of the survey. All SMA executives scrutinize the results of the survey intensively and analyze where SMA's strengths and potential for improvement lie. Thanks to our corporate culture, which is as unique as ever, it is our aim to find our way back into the rankings as one of the top 100 employers in Germany.

#### **VOLUNTARY PERSONNEL ADJUSTMENT PROGRAM**

2013 was an extremely difficult fiscal year for the solar industry. The European photovoltaic market in particular experienced a downturn, demand shifted from Europe to Asia and America and SMA posted a significant decline in sales and a substantial loss in the reporting period. Unfortunately, these sudden market changes meant that we had to make large-scale personnel adjustments for the first time in SMA's history.

To Our Shareholders

Corporate Governance

**Consolidated Management Report** — Basic Information about the Group

Consolidated Financial Statements

Other Information

A constructive partnership was formed between the Managing Board, the Supervisory Board and the Works Council to establish a socially acceptable package of measures at the heart of which lays a voluntary program for the conclusion of termination agreements. With this program, SMA set the objective to cut the number of employees in Germany – as of the reporting date of March 31, 2013 – by 680 full-time positions by the end of 2014. This corresponds to about 800 employees, as the layoffs affect both full-time positions and part-time jobs.

Over 500 employees signed a termination agreement within the specified time frame. In order to safeguard the Company's innovative strength and guarantee the stability of the IT systems, development and IT specialists were exempted from the job cuts.

Taking into account all temporary contracts that are still ongoing, we already achieved the reduction target announced for the first phase outlined in the package of measures on a voluntary basis. This means that SMA was able to avoid involuntary layoffs.

#### **EMPLOYEE HEADCOUNT**

The employee headcount for the reporting period clearly reflected the adjustments to personnel structures in Germany and isolated foreign companies. In Germany, our employee numbers fell by 19.6%, or 913 people, to a total of 3,736 employees (December 31, 2012: 4,649, figures exclude temporary employees). The number of employees abroad increased by 50% to a total of 1,405. This increase is due to the expansion in strategically important future markets and, in particular, the acquisition of Zeversolar in China.

#### **EMPLOYEES**

	12/31/2012	12/31/2013	comparable <sup>1</sup>	12/31/2012	12/31/2011	12/31/2010	12/31/2009
Reporting date	12/31/2013	—	comparable <sup>1</sup>	12/31/2012	—	12/31/2010	—
Employees							
(excl. temporary employees)	5,141	5,992	5,584	5,532	4,466	2,954	
of which domestic	3,736	4,649	4,649	4,670	4,057	2,736	
of which abroad	1,405	1,343	935	862	409	218	
Temporary employees	662	639	639	943	1,140	1,277	
Total employees							
(incl. temporary employees)	5,803	6,631	6,223	6,475	5,606	4,231	

<sup>1</sup> incl. Zeversolar

At the end of the reporting period, the SMA Group had 5,141 employees (December 31, 2012: 5,584 employees, figures exclude temporary staff). This equates to a decrease of 14% year-on-year and an equally significant decline of 7% quarter-on-quarter (September 30, 2013: 5,528 employees, figures exclude temporary staff).

On the reporting date of December 31, 2013, we employed a total of 1,405 employees at our sites abroad. This equates to 470, or 50%, more employees than the same period of the previous year (December 31, 2012: 935 employees, figures exclude temporary staff).

China saw the largest rise in employees due to the acquisition of Zeversolar. As of the reporting date of December 31, 2013, we employed a total of 408 employees in China, 89 of whom work in the area of research and development<sup>1</sup>.

At the U.S. site in Denver, Colorado, we have compiled a development team for the growing market of large-scale PV power plants on the American continent. Our employee numbers in the U.S. rose to 303 in total (December 31, 2012: 267). Of these employees, the number working in research and development was 22 on the reporting date (December 31, 2012: 8).

At our Polish production company dtw, we employed a workforce of 314 on the reporting date (December 31, 2012: 300 employees, figures exclude temporary staff).

#### **TEMPORARY EMPLOYEES AT SMA**

We will continue to rely on temporary employees across all our production site as required to cover short-term production spikes. At SMA, temporary employees are paid the same hourly rate as all other employees. If business performance is positive, they also benefit from a share in the profits. Globally, SMA employed 728 temporary employees on average during the period in 2013. This figure fell dramatically by 327 temporary employees year-on-year (average during the period for 2012: 1,055 temporary employees).

#### **DIVERSITY AND INTERNATIONALITY**

It has been proven that diverse teams work more successfully. As the global market leader with most of our sales now generated outside Germany, we know all about the significance of a diverse employee structure, otherwise known as diversity. As part of our strategy, SMA joined the "Diversity Charter" as early as in 2011. This shows our strong commitment to promoting the diversity of our employees. The results of the "Great Place to Work" employee survey regularly confirm that employees at SMA feel appreciated and enjoy fair development opportunities, regardless of gender, nationality, religion or ideology, disability, age or sexual orientation.

The number of employees working at our site in Germany, who have a foreign passport, underscores SMA's intercultural orientation. At the end of 2013, this number totaled 190 (December 31, 2012: 228). The slight decrease in this figure can be explained by the personnel adjustment measures in Germany. On the reporting date, we employed a total of 172 employees with a physical disability at the Company (December 31, 2012: 153 employees).

#### **WOMEN IN MANAGEMENT POSITIONS**

Increasing the number of female employees and, in particular, achieving a higher number of women in specialist and management positions at the Company are some of the challenges for the HR department in a manufacturing technology company such as SMA. Of the total number of employees, only 26% were women in the reporting period.

We would like to steadily and sustainably increase the proportion of female employees at all levels of the Company – particularly in technical occupations and management positions. Our aim in the medium term is that the percentage of women at specific levels of management corresponds to the proportion of female employees in that area. Measures along the way to achieving this aim include participation in the MentorinnenNetzwerk (mentor network for women) in the STEM fields, the Women's Career Index and Girls' Day. On the reporting date, there was the following gender breakdown across the Company:

<sup>1</sup> Comparable data for 2012 is not available as the acquisition took place on January 1, 2013.

To Our Shareholders

Corporate Governance

**Consolidated Management Report** — Basic Information about the Group

Consolidated Financial Statements

Other Information

#### GENDER DIVERSITY: SMA EMPLOYEES

	12/31/2013	12/31/2012
Female	25.9	25.6
Male	74.1	74.4

#### GENDER DIVERSITY: SMA EXECUTIVES

	12/31/2013	12/31/2012	12/31/2013	12/31/2012
	Female	Male	Female	Male
Domestic executives	11.6	88.4	12.0	88.0
of which Managing Board	25.0	75.0	20.0	80.0
of which General Managers and Vice Presidents	12.5	87.5	7.7	92.3
of which Directors	15.3	84.7	18.1	81.9
of which Senior Managers and Managers	10.3	89.7	10.9	89.1
Executives abroad	21.8	78.2	23.1	76.9
SMA executives	14.8	85.2	14.2	85.8

The breakdown of the various executive levels shows a very heterogeneous picture. We have a clear majority of male executives throughout SMA. The proportion of female executives is below the proportion of female employees among the entire SMA workforce.

In 2011, the Supervisory Board and Managing Board set the target of increasing the proportion of women at both top executive levels (Managing Board as well as Division Managers, General Managers and Vice Presidents) to 25% respectively by the regular Supervisory Board election after next. On the reporting date, the ratio at Managing Board level is fulfilled with exactly 25% with Chief Financial and Human Resources Officer Lydia Sommer (December 31, 2012: 20%). A positive development can also be seen in the proportion of female executives at General Manager and Vice President level. This increased to 12.5% as of the reporting date (December 31, 2012: 7.7%). At the other executive levels, however, the percentage figures were once again well below the target on account of the voluntary personnel adjustment program.

In the foreign companies, the share of women in management positions is higher than in Germany. Zevversolar has the highest figure with 28.1%<sup>1</sup>. At the end of the reporting period, a total of 21.8% of all executives at our foreign sites were women (December 31, 2012: 23.1%). The slight dip in this quota is an incentive and a challenge for future reporting periods. The percentage increase in the total number of executives compared with last year's reporting date can primarily be attributed to the acquisition of Zevversolar and the associated increase in total employee numbers, which also includes the number of executives.

#### MENTORING PROGRAM FOR WOMEN

The mentoring program for women, which was set up during the reporting period, is one of the building blocks with which SMA intends to further advance the promotion of women in management positions. The initiative provides female employees with targeted support in their professional development, makes them visible within the

<sup>1</sup> Comparable figures for 2012 are not available as the acquisition took place on January 1, 2013.

Company and enables them to network more effectively with one another. Since 2011, SMA has been a partner in the "MentorinnenNetzwerk für Frauen in Naturwissenschaft und Technik" (Mentor Network for Women in Science and Technology). This mentoring network is an inter-university institution of the ten universities in Hesse for the support of female students and doctoral candidates in the STEM fields of study (science, technology, engineering and mathematics). We get involved in the network with the appointment of mentors from our own Company and benefit at the same time from the initiative in the search for talented young female employees.

In the initial results of the Women's Career Index, Federal Minister of Family Affairs Kristina Schröder awarded SMA third place in June 2013. The Women's Career Index records the ratio of women's representation in management positions at major companies and ascertains what fair promotion prospects are open to them in practice. Receiving this award is proof for SMA that our package of gender diversity measures is having a visible effect.

#### **WORK-LIFE BALANCE AND HEALTH**

SMA places great emphasis on striking a balance between professional and private life. With the title "Life," we have developed a concept for our employees that comprises sports and health services, various types of support for families and flexible working hours and workplace models. We endeavor, for example, to find and offer individual solutions in addition to the entitlement to part-time work that exists in Germany. A large percentage of our workforce can use flexible working hours to combine their professional and private lives in a way that is more in line with their requirements.

The number of part-time employees at the Company decreased slightly over the reporting period. At the present time, a total of 8.5% of employees at our German locations work part time (December 31, 2012: 9.7%). Abroad, the total figure is 0.6% (December 31, 2012: 5.7%). At the major production sites in the U.S. and at Zeversolar in China, our employees have not yet requested part-time jobs. All employees at these sites work full time as of the reporting date. At dtw in Poland, the proportion of part-time jobs dropped significantly to 0.3% (December 31, 2012: 5.5%).

As already seen in past years, SMA Health Management also initiated a health campaign in Germany in the 2013 reporting period. The aim of this year's campaign was to prevent respiratory diseases and colds, which, according to the findings of health insurance funds, are the number one cause of illness both nationwide and at SMA. The "AIR" campaign focused on reducing respiratory diseases, improving the prevention of infection and strengthening resistance. In addition to extensive information for all employees, the campaign also included individual examinations and consultations, voluntary flu shots and sports sessions.

#### **DEMOGRAPHIC CHANGE**

Demographic change alters the working environment and presents companies with major challenges. Various investigations show that the average age of employees is over 40 in around two thirds of all companies in Germany. By contrast, SMA has a comparatively young workforce. The average age of employees is around 37 (December 31, 2012: 36). On the reporting date, the employees at our foreign companies were even younger on average than our employees in Germany. The average age at the foreign companies was 35 years (December 31, 2012: 37 years).

We see this competitive edge as both a great opportunity and a mission for the future. In difficult market situations, a shortage of skilled workers in Germany on account of demographic change is already a reality.

SMA faces up to the challenge of remaining an attractive employer with outstanding international development opportunities, a corporate culture that values its employees, a long-term approach to maintaining a work-life balance and a professional health management set-up.

## VOCATIONAL TRAINING SITUATION

At the end of the reporting period, a total of 230 young people were in vocational training at SMA in Germany (December 31, 2012: 320 apprentices). This equates to 6.2% of the total of our employees in Germany (December 31, 2012: 6.9%). On the reporting date, we also employed 182 interns, graduands and student employees in Germany (December 31, 2012: 304). 20 student employees were employed at our foreign sites (December 31, 2012: 6 student employees).

To assume social responsibility, SMA continues to train young people in promising careers in Germany, beyond its own needs. However, in light of the changed conditions, we are focusing in the 2014 training year on jobs that require professional training such as industrial clerks, electronics technicians for devices and systems and mechatronics fitters.

If we have no positions available to offer young professionals upon successfully completing their vocational training, the StinJo program<sup>1</sup> gives them the opportunity to work in a skilled-worker position for a fixed period of one year to gain some initial work experience. At the end of the StinJo year, the employment contract automatically expires unless we have converted the job into a permanent position within the contract term.

## ACQUISITION OF YOUNG PROFESSIONALS

SMA is convinced that the future of global energy supply belongs to renewable energies. To encourage young people to choose a career in the industry, we provide information regularly in Germany to pupils, trainees and students within the framework of various campaigns. In the reporting period, for example, we took part in the nationwide Girls' Day event once again. On this day, pupils in grade five and above can gain information on technical professions and the associated career prospects compared with traditionally chosen career profiles. Girls' Day is aimed at providing career guidance to girls, with a particular focus on scientific, technical and skilled manual professions.

Besides participating in the fourth Vocational Training Evening in Kassel in 2013, we also held the campaign day SMA Insight4School for another year. People seeking training positions and their relatives asked us in person about the range of training positions that we offer and gained practical insight into the various career profiles. Since 2008, SMA has been a host for the "Jugend forscht" (Youth researches) regional competition in North Hesse, Germany. In 2013, about 90 pupils presented some 40 projects in a competitive exhibition to a jury of specialists and other interested visitors.

## Corporate Social Responsibility (CSR)

We take social responsibility seriously by considering social and environmental interests. This has been an important part of corporate culture since SMA was founded. SMA understands sustainability to mean combining long-term economic success with the protection of the environment and social responsibility. From this claim, we derive specific maxims that extend across all areas of our enterprise. One of our key aims is to have a high-quality product portfolio underpinned by reliable technology. In addition, optimization of our production processes to ensure they meet the highest standards of quality, safety and environmental friendliness is equally important.

<sup>1</sup> StinJo stands for "Step in Job."

In 2012, SMA defined the ten most strategically important fields of action for increased sustainability and formulated a sustainability mission statement. The mission statement is a point of reference for our employees and makes it clear after which principles we model our relationships to business partners, customers and the public. The mission statement is supplemented by the SMA Business Principles, which set out clear standards of conduct for all employees.

#### THE TEN FIELDS OF ACTION OF THE SMA MISSION STATEMENT

- 1 — Sustainable Economics
- 2 — Innovative Products for a Sustainable Energy Supply
- 3 — Production without Waste
- 4 — Socially and Environmentally Responsible Supply Chain
- 5 — Environmental Management for Sustainable Economics
- 6 — Efficient and Renewable Energy Supply with Minimized Consumption
- 7 — Committed Employees
- 8 — Sustainable Regional Development
- 9 — A Livable and Sustainable Society – Everywhere
- 10 — Constructive Dialog

For all company activities, the SMA Public Affairs unit coordinates implementation of the sustainability strategy and regularly writes a sustainability report. Employees within the department initiate and implement suitable measures and projects with the aim of optimizing company-wide compliance with the sustainability criteria. The principles outlined in the mission statement are systematically anchored in our Company through specific delegation of responsibilities.

#### VALUES, STANDARDS AND GUIDELINES

Clearly defined values and principles are at the heart of our thinking and actions at SMA. As an internationally operating company, we align our activities with nationally and internationally recognized standards. For example, by signing the United Nations Global Compact in 2011, SMA publicly declared its commitment to responsible corporate governance. At the core of the UN initiative are ten principles in the areas of human rights, labor standards, environmental protection and anticorruption.

Our social and environmental responsibility also extends to collaboration with our suppliers and business partners. As early as 2009, SMA signed the cross-sector Code of Conduct issued by the German Association of Materials Management, Purchasing and Logistics. In 2010, we supplemented this Code of Conduct with SMA's own guidelines for suppliers (Supplier Code). This Supplier Code sets out requirements with regard to corruption, antitrust law, ethical principles, labor standards and employee rights, environmental protection, quality and product safety.

#### ENVIRONMENTAL AND ENERGY MANAGEMENT

SMA develops and distributes products that make an important contribution to climate protection and promote the use of renewable energies.

SMA Solar Technology AG production sites in Niestetal/Kassel and Denver have had their environmental management systems certified in accordance with DIN EN ISO 14001. There are no special official environmental requirements for production as, thanks to our environmentally friendly production methods, we use only very small

quantities of materials that are harmful to the environment. These are disposed of by certified disposal companies in accordance with legal requirements. In 2013, we supplemented our environmental management system by having our in-house energy management system certified in accordance with DIN EN ISO 50001. The internationally recognized certification attests to SMA's particularly efficient and sustainable use of energy in production and management.

On the whole, energy efficiency and the use of renewable energies play an important role in SMA's comprehensive sustainable energy concept. Fundamental elements of the concept include consistent expansion of photovoltaics in the construction of new buildings on the Company's sites, CO<sub>2</sub>-neutral inverter production at "Solar-Werk 1" and energy-efficient building technology. In 2013, we almost doubled the share of self-generated solar electricity in our total electricity consumption on a year-on-year basis from 8.8% to just under 17%.

In 2013, we won the German Data Center Award in the category of "Energy and Resource Efficient Data Centers" for the energy-efficient building technology used in the construction of our new data center. The building's architecture allows the systems to be cooled using air from outside almost the entire year round. The warm exhaust air is used in turn to heat the building's other rooms.

#### **COMPANY MOBILITY MANAGEMENT**

Mobility management within SMA is also part of climate and environmental protection. It raises employees' awareness of environmentally friendly mobility options for getting to and from work and of an intelligent choice of transport between SMA sites. Company mobility management includes both in-house actions and measures with external players. In 2013, the German environmental aid organization Deutsche Umwelthilfe e.V. awarded SMA with a prize for its mobility concept and particularly praised the fleet organization as a good example of climate protection in the area of mobility. In its fleet organization, for example, SMA limits the CO<sub>2</sub> emissions of its vehicles to 120 g/km. This value is below the EU threshold for 2015. A bonus-malus system provides an enhanced incentive to reduce CO<sub>2</sub> emissions further.

#### **SOCIAL COMMITMENT**

For SMA, taking its share of responsibility for positive social development is a matter of course. SMA thus promotes charitable projects, organizations and initiatives in the areas of culture, work and social matters, education, science and research as well as regional and national renewable energy projects research in emerging and developing countries. In doing so, we use both donations and sponsorship as well as direct personal support, e.g., through the voluntary work of our employees.

As an example of cultural support, in 2013, SMA, as one of the major companies in North Hesse, sponsored the North Hesse Culture Summer, the Kassel Music Days and the Kassel Volunteer's Center. In the area of education, science and research, we support the "Jugend forscht" (Youth researches) and "Hessen SolarCup" competitions, as well as the North Hesse Student Research Center.

With the MENSCH mentoring program from the "Jumpers – Jugend mit Perspektive" (Jumpers – youth with prospects) society and the mentoring program for young female engineers from the MentorinnenNetzwerk (women mentors network), SMA supports two additional educational initiatives not only financially, but also by giving our employees the opportunity to get involved.

In order to make people's access to electricity easier or even possible, in 2013, SMA, together with its employees and project partners, was involved in various aid projects in developing and emerging countries building PV systems for schools, children's homes, hospitals and others in Malawi, South Africa, Tanzania, Bangladesh, South Sudan and Uganda.

#### **SUPPORT THROUGH EXPERTISE**

SMA is involved in numerous networks, collaborative projects and initiatives that play an important role in the further development of the North Hesse region, not only financially, but also by providing expertise and human resources.

SMA has been supporting deENet, the competence network for decentralized energy technologies, as an active member since 2003. The organization has made it its mission to turn North Hesse into a renowned location for decentralized energy supply through renewable energies using technological progress and sustainable regional development. By 2020, the number of regional jobs in this area is set to rise to around 20,000.

Our close collaboration as an original shareholder in the Institute for Decentralized Energy Technologies (IdE), founded in 2011, and the sponsorship of an endowed chair at the University of Kassel with the title "Economics with a Focus on the Decentralized Energy Industry" are along similar lines. The sponsorship of the Germany-wide business plan competition "Promotion North Hesse" is also intended to provide company founders in the area of decentralized energy supply with targeted support.

## Enterprise Management

### Leading Indicators

In order to be able to react to market developments in time, it is very important for us to recognize opportunities and risks early on. For this purpose, we discuss what are commonly referred to as operative leading indicators both at Board level (corporate group) and at division level with the Division Managers, Vice Presidents and the General Managers of the subsidiaries. Such leading indicators include for example changes in incentive programs for PV systems and their effect on regional market potential, the development and competitive position of SMA in regional markets, customer acceptance of new products as well as market-relevant information from discussions with customers, suppliers and associations. The divisional organization allows us to respond more quickly to changes in the leading indicators.

The myriad of influencing factors and the complex way they interact make it difficult to produce a detailed forecast that holds up in the long term. Therefore, on the basis of operative leading indicators, we have drawn up scenarios for annual and medium-term planning. The Managing Board and Division Management are informed on a monthly basis both about the financial development of the entire SMA Group along with the individual divisions and about changes in operative leading indicators.

## Financial Management Parameters

In 2013, SMA used the following key financial management parameters for the operative business as explained below. There are no changes compared with the previous year to the calculation of key figures or to the management system.

### **SALES**

Sales include all of the sales generated over the reporting period. Since the market for inverters was shaped partly by plummeting prices in the past, we also measure, in addition to sales, inverter output sold and the average selling price per watt. We measure sales at both the Group and the divisional level.

### **OPERATING PROFIT (EBIT)/OPERATIVE EARNINGS MARGIN**

Operating profit also contains function costs and other expenses in addition to sales and cost of sales. SMA uses this key figure to measure the profitability of the individual divisions and the Group. To determine the operative earnings margin, we calculate operating profit in relation to total sales. We measure operating profit and the operative earnings margin at both Group and division level.

### **NET WORKING CAPITAL/NET WORKING CAPITAL RATIO**

Net working capital management plays an important role. In addition to inventories, net working capital includes trade receivables and trade payables. We measure our customers' and suppliers' accounts receivable as well as product manufacturing inventories regularly in relation to sales over the past twelve months. We measure and manage net working capital at the corporate Group level.

### **CAPITAL EXPENDITURE**

Capital expenditure is another key driver of operating cash flow. To manage capital expenditure, we formulate budgets as part of our annual planning, which the Managing Board approves over the course of the fiscal year. In addition to annual planning, large-scale capital expenditure projects also require approval from the Managing Board. We manage capital expenditure at the corporate Group level.

## Intragroup Reporting and Management

### **INTRAGROUP REPORTING**

The monthly reporting includes, among others, detailed comments on the development of orders placed and order volumes, the amount of inverter output sold, sales figures, the operating result, cash flow statements, research and development activities, investments and net working capital. The aim is to compare changes in decisive items on the income statement and balance sheet both with the budget and with the figures of the previous month and to take any corrective measures necessary. SMA checks annual planning and medium-term planning every six months and adjusts them if necessary. The basis of the information used for reporting is provided by an electronic management information system (SAP Business Warehouse).

### **INTRAGROUP MANAGEMENT SYSTEM**

The basic elements of the intragroup management system are the once-weekly Managing Board meeting and the monthly discussions on results with the divisions. The implementation of the strategy is also discussed during quarterly business reviews with the divisions and the achievement of objectives monitored. In addition, the intragroup management system encompasses the regular Risks and Opportunities Report and the report prepared by the Internal Auditing department.

# 2013 Fiscal Year

## General Economic Conditions and Economic Conditions in the Sector

### General Economic Conditions

After a rather restrained first half of the year, the global economy gained considerable momentum in the second half of 2013. According to the International Monetary Fund (IMF), this was predominantly caused by the economic recovery in the industrialized countries, which was shaped by rising production and increasing exports. However, according to IMF calculations, global economic growth of 3.0% for the entire year was slightly weaker than in the previous year (3.1%). Overall, gross domestic product (GDP) growth in developed national economies contracted slightly to 1.3% (2012: 1.4%). Developing and newly industrialized countries also posted a slight decline to 4.7% (2012: 4.9%).

In 2013, the euro zone continued to recover from its longest recession to date. GDP contraction in the reporting period was less pronounced at -0.4% than in the previous year (-0.7%). The fact that the European Central Bank (ECB) decreased the base rate in two stages over the reporting period to the historically low level of 0.25% is likely to have contributed to the slight upturn. In Italy (-1.8%) and Spain (-1.2%), economic growth was less sluggish than the previous year (-2.5% and -1.6%). France's economy continued to grow slightly by 0.2% (2012: 0.0%). In Germany, economic output declined year on year to 0.5% compared with the previous year's figure of 0.9%. In 2013, continued high youth unemployment and the ongoing reform processes in Southern European crisis-hit countries put the brakes on growth in the euro zone. The continuing weak demand emanating from developing and newly industrialized countries also had a dampening effect.

Alongside the European national economies, other key foreign markets for SMA also developed in an extremely mixed fashion in 2013. According to the IMF, the U.S. economy grew by 1.9% (2012: 2.8%) and the Japanese economy by 1.7% (2012: 1.4%). In China, GDP increased as in the previous year by 7.7%. With growth of 4.4%, India's economy saw a noticeable increase in economic output compared with the previous year (3.2%). By contrast, South Africa's economy posted a weaker performance than the previous year with growth of 1.8% (2012: 2.5%).

### Economic Conditions in the Sector

#### **EUROPE**

The 2013 fiscal year was shaped by significant adjustments to solar electricity tariffs in key European markets. Additional uncertainty was caused by the trade dispute between the EU and China regarding punitive duties on Chinese modules. It was not until July that China and the EU agreed on a minimum price for imports and an annual quantity limit.

In Germany, the ongoing depreciation of the feed-in tariff resulted in a sharp drop in demand for photovoltaics. German PV system operators had to contend with monthly cuts of more than 1% in 2013. In addition to increasing cuts to solar subsidies, the German Federal Government is continuing to stick to its plan of withdrawing compensation under the Renewable Energy Sources Act (EEG) for new PV systems once they reach 52 GW of total installed power. On January 20, 2014, the German Federal Government also adopted a draft by Federal Minister of Eco-

nomics and Energy Sigmar Gabriel on reforming the EEG. The planned amendment to the EEG envisages charging the self-generation of electricity from PV systems at 70% of the EEG apportionment starting from an output of 10 kW.

In Italy, the solar subsidy program Conto Energia V expired once it reached the ceiling of €6.7 billion on July 6, 2013. The strongly declining demand for photovoltaics already seen in the first half of the year then collapsed entirely. According to SMA's estimates, demand in 2013 as a whole was less than half of that in 2012.

Positive impetus came from the Benelux countries, Great Britain and Eastern Europe, whose governments continued to back stable subsidization of photovoltaics. However, this could not compensate for the decline in volume in Germany and Italy.

#### **U.S.**

The U.S. market for photovoltaics is continuing to grow. The factors driving growth in the Industrial segment in 2013 included portfolio standards on the basis of which American electric utility companies must include a share of renewable energy in their portfolios. Tax incentive programs, the net metering tariff model and the leasing of PV systems offered by a number of companies also caused demand for PV systems to rise in the Residential segment as well.

#### **JAPAN**

Japan developed very positively in 2013. Attractive subsidy programs, a high appreciation for renewable energies, low bank interest and the high demand for electricity as a result of the decision to disconnect the majority of Japanese nuclear power plants were the main drivers of the Japanese photovoltaics industry in 2013. In addition to the residential market and the market for medium-sized systems, the segment of large-scale PV power plants reported especially positive development. However, owing to the special grid infrastructure and the strict certification requirements, the Japanese market has high entry barriers.

#### **CHINA**

With growth rates of about 13 GW, China became the largest PV market in 2013. The market was driven primarily by the Industrial segment in 2013. By 2015, the government plans to achieve cumulative installed capacity of more than 40 GW, producing exact guidelines listing the provinces in which PV power is to be installed. Furthermore, the government also determines on an annual basis the numbers of private and commercial PV systems as well as industrial ground-based PV systems that are allowed to be built. Strict certification requirements continue to apply to foreign companies. The award of large-scale project orders is also determined by state tendering procedures.

#### **EMERGING MARKETS**

Energy requirements and thus demand for photovoltaics are growing in newly industrialized and developing countries. In South Africa, photovoltaics is in some cases already an economically attractive alternative to other methods of generating energy. Therefore, a market that is not reliant on subsidies is rapidly increasing in importance alongside a subsidized market. In South Africa, the market is driven by the state subsidy program REIPP (Renewable Energy Independent Power Producer Program). The government is also planning to introduce net metering nationwide to further advance the expansion of photovoltaics. Net metering allows PV system operators to offset their own power consumption by producing solar electricity. This means that they can reduce the amount of electricity they have taken from the utility grid 1:1 by feeding in solar electricity. However, in tandem with these increasing subsidies, the local content requirements are increasing in South Africa as well. These regulations stipulate that a high proportion of value creation must be achieved through local production.

The Thai government has doubled its target for the expansion of solar energy inside the country to 3 GW by 2021. The PV market in Thailand is developing very positively as a result of the excellent solar irradiation and the existing incentive programs.

Chile offers ideal conditions for generating power from photovoltaics. In addition to strong solar irradiation, attractive subsidies and high electricity prices, the country has a growing energy demand and low construction costs. PV systems in Chile today can already compete with traditional power sources without government support. The driver of photovoltaic expansion in Chile is also the government's plan to cover at least 20% of production capacity in the electricity market with renewable energies by 2020. A number of foreign investors, for example from China, are building PV systems in Chile. However, long waiting times for official environmental impact assessments and approval procedures considerably slow down the implementation of PV system projects.

In many countries located in what is known as the [Sunbelt](#), high diesel prices and extensive transportation and storage costs act as an incentive for the expansion of photovoltaics. In these sunny regions, photovoltaics is already the more financially attractive alternative. With good solar irradiation, a photovoltaic diesel hybrid system will pay for itself in just a few years.

Sunbelt  
See also Glossary  
page 172 et. seqq.

## Impact of General Conditions on Business Development in 2013

In the reporting year 2013, the negative trend in Europe continued and demand for PV inverters fell. However, strong growth stimuli emanated from China, Japan and the U.S. Demand from these countries compensated for the declining volumes in Europe (measured in GW). However, according to estimates by the SMA Managing Board, global investments of about €4.5 billion in PV systems are significantly lower than in the previous year (2012: €5.0 billion) on account of the noticeable price pressure and the shift to large-scale solar projects. SMA's business development reflects these trends.

The SMA Group sold PV inverters with a total output of 5,361 MW in the reporting period. This equates to a decrease of 25.4% compared with the previous year (7,188 MW). Sales fell by 36.3% to €932.5 million. In 2013, the international share climbed to 71.0% (2012: 56.3%). With sales of about €276.2 million (before sales deductions), Germany remained SMA's most important sales market, followed by the U.S. (€214.8 million) and Australia (€58.4 million). Earnings before interest and taxes (EBIT) sank to -€89.1 million due to the negative volume performance, the shift to large-scale solar projects and the associated high price pressure and the business performance and restructuring of Zeversolar. The EBIT margin was -9.6% (2012: 7.0%). The operating result includes one-time items for the personnel measures started in August 2013 amounting to €25.1 million as well as impairment losses on receivables and inventories of €41 million.

The business development of the Medium Power Solutions division was largely affected by the slump in demand in Europe. Net sales sank to €479.6 million (2012: €969.0 million). The Power Plant Solutions division benefited from the shift in demand to large-scale solar projects and sold virtually the same inverter output as last year. Sales declined to €375.2 million on account of price pressure (2012: €440.8 million).

## Comparison of the Actual With the Forecast Business Development

The SMA Managing Board published an initial forecast for the 2013 fiscal year on October 18, 2012. At this time, the SMA Managing Board anticipated a severe market decline and increasing price pressure in the 2013 fiscal year due to the massive cuts to subsidies for photovoltaics in Europe. It also anticipated that this would not be offset by gains in productivity and technological innovations alone. In its forecast at the time, the Managing Board estimated a considerable decrease in sales to between €0.9 billion and €1.3 billion and a break-even operating result at best (forecast EBIT margin: 0%). Even then, the Managing Board did not rule out a loss either. SMA aimed for a net working capital ratio of between 19% and 22%. Capital expenditure is expected to amount to €100 million. In this initial forecast, the Company Management again announced an adjustment to personnel structures for the 2013 fiscal year.

On February 22, 2013, SMA affirmed the forecast made on October 18, 2012. In the Half-Yearly Financial Report on August 8, 2013, SMA lowered the forecast for capital expenditure to €80 million. This was on account of adjustments to the rapidly changing conditions in the photovoltaics industry. On November 4, 2013, the SMA Managing Board adjusted the forecast for all key figures for the current fiscal year. The revised forecast predicted SMA Group sales of between €0.9 billion and €1.0 billion. The Managing Board also anticipated a loss of €80 million to €90 million. The reasons for the adjusted forecast were the stronger than expected decline in the European market and the resulting negative sales and earnings effects of the Medium Power Solutions division and the ongoing restructuring of Zeversolar. With the adjustment in November, the forecast net working capital ratio also increased to between 24% and 28%. At that time, SMA anticipated capital expenditure of about €60 million.

With sales of €932.5 million achieved in 2013, SMA is at the lower end of its sales forecast. EBIT amounted to €-89.1 million and was thus in line with the forecast. The fall in the operating result is attributable particularly to the massive decline in volumes in Europe, lower selling prices, expenses for personnel reduction measures and higher impairment losses on inventories and receivables.

### TARGET-ACTUAL-COMPARISON FOR 2013

	Forecast February 22, 2013	Forecast November 4, 2013	Results 2013
Sales	€0.9 to €1.3 billion	€0.9 to €1.0 billion	€0.9 billion
Operating profit (EBIT)	Break-even at best	€-80 to €-90 million	€-89 million
EBIT margin	0 %	-8 % to -10 %	-9.6 %
Net working capital ratio	19 % to 22 % <sup>1</sup>	24 % to 28 %	27 %
Capital expenditure	€100 million	€60 million	€53 million

<sup>1</sup> without Zeversolar

At €53.2 million, SMA fell considerably short of its originally planned investments in intangible assets and buildings and acquisition of machinery and equipment of approximately €100 million. Due to the high level of market uncertainty, the Managing Board significantly lowered its investment activities over the course of the year. SMA did not meet the EBIT margin of 0% originally forecast on October 18, 2012, and affirmed on February 22, 2013. At -9.6%, it was in line with the forecast published on November 4, 2013, of between -8% and -10%. The net working capital ratio for the reporting year was 26.6% and thus fell in line with the value range of between 24% and 28% released by the Managing Board in November 2013.

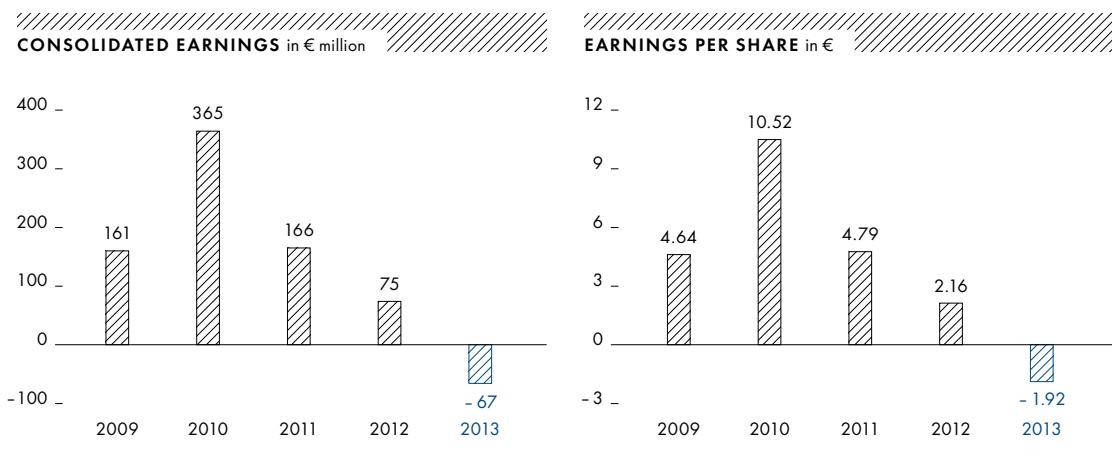
In the 2012 Annual Report, SMA forecast that the Medium Power Solutions (MPS) division would generate about 50% to 60% of sales in the 2013 fiscal year. The Power Plant Solutions (PPS) division was expected to generate about 40% of sales. Both forecasts were largely met. In 2013, the MPS division achieved external sales of €479.6 million, thus accounting for about 52% of the SMA Group's total sales. External sales for the PPS division in 2013 were €375.2 million, equating to about 40% of the SMA Group's total sales. Information on the expected operating profit (EBIT) and the EBIT margins of the MPS and PPS divisions were not part of the forecast in the 2012 Annual Report and were not substantiated by SMA at a later point in the 2013 fiscal year either.

## Results of Operations

### Group Sales and Earnings

#### SMA POSTS DECLINE IN SALES AND LOSS

In the 2013 fiscal year, the SMA Group generated sales of €932.5 million (2012: €1,463.4 million). The sales forecast substantiated on November 4, 2013, of between €0.9 billion and €1.0 billion was therefore fulfilled. The year-on-year 36.3% decline in sales is attributable to the reduction of selling prices and a downturn in business. In 2013, SMA sold PV inverters with a total output of 5,361 MW (2012: 7,188 MW). This equates to a decrease in volume of 25.4% compared with the same period of the previous year.



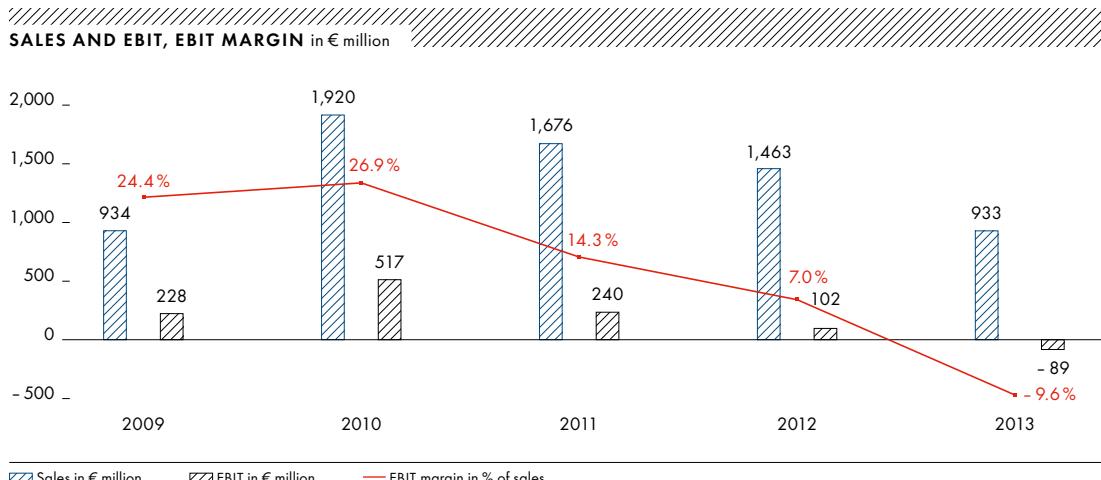
According to estimates by the Managing Board in 2013, the global photovoltaic market grew by 25% to 40 GW (2012: 32 GW). The main growth drivers were the photovoltaic markets in China, the U.S. and Japan. At the same time, the European markets experienced a severe slump as a result of cuts to subsidy programs. Based on the size of the global photovoltaic market estimated by the Managing Board, the market share of the SMA Group of 13% in the reporting year was below the level of the previous year (2012: 23%). With exclusion of China, SMA had a market share for the reporting year of 20% (2012: 26%). The loss of market share is chiefly attributable to the regional market shift to Asia. Market entry in Japan and China is still in its early stages and SMA still does not have as high a market share as in Europe and the U.S.

In 2013, gross foreign sales amounted to €675.8 million, 20.1% below the previous year's level (2012: €845.9 million). The decrease is mainly attributable to the declining demand in Europe as a result of subsidy cuts. At 71.0%, our international share was up on the previous year's figure (2012: 56.3%) and emphasized the Company's outstanding international position with excellent sales and service structures and complete product range. In 2013, the most important foreign markets for the SMA Group were North America, Australia, Japan and Thailand.

In 2013, EBIT was €-89.1 million (2012: €102.0 million). EBIT is thus still in line with the updated earnings forecast of €-80 million to €-90 million. At -9.6%, the EBIT margin was significantly below the previous year's figure (2012: 7.0%). The fall in the operating result is attributable particularly to the massive decline in volumes in Europe, lower selling prices, expenses for personnel reduction measures and higher impairment losses on inventories and receivables. Overall, these one-off items accounted for €65.6 million of EBIT. The Group earnings amounted to €-66.9 million (2012: €75.1 million). Earnings per share fell to €-1.92 (2012: €2.16).

#### **NO DIVIDEND FOR THE 2013 FISCAL YEAR**

In the year under review, SMA Solar Technology AG as the parent company of the SMA Group registered an annual net loss of €-75.9 million (2012: €65.0 million) in its separate commercial statements. The Managing Board will recommend that the Supervisory Board propose no dividend payout for the 2013 fiscal year at the Annual General Meeting on May 27, 2014. The amount paid out in dividends will thus amount to a total of €0.0 million (2012: €20.8 million).



## Sales and Earnings per Segment

### **ADJUSTMENT OF REPORTING BY DIVISION AS OF 2013**

To leverage synergies within the organization more effectively, dtw was integrated into the Medium Power Solutions (MPS) division on January 1, 2013, and transferred from Complementary Divisions. In addition, the Off-Grid Solutions business activities were integrated into the Medium Power Solutions division. The majority shareholding of Jiangsu Zeversolar New Energy Co., Ltd. acquired in March is shown in the new Zeversolar segment. The financial figures are reported using the previous year's figures.

### **DECLINING EUROPE BUSINESS NEGATIVELY AFFECTS MEDIUM POWER SOLUTIONS DIVISION**

The MPS division covers the Sunny Boy, Sunny Mini Central, Sunny Tripower and Sunny Island product families. The division also develops products used for monitoring photovoltaic systems and energy management. The subsidiary company dtw produces transformers, chokes and coils. The product families comprise 65 inverters and 14 communication products in total. SMA offers single-phase and three-phase inverters with capacities ranging from 240 W to 24 kW. SMA products feature a particularly high efficiency of more than 99%, easy installation and a service life of over 20 years. SMA has extended its unique selling propositions with innovative solutions for intelligent energy management.

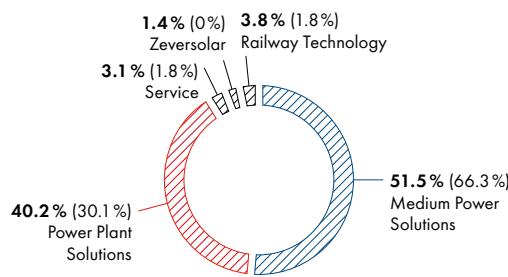
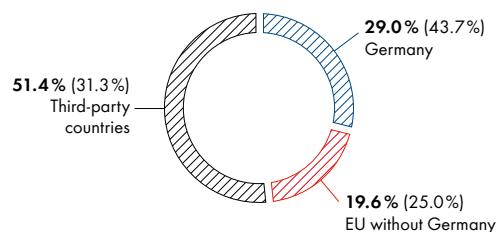
In 2013, the MPS division achieved external sales of €479.6 million, which is much lower than the previous year's level (2012: €969.0 million). With a share of SMA Group sales of 51.5% (2012: 66.3%), it was the division with the strongest sales. There was a 60.5% decline in sales in Europe (2013: €318.1 million, 2012: €804.5 million). This is a result of the cuts to solar subsidies.

Positive demand came particularly from Japan and Thailand. The U.S., Australia and the Benelux countries were among the most important foreign markets, where SMA launched new products in the fourth quarter of 2013. In 2013, the major sales drivers were the Sunny Tripower 12000TL to 17000TL, Sunny Tripower 5000TL to 9000TL and Sunny Boy 3000TL to 5000TL inverters.

The MPS division failed to compensate for the almost halving of its sales over such a short period of time with ongoing measures to boost productivity and cuts to the materials cost. The result is also impacted by the impairment losses on inventories and receivables as a result of the declining volumes in Europe. In 2013, EBIT was €-77.9 million (2012: €101.0 million). In relation to internal and external sales, this corresponds to an EBIT margin of -14.0% (2012: 9.4%).

### **POWER PLANT SOLUTIONS DIVISION BENEFITS FROM STRONG INTERNATIONAL BUSINESS**

The Power Plant Solutions (PPS) division serves the rapidly growing market for large-scale PV power plants with outputs ranging from 500 kW to the three-digit megawatt range with Sunny Central type central inverters. The product family contains central inverters with numerous variants providing optimal technical solutions for any large-scale project. As the market leader in this segment, SMA also offers central inverters that feed directly into the medium-voltage grid of electric utility companies, thus contributing to a greater energy yield of the overall system. The exceptional efficiencies of these devices reach up to 99%.

**SALES BY SEGMENTS\*****SALES BY REGIONS\***

\* Gross sales before sales deductions  
(Previous year's figures in parenthesis)

\* Gross sales before sales deductions  
(Previous year's figures in parenthesis)

The PPS division sold virtually the same inverter output as the previous year. In 2013, external sales at €375.2 million was below the previous year's level (2012: €440.8 million) due to the price pressure. Because of the shift in demand from Europe to North America and Asia, the trend toward large-scale solar projects will continue. The PPS division's share in total SMA Group sales was 40.2% (2012: 30.1%). The most important markets included North America, Japan, Germany and Thailand. The most successful products included the Sunny Central Compact Power series of inverters.

By cutting the cost of materials and advances in productivity, the PPS division was able to almost fully compensate for the significant price reductions on the previous year. Earnings before interest and taxes (EBIT) amounted to €37.0 million in the reporting period (2012: €45.2 million). In relation to internal and external sales, the EBIT margin was 9.5% (2012: 9.7%).

**SERVICE DIVISION INCREASES ITS PROFITABILITY**

Alongside a broad product portfolio, excellent service is an important distinguishing feature that is going to become even more important in business competition. In order to exploit this potential systematically, SMA has bundled its service activities in one division.

SMA is represented with its own service companies in all important photovoltaic markets. With an installed capacity of more than 30 GW worldwide, SMA leverages economies of scale to take its service business to profitability over the medium term. Services offered include, for instance, warranty extensions, service and maintenance contracts, operational management, remote system monitoring and spare parts business.

In 2013, external service sales amounted to €29.2 million (2012: €26.9 million). Notable sales drivers were especially services subject to charge, the commissioning of PV systems and repairs as well as service and maintenance contracts subject to a charge. In the reporting period, EBIT was €-1.4 million (2012: €-15.8 million). This marked growth in profitability can be attributed in particular to the productivity measures implemented last year. For example, SMA has concentrated a number of locations in the new Service Center at Sandershäuser Berg. The SMA Managing Board expects the Service division to make a positive profit contribution in the future.

String Inverters  
See also Glossary  
page 172 et. seqq.

#### **REALIGNMENT OF ZEVERSOLAR DRIVEN FORWARD**

The Zeversolar division comprises Jiangsu Zeversolar New Energy Co., Ltd. – which was acquired in March – and its subsidiary companies, and serves the Chinese photovoltaic market with its central inverters. [String inverters](#) are offered in selected foreign markets.

External sales after closing (March 12, 2013) totaled €13.0 million. The Sales were almost exclusively generated in China. However, international business has almost completely collapsed, particularly due to the drop in demand in Europe. The operating profit before interest and taxes (EBIT) amounted to €-22.2 million, including impairment losses on inventories and receivables of €7.1 million.

SMA implemented a large number of restructuring measures at Zeversolar in order to increase productivity and quality and lower material costs sustainably. In addition, the sales strategy and organization was adjusted in order firstly to benefit from the positive growth trend in China and secondly to serve certain market segments in foreign markets. The major restructuring measures were completed by the end of the first half of 2013. In the current fiscal year, the Managing Board already anticipates considerable sales growth and a break-even result.

#### **RAILWAY WITH POSITIVE DEVELOPMENT**

The SMA Railway Technology GmbH and its Brazilian subsidiary company manufacture converters as individual devices and complete energy supply systems for railway coaches and multiple-unit trains for short- and long-distance railway traffic.

In the current fiscal year, the business division's external sales increased by 33.0% to €35.5 million (2012: €26.7 million). Turkey, Brazil and Switzerland were among the most important foreign markets.

Last year, the Management realigned the companies toward project business and established a production location in Brazil.

Earnings before interest and taxes (EBIT) were increased significantly to €1.3 million (2012: €-1.0 million) and correspond to an EBIT margin in relation to internal and external sales of 3.6% (2012: -3.4%).

### [Development of Significant Income Statement Items](#)

#### **SALES DECLINE AND PRICE SLUMP NEGATIVELY AFFECT GROSS MARGIN**

In 2013, cost of sales totaled €787.6 million (2012: €1,119.8 million). SMA's strategy of reducing cost of sales through technical innovations showed an initial impact. For example, material costs per watt were lowered by 11.8% year-on-year to 9.7 euro cents per watt (2012: 11.0 euro cents per watt). Unfortunately, the savings made cannot fully compensate for the declining margin as a result of the decrease in volumes and prices. The various personnel measures caused personnel costs to fall by 22.1%. The lower additions to warranty provisions and the systematic reduction of operating expenses resulted in a decline in other expenses of €38.2 million to €51.3 million in 2013. The consolidation of Zeversolar negatively affected the gross margin.

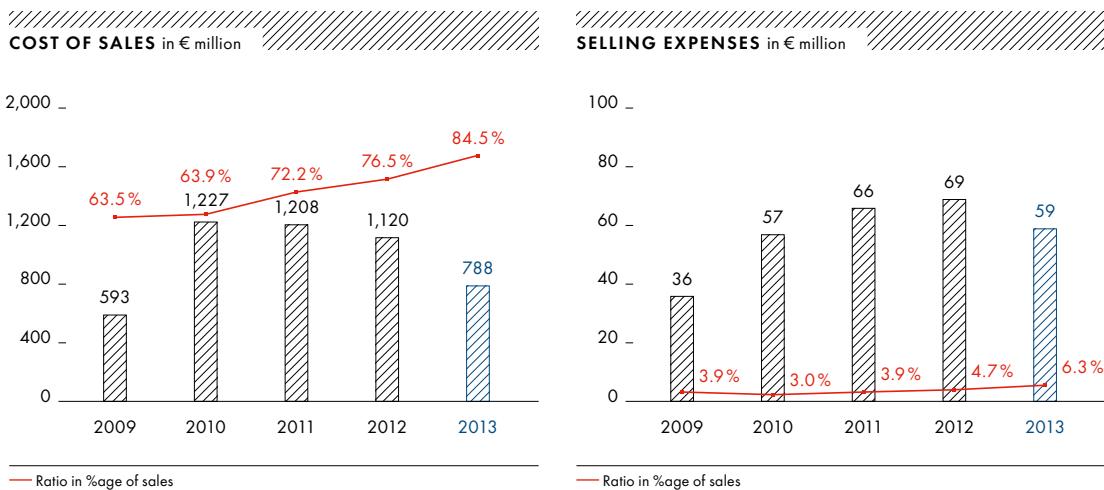
The decline of the gross margin to 15.5% (2012: 23.5%) is primarily attributable to the declining volumes in Europe, the fall in prices and impairment losses on inventories due to the sudden collapse of the European market. In addition, higher depreciation and amortization compared with the previous year had a negative impact on the gross margin. With respect to the cost of sales, 66.4% could be attributed to material expenses, 17.6% to personnel expenses and 16.0% to depreciation and amortization as well as other expenses.

#### **INTERNATIONAL SALES ORGANIZATION ADAPTED TO NEW STRUCTURE OF DEMAND**

In 2013, SMA adapted the sales and marketing structures to the new market situation. In Germany and Europe, the structures were adjusted to suit the lower demand level, while the sales organizations in China, Japan, South America and South Africa were further expanded. Sales and marketing costs fell to €59.2 million (2012: €68.9 million). The personnel savings and reductions in operating expenses were partially offset by the realignment of Zeversolar. On the basis of the decline in sales, the cost of sales ratio increased to 6.3% (2012: 4.7%).

#### **SMA INVESTS MORE THAN €100 MILLION IN RESEARCH AND DEVELOPMENT**

Development expertise is a major strategic unique selling proposition of SMA and is therefore expanded rigorously. In 2013, research and development expenses amounted to €79.6 million after the capitalization of development projects (2012: €87.9 million). The decrease in research and development expenses is based primarily on the reduction in personnel costs, as a result of the various personnel measures. Research and Development was further expanded with new employees year-on-year. For example, a new development center was founded in Denver, Colorado, U.S. Through the acquisition of Zeversolar, SMA also acquired a development team in China, which, in addition to product development for Zeversolar, also supports the initiatives aimed at reducing material costs in Germany. Total research and development expenses before the capitalization of development projects amounted to €102.5 million (2012: €108.1 million). This means SMA invested 11.0% of sales in the development of new products in the fiscal year (2012: 7.4%). Scheduled depreciation of capitalized and in-process development projects, reported under production costs, amounted to €14.9 million in 2013 (2012: €9.4 million).



In the 2013 fiscal year, the SMA Group had 1,024 employees (not including temporary employees) in research and development (2012: 1,041 employees). Material costs of €5.1 million were slightly down on the previous year (2012: €6.4 million). As a result of further investments in our Test Center, depreciation and amortization increased to €6.2 million (2012: €4.9 million). At €32.5 million, other expenses was at the same level as the previous year (2012: €32.5 million). Other expenses include infrastructure costs, costs of development collaborations and costs of measures to protect intellectual property. The rise in capitalized development projects reflects the enormous amount of activity in the development of new devices.

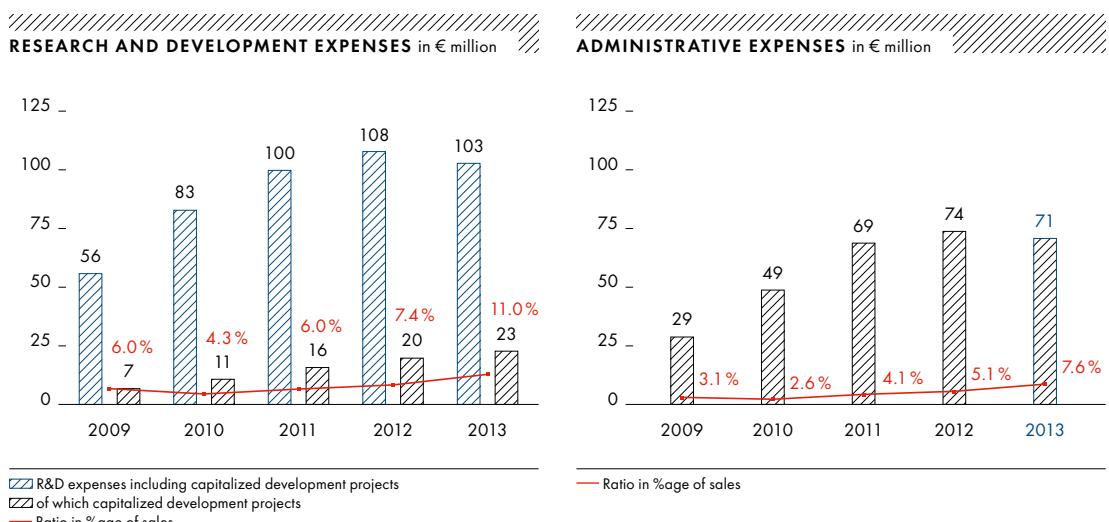
Administrative expenses in the fiscal year totaled €70.7 million (2012: €74.4 million). As a result of the personnel adjustments in Germany, SMA adjusted the administrative structures to the lower sales level. Personnel costs fell by 18.4% to €39.8 million as a result of the reduction in the number of employees and various personnel measures. The operating cost savings achieved were more than offset by the restructuring of Zeversolar and the associated costs. Other administrative expenses increased by 21.0% to €29.3 million (2012: €24.2 million). The ratio of administrative expenses to sales was 7.6% in 2013 (2012: 5.1%).

The balance of other operating income and expenses totaled €-24.6 million in 2013 (2012: €-10.4 million). This includes the costs relating to the staff reduction measures amounting to €25.1 million. The effects of foreign currency valuation and the impairment losses on receivables and miscellaneous expenses and income were also reported under this heading.

In a difficult overall market, SMA posted an operating loss before interest and taxes (EBIT) of €-89.1 million (2012: €102.0 million). At -9.6%, the EBIT margin is below the previous year's figure of 7.0%. The savings made to material costs, personnel costs and operating expenses cannot compensate for the particular effect on results caused by the declining volumes in Europe. The expenses relating to the staff reduction measures also negatively impact the operating result.

#### FINANCIAL RESULT

The financial result worsened in 2013 due to a €0.3 million increase in financial expenses (2012: €2.7 million). This was caused by interest expenses for loans, which were assumed through the acquisition of Zeversolar. Financial income rose in 2013 to €5.9 million (2012: €4.8 million). Financial income is positively affected by the subsequent



measurement through profit or loss of the written put option amounting to €1.5 million. At the same time, interest income declined on account of the lower market interest rate. Financial expenses rose to €5.5 million (2012: €2.1 million), which was primarily caused by a €2.7 million increase in interest expenses. Securities held on the reporting date also decreased, as a result of the low valuation of financial expenses amounting to €1.0 million (2012: €0.4 million).

Earnings before interest, taxes, depreciation and amortization (EBITDA) of €–5.5 million resulted in an EBITDA margin of –0.6% (2012: 11.7%). SMA achieved a return on sales (EBT in relation to sales) of –9.5% (2012: 7.2%). The return on equity after taxes (consolidated net result in relation to average equity in the reporting period) was –8.7% in the reporting year (2012: 9.3%); the return on assets after taxes (consolidated net result in relation to average total assets in the reporting period) was –5.2% (2012: 5.6%).

#### **MULTI PERIOD OVERVIEW OF RESULTS OF OPERATIONS**

in %	2013	2012	2011	2010	2009
EBIT margin	–9.6	7.0	14.3	26.9	24.4
EBITDA margin	–0.6	11.7	17.3	28.5	26.2
EBT margin (return on sales)	–9.5	7.2	14.5	27.0	24.9
Return on equity after taxes	–8.7	9.3	21.9	64.3	46.8
Return on assets (after taxes)	–5.2	5.6	12.7	37.1	27.1

## Value Added

### **LOW CAPITAL INTENSITY CLEARLY EMERGES FROM THE VALUE ADDED STATEMENT**

The value added statement shows the overall performance of the SMA Group minus intermediate input. Gross value added defines the material expenses, changes in inventories and other expenses as intermediate input. When determining net value added, depreciations are also considered as intermediate input. The distribution statement shows the share of those participating in the value added process.

In the 2013 fiscal year, net value added was €210.8 million (2012: €439.3 million). The decrease is mainly due to reduced sales. This can be attributed to the decline in volumes as a result of the subsidy cuts in Europe and the decrease in inverter prices. Other expenses were not reduced in proportion to sales. The increase in depreciation and amortization is mainly due to increased depreciation charges for development projects. A significantly higher share of 139.5% of net value added was attributable to SMA employees in comparison with the previous year (2012: 75.7%), although the absolute amount was €38.5 million lower than in the previous year. This also includes the costs relating to the voluntary severance program amounting to €25.1 million. The negative result in the reporting period is also reflected in taxes paid to the government and the payout to the shareholders. The proportion of net value added levied by the government has decreased to –10.1% (2012: 6.7%). In light of the negative result for the 2013 fiscal year, the value added statement does not prescribe a dividend payout. The shareholders' share of net value added is therefore 0% (2012: 4.7%).

**VALUE ADDED STATEMENT**

	<b>2013 in € million</b>	<b>2013 in %</b>	<b>2012 in € million</b>	<b>2012 in %</b>	<b>Change in %</b>
Sales	932.5	92.0	1,463.4	94.7	
Financial income	5.9	0.6	4.8	0.3	
Other income	47.7	4.7	52.6	3.4	
Own work capitalized	27.5	2.7	24.9	1.6	
<b>Company performance</b>	<b>1,013.6</b>	<b>100.0</b>	<b>1,545.7</b>	<b>100.0</b>	<b>-34.4</b>
Material expenses	522.1	51.5	810.7	52.4	
Changes in inventories	6.1	0.6	-14.7	-1.0	
Other expenses	191.1	18.8	240.5	15.6	
<b>Prepayments</b>	<b>719.2</b>	<b>70.9</b>	<b>1,036.5</b>	<b>67.0</b>	<b>-30.6</b>
<b>Gross value added</b>	<b>294.4</b>	<b>29.0</b>	<b>509.2</b>	<b>33.0</b>	<b>-42.2</b>
Depreciation and amortization	83.6	8.2	69.9	4.5	
<b>Net value added</b>	<b>210.8</b>	<b>20.8</b>	<b>439.3</b>	<b>28.5</b>	<b>-52.0</b>
<b>Distribution statement –</b>					
Employees	294.0	139.5	332.5	75.7	-11.6
Lenders	5.5	2.6	2.1	0.5	161.9
Government	-21.9	-10.4	29.6	6.7	-174.0
Shareholders	0.0	0	20.8	4.7	-100.0
SMA Group	-66.8	-31.6	54.3	12.4	-223.1
<b>Net value added</b>	<b>210.8</b>	<b>100.0</b>	<b>439.3</b>	<b>100.0</b>	<b>-52.0</b>

## Financial Position

### Principles and Objectives of Financial Management

The SMA Group maintains a strong financial basis. This allows SMA to take constant advantage of opportunities that arise in the photovoltaic market flexibly and independently from banks and credit institutions.

Our financial management is adjusted to both the short- and medium-term requirements of our operative business and to our long-term business strategy. The objective of our financial management is to retain sufficient liquidity reserves. Particularly in a growth industry, where development is still determined by political conditions, our conservatively oriented financial management is of great value. With our strong financial basis, we can bypass short-term fluctuations and benefit from the long-term positive prospects of photovoltaics.

Responsibility for financing and liquidity control in the Group lies with the Corporate Treasury department. The structure- and process-oriented organization of the Corporate Treasury is designed to deliver professional financial management and guarantee adherence to prevailing Group-wide guidelines. Further tasks are the strategic orientation of customer credit management and the Group's insurance business.

Inflows of funds from our current business activities constitute our most important source of financing. The Corporate Treasury controls cash holdings centrally unless restrictions in the movement of capital in any individual country prevent this from being done. The Corporate Treasury also invests the cash holdings and in so doing, the bank partners selected must comply with strict creditworthiness criteria. We treat counterparty risks related to supplier credits granted to our customers according to supply volumes and specific risks; the most important indicator in this respect is provided by the customer's payment practices vis-à-vis SMA.

We recognize market risks that might jeopardize the results of operations – above all currency risks – in a systematic fashion and preclude such risks through hedging operations, provided this is economically expedient.

## Financing Analysis

Through its acquisition of Zevversolar, SMA also assumed the existing loans of its companies amounting to €31.8 million. As part of the restructuring program at Zevversolar, SMA started to restructure these financial liabilities. Further loans amounting to €20.3 million were taken up here to fund business operations and €11.0 million was paid. The level of financial liabilities, which was €35.6 million at the end of 2012, increased to €73.4 million at the end of 2013.

Most of the provisions set aside by the SMA Group are for warranty obligations from our various product families. Other financial liabilities comprise obligations to employees related to vacation and flexitime commitments and outstanding payments related to the voluntary severance program and obligations to customers related to concluded bonus agreements.

Sufficient credit lines for current business were available from the five core banks. Equity decreased by €96.3 million to €724.4 million compared with December 31, 2012. The continued high equity ratio of 57.5% (2012: 61.8%) underscor the solidity of the balance sheet structure.

## Liquidity Analysis

### **SMA GENERATES POSITIVE GROSS CASH FLOW**

In the reporting period, gross cash flow of the SMA Group amounted to €11.2 million, considerably below the figure of the previous year (2012: €165.8 million). The decline is primarily attributable to strongly depressed consolidated earnings year-on-year. The change in provisions is primarily a result of the volume-related lower transfers to warranty provisions. Gross cash flow is calculated by considering earnings before income taxes and the financial result, adjusted for interest payments received, depreciation and amortization, changes in provisions, profit/loss from the disposal of non-current asset and other non-cash expenses/income received minus interests paid and income taxes paid.

Net cash flow from operating activities amounted to €-2.4 million in the fiscal year compared with the previous year's figure of €116.1 million. This result is a success in light of the severe slump in earnings due to the decline in volumes and sales. The almost break-even result is primarily attributable to the success in optimizing net working capital.

Net cash flow from investing activities amounted to €34.4 million in the reporting period (2012: €-260.1 million). Investments in fixed assets and intangible assets were decreased dramatically year-on-year and adapted to the changed conditions. A total of €22.1 million was invested in the acquisition of Zeversolar. As in previous years, SMA invested free financial resources in time deposits with a term to maturity of more than three months.

In 2013, a significant item in the net cash flow from financing activities amounting to €-16.4 million (2012: €-43.2 million) was SMA Solar Technology AG's dividend payout of €20.8 million and the debt restructuring activities within the restructuring of Zeversolar. An additional amount of €5.0 million is included for the acquisition of further shares in Zeversolar.

Cash and cash equivalents amounting to €192.4 million (December 31, 2012: €185.3 million) include cash in hand, cash held at banks and short-term deposits with an original term to maturity of less than three months. With time deposits with a term to maturity of more than three months and fixed-interest-bearing securities as well as interest-bearing financial liabilities, this resulted in net cash of €308.1 million (December 31, 2012: 446.3 million). This means that SMA continues to have excellent liquidity reserves.

#### MULTI PERIOD OVERVIEW OF THE FINANCIAL POSITION SMA GROUP

in € million	2013	2012	2011	2010	2009
Shareholders' equity	724.4	820.7	789.3	728.4	407.6
Equity ratio in %	57.5	61.8	57.4	58.2	56.7
Non-current liabilities	287.0	263.6	241.1	167.2	95.1
Current liabilities	248.5	244.4	343.9	355.8	215.9
Share of non-current provisions in total assets in %	8.1	8.5	7.9	6.4	5.7
Financial liabilities (incl. finance lease liabilities)	73.4	35.6	33.9	21.2	20.2
Net cash	308.1	446.3	473.3	523.4	344.8
Net working capital	247.6	268.0	281.7	284.6	98.6
Net cash flow from operating activities	-2.4	116.1	238.9	386.3	221.5
Net cash flow from investing activities	34.4	-260.1	-129.1	-210.7	-201.5
Net cash flow from financing activities	-16.4	-43.2	-91.4	-46.8	-36.1

To Our Shareholders

Corporate Governance

**Consolidated Management Report** —— 2013 Fiscal Year

Consolidated Financial Statements

Other Information

## Investment Analysis

In the past fiscal year, SMA has considerably reduced its investment in fixed assets and adapted to the changed conditions in the solar industry.

In 2013, the volume of investment in fixed and intangible assets totaled €53.2 million (2012: €100.2 million) and was thus significantly lower than the previous year. This equates to an investment ratio in relation to sales of 5.7% (2012: 6.8%).

In the 2013 fiscal year, €25.2 million was invested in fixed assets (2012: €72.9 million). Investments in prepayments/assets under construction decreased considerably year-on-year to €21.0 million. €0.9 million went towards land and buildings.

Further investments went towards the expansion and restructuring of existing buildings at the Niestetal/Kassel headquarters. Due to intensive investing activity in recent years, the scheduled depreciation of fixed assets increased to €54.4 million from €52.3 million in the previous year.

The investments in intangible assets of €28.0 million almost exclusively went towards capitalized development work. With €29.2 million, amortization of intangible assets was clearly above the previous year's figure (2012: €17.6 million). This was due to the scheduled depreciation and a need to carry out value adjustments on capitalized development projects.

### INVESTMENTS COMPARED TO DEPRECIATIONS AND NET CASH FLOW FROM OPERATING ACTIVITIES

in € million	2013	2012	2011	2010	2009
Net cash flow from operating activities	- 2.4	116.1	238.9	386.3	221.5
Capital expenditure <sup>1</sup>	53.2	100.2	160.2	158.3	82.1
Depreciation and amortization	83.6	69.9	50.4	31.3	16.3

<sup>1</sup> See Notes sections 16 and 17, page 147 et seqq.

## Net Assets

### Analysis of the Asset Structure

As of December 31, 2013, total assets of the SMA Group fell by 5.2% to €1,259.9 million (2012: €1,328.7 million).

Non-current assets increased by €38.1 million to €558.3 million. The increase is the result of increased capitalization of deferred taxes, which have occurred due to the capitalization of taxes on current year losses. Other financial assets increased by €2.3 million to €53.4 million year-on-year.

As of December 31, 2013, net working capital decreased to €247.6 million (December 31, 2012: €268.0 million). This amounted to 26.6% of sales and thus within the range of 24% to 28% forecast by the SMA Managing Board on November 4, 2013.

Total inventories of €184.1 million as of December 31, 2013, were down on the previous year (December 31, 2012: €221.4 million). Within stock value, various effects caused changes in inventories. SMA significantly decreased inventories of raw materials, consumables and supplies to €99.7 million in the reporting period (December 31, 2012: €128.4 million). The change is due to the adjusted procurement volumes and impairment losses as an adjustment for excess inventories. Inventories of unfinished goods and work in progress remained at the same level as the previous year at €27.5 million (December 31, 2012: €27.2 million). Optimizing the procurement strategy for individual markets enabled a reduction in inventories of finished goods. On the reporting date, the inventory of finished goods and goods for resale was €56.3 million (December 31, 2012: €65.0 million).

Trade receivables amounted to €124.3 million on the reporting date (December 31, 2012: €119.3 million). Impairment losses on trade receivables amounted to €17.1 million in the year under review (December 31, 2012: €11.6 million). Due to increasing project business and internationalization, days sales outstanding rose to 48 at the end of the reporting period (December 31, 2012: 33 days).

The lower trade payables were a result of the lower procurement volumes in the second half of the year, particularly in the fourth quarter of 2013. On the reporting date, these amounted to €60.8 million (December 31, 2012: €72.7 million).

## Importance of Off-Balance Sheet Financing Instruments

The SMA Group uses lease agreements in the case of plant and office equipment. Future obligations under tenancy and lease agreements are shown in the Notes in section 29 "Obligations Under Leases and Other Financial Obligations."

See also Notes  
page 120 et. seqq.

SMA is not involved in any other off-balance-sheet transactions that might have a significant impact on the financial position, the results of operations, investment expenditure, net assets or capital expenditure – neither now nor in the future.

### MULTI PERIOD OVERVIEW OF NET ASSETS SMA GROUP

in € million	2013	2012	2011	2010	2009
Goodwill, intangible assets and fixed assets	441.1	443.8	417.7	297.7	164.5
Financial assets and long-term securities (incl. deposits with a total term to maturity of more than three months)	185.1	295.5	135.6	190.0	140.0
Cash and cash equivalents (incl. deposits with a total term to maturity of less than three months)	192.4	185.3	371.1	354.1	225.0

## SMA Solar Technology AG (Notes Based on the German Commercial Code - HGB)

In addition to reporting on the SMA Group, we also outline the business development of SMA Solar Technology AG (SMA AG) as below.

SMA AG is the parent company of the SMA Group and has its headquarters in Niestetal, Germany. Its primary business operations include the development, production and sale of PV inverters, transformers, chokes as well as monitoring and energy management systems for PV systems. In addition to its own operative business, SMA AG also performs a function as a holding company for the SMA Group. All key management mechanisms of SMA AG are oriented to the SMA Group.

The Annual Financial Statement of SMA AG is prepared according to German Commercial Law (HGB). The Consolidated Financial Statement follows International Financial Reporting Standards (IFRS). This leads to differences between the accounting policies. These mainly relate to intangible assets, the measurement of inventories, provisions, financial instruments, accrual items and deferred taxes.

### Results of Operations

#### **SMA AG INCOME STATEMENT IN ACCORDANCE WITH HGB (ABSTRACT)**

in €'000	2013	2012
<b>Sales</b>	<b>706,895</b>	<b>1,177,409</b>
Increase or decrease in finished goods and work in progress	- 12,817	10,242
	<b>694,078</b>	<b>1,187,651</b>
Other own work capitalized	4,677	4,610
Other operating income	79,205	62,298
Material expenses	422,549	707,951
Personnel expenses	208,257	238,335
Amortization and depreciation of intangible and fixed assets	50,659	50,229
Other operating expenses	187,397	213,303
Financial Result	16,220	28,004
<b>Net operating income (loss)</b>	<b>- 74,682</b>	<b>72,745</b>
Taxes on income	255	7,522
Other taxes	979	253
<b>Annual net income/net loss</b>	<b>- 75,916</b>	<b>64,970</b>
Accumulated income/losses brought forward	568,316	524,166
<b>Profit available for distribution</b>	<b>492,400</b>	<b>589,136</b>

PV inverters from SMA with a total capacity of 3.9 GW were sold in 2013 (2012: 5.7 GW). Of this, 0.4 GW (2012: 0.3 GW) were attributable to associated companies. External **sales** of PV inverters for PV rooftop systems were significantly down on the previous year's level, declining by 48.7% to €485.1 million (2012: €945.8 million). The drop in sales is a result of the massive cuts to solar subsidies in Europe. Positive demand came in particular from Japan and Thailand.

Sales of large-scale solar projects amounted to €223.2 million (2012: €246.0 million). The trend toward large-scale solar projects continued.

Sales in the Service division totaled €21.1 million (2012: €24.5 million). Aside from services with a charge, sales were generated from the commissioning of PV systems and repair charges.

The **net operating income (loss)** of SMA AG totaled €-74.7 million (2012: €72.7 million).

In the 2013 fiscal year, SMA AG registered a loss of €-75.9 million (2012: annual net income of €65.0 million).

**Other operating income** amounted to €79.2 million (2012: €62.3 million). Income from foreign currency gains totaled €4.6 million in the fiscal year (2012: €7.6 million).

**Material expenses** fell by €285.4 million year-on-year (40%) to €422.5 million. The significant decrease compared with the previous year is primarily attributable to the lower sales volumes.

**Personnel expenses** for the fiscal year decreased by 12.6% to €208.3 million. This decrease corresponds to the decrease in the average number of employees (not including temporary employees, trainees and interns) by 381 to 3,668 employees. Personnel expenses include an amount of €25.1 million for personnel reduction measures. The various other personnel measures had an offsetting effect.

**Amortization and depreciation** increased by €0.4 million from €50.2 million in the 2012 fiscal year to €50.6 million in the 2013 fiscal year. The very slight increase against the previous year is due to lower investing activities.

The decline in **other operating expenses** from €213.3 million in the previous year to €187.4 million in the 2013 fiscal year is primarily a result of reduced expenditure for services, freight, packaging and rent. Expenses related to foreign currency valuation were €9.0 million for the fiscal year (2012: €8.2 million).

The **financial result** amounted to €16.2 million (2012: €28.0 million). The decline was primarily due to €10.3 million lower income from equity investments.

**Taxes on income** declined in relation to pre-tax income by €7.3 million.

After tax, the Company reported an **annual net loss** of €-75.9 million in 2013 compared with an annual net income of €65.0 million in the past fiscal year.

To Our Shareholders

Corporate Governance

**Consolidated Management Report** —— 2013 Fiscal Year

Consolidated Financial Statements

Other Information

## Net Assets and Financial Position

### SMA AG BALANCE SHEET IN ACCORDANCE WITH HGB (ABSTRACT)

	in €'000	12/31/2013	12/31/2012
<b>ASSETS</b>			
<b>A. Fixed assets</b>			
I. Intangible assets	17,785	19,563	
II. Fixed assets	279,569	312,242	
III. Financial assets	121,093	70,048	
	<b>418,447</b>	<b>401,853</b>	
<b>B. Current assets</b>			
I. Inventories	101,992	153,801	
II. Receivables and other assets	143,375	134,913	
III. Securities	104,276	103,184	
IV. Cash and cash equivalents	228,058	338,383	
	<b>577,701</b>	<b>730,281</b>	
<b>C. Prepaid expenses and deferred charges</b>	<b>766</b>	522	
	<b>996,914</b>	1,132,656	
<b>LIABILITIES</b>			
<b>A. Shareholders' equity</b>			
I. Share capital	34,700	34,700	
II. Capital reserves	124,200	124,200	
III. Retained earnings			
1. Statutory reserve	400	400	
2. Other retained earnings	3,136	3,136	
IV. Profit available for distribution	492,400	589,136	
	<b>654,836</b>	<b>751,572</b>	
<b>B. Special account with reserve characteristics</b>	<b>245</b>	337	
<b>C. Provisions</b>	<b>178,729</b>	<b>221,706</b>	
<b>D. Trade payables</b>	<b>61,022</b>	<b>71,351</b>	
<b>E. Accrued liabilities</b>	<b>102,082</b>	<b>87,690</b>	
	<b>996,914</b>	1,132,656	

As of December 31, 2013, **total assets** of SMA AG decreased by €135.7 million to €996.9 million (2012: €1,132.7 million).

**Fixed assets** increased by €16.6 million to €418.4 million. The increase can largely be attributed to the rise in financial assets through the acquisition of Jiangsu Zevversolar New Energy Co., Ltd.

As of December 31, 2013, total **inventories** of €102.0 million were down on the previous year's level (2012: €153.8 million). Within stock value, various effects caused changes in inventories. SMA reduced inventories of raw materials, consumables and supplies from €92.6 million to €53.9 million. Inventories of unfinished goods decreased slightly to €21.1 million (2012: €21.6 million). Inventories of finished goods decreased to €26.9 million (2012: €39.2 million). This figure includes impairment losses amounting to €17.6 million. These essentially related to raw materials, consumables and supplies (€13.7 million).

**Trade receivables** totaled €49.4 million on the reporting date (2012: €70.4 million). Receivables of €11.0 million were written down.

**Cash and cash equivalents and securities** fell by 24.7% to €332.3 million (2012: €441.6 million). Liquidity control at SMA AG is based on the financial strategy of the SMA Group.

In 2013, **equity** decreased, as a result of earnings and the dividend payout by €96.7 million to €654.8 million, compared with December 31, 2012. The equity ratio is 65.7% (2012: 66.4%).

The **provisions** of SMA AG largely comprise provisions for warranty obligations for our various product families and personnel provisions.

**Trade payables** declined year-on-year by €22.1 million based on business performance. On the reporting date, these were at €19.8 million (2012: €41.5 million).

**Accrued liabilities** of €102.1 million (2012: €87.7 million) were reported for deferred sales for extended warranties sold for subsequent years.

#### RISK AND OPPORTUNITIES

The business performance of SMA AG is essentially exposed to the same risks and opportunities as the SMA Group. SMA AG also partakes in the risks affecting its investments and subsidiary companies proportionate to its respective holding. The risks are presented in the Risk Report. The relationships with our investments can also result in negative effects from statutory or contractual provisions for liabilities (particularly financing).

#### OUTLOOK

On account of SMA AG's interdependence with its Group companies and its importance within the Group, please refer to our statements in the Forecast Report for the SMA Group, which also reflect the expectations for the parent company in particular.

## Overall Statement by the Managing Board on the Trend of Business 2013

In the 2013 fiscal year, the SMA Group performed in line with the expectations that were adjusted in November. With sales of €932.5 million, SMA is at the lower end of its sales forecast. EBIT amounted to €-89.1 million (-9.6% EBIT margin) and was thus also within the range forecast. The operating result includes one-time items for the personnel measures started in July 2013 amounting to €25.1 million as well as impairment losses of €41.0 million.

Despite the considerable drop in earnings, the SMA Group still maintains an extremely solid financial basis. At the end of the reporting year, the equity ratio stood at just under 58% with net cash of about €308 million. SMA thus has the financial strength to absorb short-term market changes and achieve its strategic goals under its own power.

The development of business was once again marked by high dynamism in the various photovoltaic markets and subsegments. Particularly in Europe, the drastic cuts to remuneration for solar electricity led to a decline in demand, starting in the second half of 2012 and continuing more strongly than expected in 2013. Strong growth stimuli for SMA emanated from the foreign photovoltaic market such as Japan. The U.S., Indian, Thai, Australian and South African markets also developed positively for SMA. New sales markets included South America and the Near East. Despite the positive development in markets outside Europe and the success of ongoing measures to increase productivity and develop new products and services, SMA was unable to compensate for the strong decline in demand in Europe, and particularly in Germany, in such a short period of time. In 2013, inverter output sold totaled 5.4 GW, about 25% down on the previous year's figure (2012: 7.2 GW). One-time items, such as the voluntary employee severance program announced in the second half of the year and impairment losses, also negatively impacted SMA's earnings situation.

The regional shift in demand also impacted the sales figures for individual products. While in established European photovoltaic markets, which saw a fall in demand, SMA products for small- and medium-sized solar applications (residential & commercial) are still a focus; demand in the growth regions was determined rather by large-scale solar projects and industrial applications (commercial & industrial). This development had a material impact on the earnings situation of the Medium Power Solutions (MPS) and Power Plant Solutions (PPS) divisions. While business in the MPS division experienced a marked decline, PPS sold almost the same inverter capacity in 2013 as in the previous year. At the same time, PPS achieved an EBIT margin of 9.5%. The PPS division's success is primarily due to our strategic action areas. However, our initiatives to reduce costs had an impact as well.

### Acquisition of Zeversolar Complete

The necessary restructuring of Zeversolar also had a negative impact on earnings. In March 2013, SMA acquired the majority shareholding in the Chinese inverter manufacturer Jiangsu Zeversolar New Energy Co., Ltd. (Zeversolar). Through further share purchases and a capital increase, SMA increased its shareholding to a total of 98.81% in the fall of 2013. With the acquisition of Zeversolar, SMA has secured itself a strong position in the world's largest photovoltaic market of China, which it will start to benefit from as early as in 2014.

To integrate Zeversolar in the SMA Group and position ourselves in the global photovoltaic market, we are pursuing a clearly defined two-brand strategy. Whereas we will continue to position ourselves as a technology and innovation leader with SMA and provide system solutions with superior customer benefits and a comprehensive range of services, Zeversolar operates as an independent brand with specific unique selling propositions. Hence, Zever-

solar – in a way that is clearly distinguished from the SMA product portfolio – supplies the rapidly growing Chinese market and what is known as the budget market (low-price segment) abroad, for which SMA has no products in its range. Zeversolar devices offer functions that are precisely tailored to customer requirements and come with a more limited scope of services.

## Intersolar AWARD for Sunny Boy Smart Energy

In the 2013 fiscal year, we presented numerous product innovations at international leading trade fairs. For example at Intersolar Europe 2013 in Munich, we presented our integrated system concept SMA Smart Home. This solution is based on the wall-mountable Sunny Boy Smart Energy inverter and additional system components such as the Sunny Home Manager, the intelligent control center of the complete system. With the SMA Smart Home, households can automatically attune power consumption to solar power generation without compromising on convenience and thus increase their self-consumption to up to 50%. Our concept also convinced the Intersolar AWARD jury, which named the Sunny Boy Smart Energy as the best product in its "Photovoltaics" category.

## Complete System Service Makes a Successful Start

In 2013, we also managed to expand our service activities and thus further refine one of our most important unique selling propositions. Alongside comprehensive after-sales services at home and abroad, SMA Service successfully established itself as a universal service provider for the necessary 50.2-Hz modification of PV systems in Germany. As such, SMA supports electric utility companies in data collection and deals with the entire modification process. Over the course of the year, we already converted more than 7,000 systems to 50.2 Hz. At the end of 2013, SMA Service achieved another success, with E.ON Mitte commissioning SMA to perform the 50.2-Hz-modification of approximately 13,000 PV systems.

Alongside its previous range of primary services, SMA successfully positioned itself on the market in 2013 with the complete system service for large-scale PV power plants. Starting 2014, SMA America will take on the operational management of a 100-MW PV system in Ontario, Canada. The 10-year service contract is SMA's largest operation and maintenance contract worldwide so far. Sales in the division increased by about 15% overall.

## Reference Projects in Key Markets

Other successes for SMA in the past fiscal year included a few major commissioning projects for large-scale PV power plants. In February, a 40-MW PV power plant was connected to the grid in Rajasthan, India. The plant is equipped with Sunny Central 800CP inverters from SMA. The project involves India's largest PV power plant to date, which was built as part of the state program "National Solar Mission."

Wp,  
Grid Management  
See also Glossary  
page 172 et. seqq. In April, Europe's largest thin film PV power plant to date in Templin, Brandenburg, was put into operation. The modern grid management functions of our Sunny Central inverters are an important part of the **128-MWp** project and are instrumental for the reliable supply of electricity to Greater Berlin from renewable energies.

Kagoshima in South Japan saw the country's largest PV power plant to date connected to the grid in November. The 70-MW system is equipped with 140 Sunny Central 500CP-JP type central inverters and 1,260 string monitors from SMA. SMA achieved a significant development accomplishment in Japan with the certification of the Sunny Tripower 10000 TLEE-JP. This makes SMA the first international PV inverter manufacturer to fulfill the demanding requirements for certification by JET<sup>1</sup> and means that it is now able to offer a JET-certified three-phase device in Japan. In the U.S., we successfully launched the Sunny Tripower TL-US and the Sunny Boy 240 US micro inverter, which are specifically tailored to U.S. requirements for medium to large PV systems, allowing us to round off our U.S. product portfolio.

In the area of photovoltaic diesel hybrid applications, SMA delivered more than 15 projects all over the globe in 2013. This has enabled us to position ourselves clearly in an important future market. The first photovoltaic diesel hybrid system in the South Pacific equipped with the SMA Fuel Save Solution was put into operation on the Tongan island of Vava'u toward the end of the year. During the midday hours, the photovoltaic diesel hybrid system covers up to 70% of the total electricity demand on Vava'u and fulfills about 13% of the island's total energy demand for a year.

## Technology Leadership Maintained

As a technology leader, we offer our customers system solutions with superior benefits and a complete range of services. These unique selling propositions allow us to achieve fair prices for products and services on the market. With our technological innovations, we are also an important driver of the global energy transition. At the end of the fiscal year, SMA employed more than 1,000 employees worldwide in the area of research and development. In the past three years, we have invested over €300 million in research and development, filed a number of new patents and set new standards for the photovoltaics industry in all fields of application from PV inverters to energy management systems.

We are continuing our focus on new technologies and system technology. By integrating storage solutions in the intelligent energy management system, we intend to give the photovoltaics industry fresh impetus and drive forward decentralized and independent energy supply in households. In this, we also pursue forward-looking projects such as the intelligent grid connection of electric vehicles as temporary storage units for solar electricity. We are also continuing with the early introduction of our internationalization strategy. It is already beginning to show increasing benefits, with SMA generating 71.0% of its sales abroad in the 2013 fiscal year (2012: 56.3%). We will continue to rigorously drive forward this strategy to continue to benefit early on from growth in emerging photovoltaic markets.

## Voluntary Employee Program Agreed

Unfortunately, we had to lose a number of our employees in 2013 on account of the significant drop in both demand and sales. We discussed the necessary measures intensively with the Supervisory Board and the Works Council beforehand and worked together to find solutions for their implementation. At the heart of the socially acceptable package of measures we agreed was a voluntary program for the conclusion of termination agreements. Over 500 employees signed a termination agreement within the specified time frame. In order to continue to safeguard SMA's innovative strength and guarantee the stability of the IT systems, development and IT specialists were exempted from the adjustment measures.

<sup>1</sup> Japan Electrical Safety & Environmental Technology Laboratories

# Supplementary Report

## Significant Events since the Beginning of the 2014 Fiscal Year

There have been no significant changes in the Company's situation or market environment since the beginning of the 2014 fiscal year.

## Other Elements of the Consolidated Management Report

The following sections are elements of the Consolidated Management Report:

- » The Corporate Governance Statement in accordance with Section 289a HGB starting page 27
- » Company-Relevant Statements and Explanations starting page 27
- » The Remuneration Report starting page 29

# Risk and Opportunities Report

## Risk and Opportunities Management

### Risk Management System

In the context of its global business activity, the SMA Group is exposed to a range of risks. Although SMA must accept risks to a certain extent, which can impair target attainment in the implementation of strategies in the business units, suitable countermeasures can be used to control and influence them. In addition, with regard to opportunity management, a balanced opportunity/risk ratio is taken as a basis. Major potential opportunities are described in more detail below, each in connection with the corresponding individual risks, and are listed in the Forecast Report. The risk management system helps identify risks at an early stage and communicate them in an understandable manner. The system is oriented toward the COSO Enterprise Risk Management – Integrated Framework, which is today the best-known international standard for establishing and systematically developing a Company-wide risk management system. The framework was published in 2004 in order to allow the integration of risk management systems and the Internal Control System. That includes not only strategic risks (such as products, technologies, markets, customers and changes in environmental factors), but also all downstream risks on the operational and procedural level. As an integrated approach, it covers everything that occurs in the Company and combines corporate goals and business processes, organizational levels, risk management and the internal controls. COSO ERM serves as an aid for formulating a risk strategy and for establishing and operating systematic risk management in order to identify potential risks at an early stage and thus manage them proactively and to initiate suitable measures for their elimination. A software application is used throughout the Group to map risks and thus to make recognition easier for risk officers and reporting easier for Risk Management and to meet documentation requirements.

### Integration into the existing structure and process-oriented organization

The SMA Managing Board bears the overall responsibility for effective risk and opportunities management to ensure that all risks and opportunities are considered comprehensively and uniformly. The Supervisory Board is responsible for monitoring the effectiveness of the Group-wide risk management system. In order for this task to be performed, the Supervisory Board's Audit Committee processes the information for the full Supervisory Board. The task of implementing and developing the system further was transferred to the Group risk management function, which is responsible for the centrally controlled risk and opportunities management process.

### Risks Identification

A risk is defined by SMA as an event that ensues from a decision taken by Management (strategic), an action (operative) or external circumstances and – if the risk transpires – results in a negative deviation from the planned earnings. The aim of risk management is to identify risks above a defined threshold as early as possible in order to limit the potential impact with suitable measures. In addition, the Company must accept risks to a certain extent in order to utilize opportunities.

The Managing Board laid down the objectives of risk management in terms of the risk strategy and the principles of organization, risk analysis and risk communication in a risk handbook that applies to the entire SMA Group and is available to all employees. It contains principles for dealing with risks; requirements, value limits and uniform processes of regular and immediate reporting are bindingly defined.

Responsibility for identifying risks lies primarily with the corresponding risk officer. The inclusion of employees in their areas of expertise ensures active identification, analysis and measurement, and creates the appropriate transparency in a potential risk situation. To support them, a catalog of potential risks is created to guarantee the recognition of all risks to the Company as a going concern; common risk management tools are used to identify risks efficiently.

## Risk Assessment

In the quarterly risk identification process, the risk officers determine the risk situation in a standardized bottom-up process. The relevant risk officer, by compiling a risk analysis, assesses the probability of a risk occurring and the amount of damage that might be caused by any risks that are detected. The likelihood of the risk transpiring is classified according to the evaluation categories "unlikely, possible, likely and very likely." The effect of risks on the Group's earnings is measured according to the categories "slight, medium, high and very high." Qualitative and quantitative assessments are used uniformly throughout the company; risk calculation methods like sensitivity analyses are not yet used.

Gross and net risk values are to be determined for every individual risk within an observation period of two years. Gross risk value represents the largest possible negative financial effect before measures are taken to influence the risk. Net risk value accounts for the implementation of risk-reduction activities. This shows the influence the counter-measures and possible development scenarios may have. Changes in framework conditions between reporting dates may result in a reevaluation of individual risks.

## Risk Management

The objective of risk management is to actively influence the issues identified, taking into account the corporate strategy. The aim is to influence the corresponding potential according to specific configuration with individual instruments; this involves large parts of the Company with different emphases. Risks are identified by an early-warning system so that they can then be controlled, e.g., through damage prevention or damage limitation actions, the formation of sufficient security reserves or the transfer of individual risks to third parties, e.g., insurance companies. With regard to risk management, these measures and their implementation are subject to regular monitoring and adjustment.

## Continuous Risk Monitoring and Reporting

The development of residual risks is monitored regularly, using suitable early-warning tools and indicators. If a risk increases, management must be notified in good time in order to be able to take countermeasures. Our Risk Management System is designed to ensure that the relevant employees can identify risks early on and report them to the responsible decision-makers in the Company. SMA can also recognize short-term deviations from business objectives through detailed and timely reports submitted by the Accounting department. Depending on the degree of urgency, reporting takes place on an ad hoc, monthly or quarterly basis. Further methods for detecting risks are the evaluation of customer and supplier information, systematic market and competitive analyses and monitoring of economic, legal and subsidy-related framework conditions in target markets.

Under the terms of the risk analysis, subsidiaries, departments and units report in qualitative form, provided the individual risks are classified at least as "high," both to the central risk manager and to the Managing Board according to defined risk categories for further prioritization and aggregation. Apart from quarterly risk notifications, immediate reporting duties have been laid down for all risk officers, who must report to the Managing Board if the risk situation changes significantly. Significant reported risks and countermeasures from all divisions and adjustments to the risk management process are addressed separately in regular meetings of the Risk Committee. In addition, the Supervisory Board is informed of significant risks with a considerable impact and newly identified issues that exceed defined value limits every six months. The Audit Committee is also regularly informed of the status of the risk management system and its implementation in the Company.

**See also page 92 et seqq.** The significant individual risks on the reporting date are shown on page 92.

## Opportunities Management

Making use of existing opportunities is one of the core tasks of each and every enterprise. This can pertain to both internal and external potential. As part of our risk and opportunity management approach, which is integrated into the company organization, we regularly identify and assess opportunities arising from our business activities and act accordingly. Identifying these opportunities early on and regularly is above all the task of management but also involves all the employees. We assess opportunities to the best of our knowledge, basing our assessment on assumptions relating to market development, the market potential of technology and solutions and the expected development of customer demand and prices. In this respect, the Group-wide planning process and the annual strategy meeting, held by the Managing Board and attended by all Division Heads, Vice Presidents and General Managers of the subsidiaries which lead to strategy reports for all areas and subsidiaries, are significant cornerstones. We employ continuous market and competitive analysis, systematic knowledge management, an open information policy within the Group and the promotion of creative employees in order to detect our potential for utilizing opportunities. In doing so, we are aiming for a balanced relation between opportunities and risks. The software application used has so far only recorded risks; from 2014, the system will also support opportunity recognition, assessment and reporting.

**See also page 104 et seqq.** More explanations on the opportunities during the next fiscal year may be found by referring to the Forecast Report.

## Compliance Management System

In view of changing markets and increasing internationalization, in 2013, as in previous years, SMA continuously developed its Compliance Management System and strengthened its compliance organization. Within the SMA Group, the responsibility for managing the compliance organization lies with the Group Compliance department based in Niestetal. The Group Compliance department is responsible for the global implementation of the Compliance Management System to ensure adherence to legislation and guidelines in the Company.

The Supervisory Board's Audit Committee receives a report from the Group Compliance department once a year to convince itself of the effectiveness of the Compliance Management System. The Compliance Steering Committee, consisting of the Chief Executive Officer, the Chief Financial and Human Resources Officer, and the Heads of the Legal & Compliance and Internal Auditing & Risk Management business areas, reviews and decides upon compliance issues of fundamental importance.

Projects aimed at improving the Internal Control System were the focus of compliance work in 2013. Both in Sales and in Purchasing, internal controls were made more effective on the basis of continuous risk analysis. Processes and guidelines in Sales were revised in order to account for the growth in project companies and the accompanying risks. In Purchasing, the focus was on defining the roles of the units involved in the procurement process and compiling new guidelines for the placement of orders.

The Compliance Management System was also enhanced in 2013. When the Speak-Up Line, a whistle-blower system, was set up, the final missing component of the Compliance Management System was in place. The compliance organization was augmented with a Compliance Manager responsible for China.

In 2014, Group Compliance will continue to work on optimizing processes and improving the internal control systems. To fix the various measures and guidelines in the work sequences (effective implementation), which were developed in connection with the work on the Internal Control System and the development of the Compliance Management System, additional training is planned for employees particularly in Sales, Purchasing and Service.

## Internal Control System

The SMA's Group Internal Control System includes all the principles, procedures and measures designed to ensure the proper course of business activities. It is made up of systematically created organizational and technical measures and controls within the Company aimed at ensuring adherence to laws and regulations, as well as guidelines for preventing damage that might be caused by its own employees or third parties. The Managing Board is responsible for the implementation and adequacy of the Internal Control System; effectiveness is monitored by the Supervisory Board or its Audit Committee.

## Key features of the internal control and Risk Management System in relation to the (Group) Accounting Process (Section 289 (5) and Section 315 (2) No. 5 HGB)

The Internal Control System pertaining to the accounting process is part of the Overall Internal Control System, which is embedded in the Company-wide Risk Management System. It includes structures and processes designed to ensure that subject matter related to the Company and transactions are recorded, processed and recognized and subsequently incorporated into the Annual Financial Statements and Consolidated Financial Statements. The Internal Control System as it pertains to the accounting process contains the principles, processes and measures required to guarantee internal and external Group accounting and timely and reliable financial reporting.

Process-integrated and process-independent monitoring measures constitute the basis of the internal monitoring system. Automated IT process controls make up an important constituent part of these process-integrated measures. Further controls are the organizational monitoring measures, such as the four-eyes principle, the organizational separation of administration, execution, settlement and approval functions and work instructions. Furthermore, we protect the IT systems deployed wherever possible against unauthorized access by using appropriate authorization systems and access restrictions. The Supervisory Board's Audit Committee and the Internal Auditing department are incorporated into the internal monitoring system with process-independent audit activities.

The Internal Auditing department is subordinate to the Chief Executive Officer and reports directly to him and to the Supervisory Board or the Audit Committee. As part of its auditing tasks, the Internal Auditing department regularly examines the effectiveness of the Internal Control System on the basis of a risk-orientated audit plan by means of sampling and thus also checks the Internal Control and Risk Management System as it pertains to the accounting process. Alongside the Internal Auditing department, the auditor of the Annual Financial Statements also carries out an evaluation. Under the terms of his/her audit of the Financial Statements, the auditor is obliged to report any accounting-relevant risks found and any fundamental weaknesses in the Internal Control and Risk Management System to the Supervisory Board's Audit Committee. The audit of the Annual Financial Statements and Consolidated Financial Statements by the auditor and the audit of the local financial statements submitted by the major Group companies included in the scope of consolidation safeguard the basic process-independent monitoring mechanism in the accounting system.

## Risks With Regard to the (Group) Accounting Process

Important risks in the (Group's) accounting process include the possibility that the local financial statements of the Group companies included in the scope of consolidation fail to properly reflect the true results of operations, financial position and net assets due to unintentional or deliberate wrongdoing, or that publication of the Quarterly Statements and of the Annual Financial Statements is late. These risks may permanently impair the confidence of shareholders or the reputation of the SMA Group. As an integral part of the SMA Group, the Risk Management System as it pertains to Group accounting is concerned with detecting the risk of misstatements in the Group's bookkeeping as well as in external reporting. In order to ensure the Group-wide systematic early identification of risks, the SMA Group has installed a monitoring system for the early identification of risks threatening the existence of the Company in accordance with Section 91 (2) AktG, permitting – beyond the limits of statutory regulations – the prompt identification, control and monitoring of all existence-threatening and other risks. The auditor assesses the proper functioning of the early risk identification system in accordance with Section 317 (4) of the German Commercial Code. More detailed explanations of the Risk Management System are provided in the Risk and Opportunities Report.

## Regulations and Controls Designed to Ensure the Propriety of (Group) Accounting

As a reaction to changed conditions, the redesigned connection of subsidiaries is intended to make work sequences more efficient in the future and facilitate a better response to local requirements. For this purpose, administrative processes like order processing, debtor management, accounting and controlling are bundled together. On June 1, 2013, the Shared Service Center EMEA was established, which now operates globally and assists companies individually worldwide.

The internal control measures are aimed at securing proper and reliable (Group) accounting and ensuring that business transactions are fully and promptly recorded in accordance with legal provisions and the Articles of Association. They also ensure that inventory stocktaking is properly implemented and that assets and liabilities are properly recognized, measured and carried in the Annual Financial Statements and Consolidated Financial Statements. Furthermore, the regulations ensure that accounting records provide reliable and comprehensible information.

The functions of the departments that play a major role in the accounting process are clearly separated and their areas of responsibility are clearly delimited. The relevant departments are staffed with adequately trained personnel in sufficient numbers; the four-eyes principle has been defined consistently for accounting-relevant processes.

SMA constantly evaluates laws, financial reporting standards and other agreements as regards their relevance and effect on the (Group) accounting process. We communicate relevant requirements promptly to the companies in the SMA Group. The uniform IT platform, uniform Group account plan and standardized accounting processes ensure the proper and timely recording of important business transactions. There are binding rules for the additional, manual capture of business transactions.

In addition, SMA has an accounting manual that specifies the provisions on accounting in accordance with the International Financial Reporting Standards (IFRS). The accounting manual applies to all employees involved in the accounting process; the accounting provisions also apply to all external service providers involved in the accounting process. Besides general accounting principles and methods, these provisions above all include rules concerning the balance sheet, income statement, statement of comprehensive income, Notes, Management Report, cash flow statement, statement of changes in equity and segment reporting in compliance with EU legislation.

By laying down clear requirements, the accounting manual limits the degree of discretion that may be exercised by employees when recognizing, measuring and carrying assets and liabilities, and thus reduces the risk of non-uniform practices. The accounting manual also contains detailed definitions of the components of the reporting packages to be prepared by the subsidiaries. The preparation and aggregation of additional data for the preparation of the Notes and the Management Report and reporting on subsequent events takes place at Group level. At Group level, the controls to ensure the propriety and reliability of the Group accounting include the analysis and, where necessary, a correction of the reporting packages submitted by the subsidiaries. In addition, a check is carried out centrally on the financial statements submitted by the companies included in the scope of consolidation while referring to the audit reports drafted by the local auditors. Each month upon submission of the reporting

packages, the relevant employees at the subsidiaries at home and abroad and the individual divisions also confirm the propriety and completeness of each financial statement in the form of an internal declaration of completeness. The process of preparing the Consolidated Financial Statements is coordinated and monitored centrally according to a defined deadline and action plan. During this process, centralized contact persons in the Accounting and Controlling departments (help desks) support those responsible for preparing the financial statements at the subsidiaries, at home and abroad.

## The Use of IT Systems

Business transactions at SMA and at all the larger subsidiaries are primarily recorded, using ERP systems from SAP AG, Walldorf. These are protected from misuse by appropriate authorization systems and access restrictions. The authorizations granted are reviewed and amended regularly. The centralized control and monitoring of nearly all IT systems, centralized change management and regular system backups minimize not only the risk of data loss, but also the risk of failure of IT systems relevant to accounting. External service providers with their own IT systems are engaged in the case of smaller companies.

When preparing the Consolidated Financial Statements for the SMA Group, the subsidiaries prepare their respective separate financial statements in the form of standardized reporting packages. As part of web-based reporting, these reporting packages are then transferred to an IT consolidation system based on SAP SEM-BCS, therefore most manual work stages are no longer necessary. The application can be accessed via an encrypted data cable and security tokens. The data reported that pertains to the financial statements is checked on the basis of system controls. The use of the Group-wide IT consolidation system ensures that all data is recorded properly and completely and that business transactions within the Group are eliminated. All the consolidation processes required to prepare the Consolidated Financial Statements are carried out and documented within the IT consolidation system. This is where the various components of the Consolidated Financial Statements, including important data for the Notes to the Consolidated Financial Statements are prepared. In the 2013 fiscal year, the introduction of SAP R/3 in some subsidiaries allowed further standardization of the structure and, with the aid of the interfaces (IDoc) created, enabled accounting entries to be made across accounting areas, thus ensuring automated invoice posting. In the 2013 fiscal year as well, further SAP ERP introductions in some subsidiaries resulted in a continual standardization of processes. The deployment of the new General Ledger in SAP ERP Financials supports matrix consolidation and combines the data distributed across several applications in SAP ERP.

## Disclaimer

The Internal Control and Risk Management System enables risks that might otherwise prevent the Annual Financial Statements and Consolidated Financial Statements from being properly drawn up to be controlled and is therefore continuously developed. However, the Company-wide application of the regulatory and control measures cannot guarantee absolute reliability as regards the accurate, complete and timely recording of facts in (Group) accounting and the detection of irregularities.

## Individual Risks

The following section describes significant risks with considerable disadvantageous effects on business and the associated results of operations, financial position and net assets of the Group and the Company's reputation. The possibility of occurrences as well as accompanying effects after countermeasures have been taken are assessed. The order of the risks presented in the four categories reflects their current assessment for SMA.

The probability of occurrences and the possible effect of a risk as well as its year-on-year development are assessed by the following criteria:

FEATURES OF THE RISK ASSESSMENT		
Probability of occurrences	Potential effects	Risk development
<b>unlikely</b> (>0 to <15%)	<b>Slight</b> Limited negative effects on expected earnings, no loss of reputation, no threat to customer relationships	↗ Higher than in the previous year
<b>possible</b> (≥15 to <50%)	<b>Medium</b> Some negative effects on expected earnings, moderate loss of reputation, potential threat to customer relationships, identifiable disruption to business operations (primarily internal effect)	→ Same as previous year
<b>likely</b> (≥50 to <85%)	<b>High</b> Substantial negative effects on expected earnings, high loss of reputation (not yet a threat to existence), major threat to customer relationships, significant disruption to business operations (with external effect)	↘ Lower than in the previous year
<b>very likely</b> (≥85 to <100%)	<b>Very high</b> Harmful negative effects on business, associated with a very high loss of reputation, very major threat to customer relationships, disruption of business operations that threatens existence	

### PRESENTATION OF THE INDIVIDUAL RISKS

<b>Areas of Risk</b>	<b>Probability of occurrence</b>	<b>Potential financial impact</b>	<b>Risk development</b>
<b>Strategic Risks</b>			
Regulatory risks	Very likely	Very high	→
Competition risks	Very likely	High	↗
Market risks	Possible	High	↗
Investment risks	Likely	High	↗
Risks from research and development activities	Likely	High	→
Patent risks	Likely	High	↗
<b>Operating Risks</b>			
Procurement and inventory risks	Likely	High	→
Product risks	Likely	High	→
Personnel-related risks	Possible	Medium	→
IT risks	Likely	High	→
<b>Financial Risks</b>			
Financing and liquidity risks	Unlikely	Slight	→
Risks from exchange rate fluctuations	Possible	Slight	↗
Risks from changes to general interest rates	Possible	Slight	→
Risks from customer bad debt	Likely	High	→
<b>Compliance Risks</b>			
Export risks	Likely	Medium	↗
Antitrust risks	Possible	Very high	↗
Risks from violating data protection law	Possible	Slight	→
Risks from environmental damage	Unlikely	Slight	→

## Strategic Risks

### REGULATORY RISKS

The photovoltaics sector depends to a large extent on state subsidies worldwide. Due to differing subsidy conditions and their development, markets are highly volatile. Volume fluctuations occur regionally as well as cyclically, complicating planning significantly.

Due to the severe deterioration of subsidy conditions in Germany and the European core markets compared with 2012, the risk situation has continued to increase significantly. As an important established market, Germany benefits from the Renewable Energy Sources Act (EEG). Any changes to these conditions can heavily influence local market growth. The amendment to the EEG, which was confirmed at the end of June, again significantly reduced the feed-in tariff with retroactive effect from April 1, 2012. In the amendment, the German Federal Government agreed to lessen the cut to solar subsidies but is still planning for the subsidy to cease at an installed capacity of 52 GW. According to the German Solar Industry Association (BSW), 3.3 GW of additional solar power capacity was installed in Germany in 2013. This was around 55% less than in the previous year (7.6 GW). PV systems in Germany produced 29.7 billion kilowatt hours (kWh), accounting for 5% of German power consumption. On January 20, 2014, the German Federal Government also adopted a draft by Federal Minister of Economics and Energy Sigmar Gabriel on reforming the EEG. The plans envisage charging the self-generation of electricity from PV systems at 70% of the EEG apportionment starting with an output of 10 kW.

The non-European markets can compensate for the market decline in Europe in terms of quantity; the foreign share in sales at over 70% was increased considerably compared with the previous year (56.3%). In numerous foreign markets, there are also incentive programs for the expansion of photovoltaics. Governments regularly examine these incentive programs and align them to the market situation. These adjustments range from bringing forward the date for reducing the feed-in tariff to cancellation.

Positive stimuli emanated from Eastern European markets, the Benelux countries and Great Britain. However, overall demand in Europe continued to decline in view of further significant adjustments to subsidy conditions, especially in Germany (uncertainty regarding the development of the EEG after the 2013 federal election) and Italy, and the unresolved financial crisis. In contrast, significant growth stimuli emanated from non-European markets (e.g., U.S., Japan, Australia and Thailand). Due to attractive subsidy conditions in these countries and the expansion targets in China, Asia and North America, in the Managing Board's expectations, have increased significantly in importance as growth markets and offer sizeable opportunities. In addition, the decline in global subsidies is driving market development for "merchant projects," whereby the electricity generated is sold unsubsidized via electricity exchanges. This new market segment is expected to become much bigger than the subsidized markets existing today.

SMA employees are engaged in different solar energy associations in order to influence political decision-makers at a national and European level. In addition, we are pursuing our internationalization in order to lessen our dependence on individual markets. This undertaking is supported by the expansion of global sales and service activities, intensified marketing activities and more efficient connection and integration of foreign sites by establishing the Shared Service Center and the increase of decentralized responsibilities.

#### **THE RISK OF AGGRESSIVE COMPETITION**

Some markets offer attractive incentives for PV systems. The concomitant high demand for PV systems leads to intense competition. Existing and new competitors, particularly from Asia, will attempt to secure market shares through an aggressive pricing policy and advantageous payment conditions. Moreover, saturated markets and structured tendering processes for large-scale solar projects lead to more transparency and more intensive price competition. This can attract new and financially stronger competitors.

Although SMA continues to press ahead with internationalization, changes to subsidy conditions will cause additional pricing pressure and potentially have business-critical effects. Many customers are stopping or postponing their large-scale projects in Europe. As access to the capital market has also become more difficult, critical financing situations can arise for companies without sufficient capital resources; in the short to medium term, more competitors will withdraw from the market.

Furthermore, in 2013, overcapacity, both at module and inverter manufacturers, continued to result in a global decline in selling prices. Other possible scenarios are that competitors could improve the quality, functionality or performance of their products and/or local competitors could react more flexibly and adapt better to the prevailing market requirements in certain markets. Such competition may in the future lead to further declines in prices for products and services produced by the SMA Group and likewise to a loss in market shares.

In the opinion of the Managing Board, the competition risks have increased in comparison to the previous year. Other inverter manufacturers are receiving non-repayable subsidies from the government or para-governmental organizations, for instance. This competition, which the Managing Board views as unfair, has material repercussions on our financial position and results of operations. In addition, increasing market fragmentation can be seen, which is leading to declining concentration among inverter manufacturers. This in turn is resulting in increased competitive and pricing pressure. Should our competitors succeed in being able to quote well below SMA's prices on a sustained basis, this will severely impair business development.

SMA faces this price competition by offering technology and innovation leadership. With expenditure for research and development of about €103 million in 2013 (including capitalized development projects) and an R&D budget of up to €130 million in 2014 (including capitalized development projects), SMA is well prepared to continue setting important trends in photovoltaics in the years to come with significant product innovations. Regular monitoring and regular reports to the Managing Board ensure the early identification of project delays and the initiation of appropriate countermeasures. The trend toward complete solutions and the use of standard components will increase flexibility in the long term. The intention behind establishing decentralized purchasing organizations is to lower material costs in a consistent manner and to break away from dependence on individual suppliers.

In the fiscal year, opportunities arose primarily from the further development of international markets.

By establishing foreign subsidiaries, SMA increases its proximity to customers where they are located and is able to react quickly to changes in specifications. With regard to ongoing internationalization, sales and marketing structures are being established and expanded abroad. In 2013, China was already the fastest growing and largest photovoltaic market, and it is expected to continue leading development in the years to come. By acquiring a controlling interest in Jiangsu Zeversolar New Energy Co., Ltd., Suzhou, China, SMA is trying to benefit from the expected growth potential with products specially tailored to the requirements of the Chinese photovoltaic market and certain other foreign markets.

Changed political conditions will help provide SMA with great opportunities to expand its business even in young markets. In order to identify and use this business potential at an early stage, the Managing Board has adopted a process for the systematic analysis of potential markets. Opening up new business areas and markets to increase sales is one of the central elements of the 2015 Group strategy. In this context, the Managing Board sees system technology for storage applications, photovoltaic diesel hybrid systems and services as important new business areas, which are expected to generate up to 25% of sales in 2015.

#### **MARKET RISKS**

If market saturation occurs in our target markets, this will result in a drop in demand for SMA products. In the past, the high demand for PV systems – and consequently for products and services produced by the SMA Group – resulted partially from the sharp increase in the prices of conventional energy carriers. The higher the price of energy obtained from these sources, the more attractive is electricity generated by sunlight becomes. If the market prices of conventional energy carriers fall, this may be followed by a drop in demand for PV systems and therefore for products manufactured by the SMA Group. If the Company is unable to close this gap in demand with new buyer groups or by opening up new markets, such market saturation will negatively affect the assets, financial position and results of operations of the SMA Group.

Furthermore, entry barriers to individual markets represent a greater challenge in comparison with the previous year, especially in the context of increasing internationalization. Certain countries for instance set high certification hurdles. However, obstacles in the way of our international expansion would have material effects on the development of the SMA Group in the future. Therefore, SMA always seeks to contact the certification authorities and energy supply companies abroad early on. Thanks to the information gleaned from such contacts, SMA is able to recognize and carry out any adjustments required in its products in good time. In addition, SMA pursues the strategy of being the first company to be represented in new photovoltaic markets, in order to reduce its dependence on individual markets. For example, "distributed generation" is a market segment that is growing globally, driven by private and commercial applications. Through global partnerships, also with investors, SMA is promoting these markets while securing good starting positions for the future.

The formation of buying syndicates can increase the dependency of the SMA Group on a few wholesalers or specialist wholesalers and other customers generating large sales. This dependency harbors the risk of the increasing negotiating power of such large customers together with more pricing pressure. SMA avoids dependency on individual customers by deploying a suitable sales strategy.

#### **INVESTMENT RISKS**

If we improperly assess the development of markets in the future, this could lead to a failure to fully utilize our production capacities and to the unscheduled depreciation of production equipment and product developments. The higher relative share of fixed costs would have a negative impact on the results of our operations. Over the years, SMA has established processes that allow it to react quickly to swings in demand. Through the use of interim solutions, we try to delay investments for as long as it is economically rational. Our regular forecast process allows us to recognize swings in demand early on and take corrective measures. Thanks to the high degree of production flexibility at SMA, we can largely absorb negative swings in demand.

The above comments on competition and market risks show that SMA requires access to the Chinese market, the world's largest photovoltaic market in the future, and additional development resources. By acquiring a controlling interest in Zeversolar, SMA has laid the foundation for access to the fast-growing Chinese photovoltaic market. The Company develops, produces and distributes PV inverters. Products range from products for residential systems to PV power plants in the megawatt class. With products still launched under the Zeversolar name (central and string inverters), SMA primarily serves the Chinese photovoltaic market and budget market (low-price segment) abroad. To optimize access to the market, SMA has developed new distribution channels for Zeversolar and established partnerships with Chinese photovoltaic companies and financial institutions. SMA will thus be able to discern Chinese competitors' developments and strategies more quickly. Additional development capacity could reveal additional synergies. Despite this transaction, market access in China remains difficult. If Zeversolar does not develop sales potential to the expected degree or cannot participate in the forecast market growth to the assumed extent, the profitability targets related to this investment could be missed. In addition, there are risks involved with the integration of employees, processes, technologies and products.

#### **RESEARCH AND DEVELOPMENT RISKS**

SMA's wide-ranging product portfolio includes inverters for all applications, power classes and module types, accompanied by intelligent energy management and monitoring systems. Besides the continued optimization of existing products, the management's goal is to concentrate development capacity primarily on future product generations. Here, the risk arises that vital technology trends are identified too late or that market launch is delayed due to development stages that are too long. As this could lead to sales losses and sinking market share, the SMA Group invests large sums of money in research and development in order to develop new processes, technologies,

products and services. The Development area has developed timetables for all projects that are regularly submitted to division management and the Managing Board. The planned development times can be adhered to by consistently monitoring milestones. In addition, the Managing Board intends to continue increasing development capacity and expanding partnerships with research facilities. SMA is consciously seeking contact with research facilities in order to advance strategic development projects together. These measures are to further reduce the development time of innovative products. However, we cannot rule out that individual development projects will fail to deliver commercially exploitable results or to do so in the expected timeframe.

With our patents and through constant monitoring of technologies and competitors relevant for SMA, we try to maintain and expand our technological edge. Like political conditions, the risk from new technical directives is only manageable to a limited extent. The risk of not meeting such changed requirements remains. Only an accelerated development process and good market knowledge will make it possible to minimize this risk in the future. Therefore, our employees actively contribute to new technical guidelines through standards associations, amongst other organizations. In addition, the assumptions and associated risks of strategic projects are regularly reviewed. For example, single sourcing is avoided for future product generations by accounting for qualified suppliers at an early stage and material supply is secured with corresponding supply contracts. In order to advance the technological innovations for the further reduction in system costs and grid integration of photovoltaics, a new development base for the PPS division was established in the U.S. to quickly implement local adaptive developments specifically for the American market. The objective is to identify and advance relevant developments more quickly in the context of the future additional expansion of the development group. These procedures allow us to recognize and implement changes in what is required of our products early on.

#### **PATENT RISKS**

The SMA Group is the owner of numerous patents and other industrial property rights that are important for business success. In addition to the mainly exclusive use of the invention, patents also promote innovation and thus future economic benefit. Since competitors and research institutes also file a large number of patent applications, we cannot rule out that, in spite of regular, extensive research, we will not infringe on third-party patent rights or other industrial property rights or that, vice versa, patents or other industrial property rights belonging to us will be violated by third parties. If the former occurs, the SMA Group may incur considerable costs related to claims for compensation, in its defense against such claims or in relation to royalty payments to third parties.

Asian countries in particular have rapidly caught up on the number of both domestic and internationally recognized patents. Innovations are to be funded by the reimbursement of development and registration costs and tax incentives granted. Like the rapid growth of patent applications, the number of lawsuits regarding the theft of intellectual property is also increasing considerably.

The violation of third-party property rights by SMA is a latent risk. SMA must ensure that in particular new technologies that form the basis of a whole product generation or product family are free of property right violations or that appropriate agreements can be made. Otherwise, there is a threat to continued existence. It is therefore important that the product be checked for third-party rights in a timely manner before approval and market launch. Corresponding milestones have been included in the guidelines and process descriptions on product development and market launch. The Intellectual Property Management department actively protects proprietary technologies and monitors patent applications. By employing patent attorneys, SMA also strives to avoid the risk of lawsuits and any litigation costs. In the case of disputes related to intellectual property, we make provisions if we consider it likely that such claims might be asserted against us. Because there are significant intervals between the application and the disclosure of property rights, the danger of patent infringements cannot be fully ruled out in the future in spite of optimum patent monitoring.

## Operating Risks

### **PROCUREMENT AND INVENTORY RISKS**

Unexpected supply bottlenecks and price increases may sometimes occur when procuring raw materials, parts, components and services. The loss of suppliers is critical, in particular if they are single source suppliers. In the event of delays in delivery or changes in terms and conditions, the SMA Group would have to pay higher prices for the input products required or – if at all possible – make use of other suppliers. The latter might lead to delays, less favorable purchasing conditions or quality impairments. The conceivable consequences would include damage to the Company's reputation or penalties due to a failure to adhere to delivery commitments. Even negative price developments affecting raw materials such as copper, steel or aluminum could have a negative impact on the results of operations. Purchase prices are therefore coupled to the price index for raw materials. There are opportunities and risk associated with this.

SMA is to a large extent dependent on certain suppliers. We seek to minimize these risks through market analyses, careful evaluation and critical selection of suppliers, flexible supplier agreements, clearly defined quality standards and a reduction in the dependence on individual suppliers. SMA will also make greater use of standard components in future innovations to strengthen its negotiating position with suppliers and increase flexibility.

Regular inventory reviews are carried out in connection with short innovation cycles and resulting potential inventory write-down requirements. Early-warning systems and the consistent appointment of additional suppliers (second sources) contribute to the reduction of dependence on individual suppliers and strengthen SMA's negotiating position. On the basis of existing early-warning indicators, development trends are to be identified in a timely manner before they affect purchase prices by observing the price development of important raw materials.

Another measure initiated in this regard in the previous year and pursued intensively in the past fiscal year was the internationalization of our purchasing structures by establishing decentralized purchasing teams in the U.S., Poland and Asia to lower acquisition prices and logistics costs.

As part of the global purchasing and commodity strategy, the "best-cost country" purchasing activities are to be monitored more closely than before; in addition, supplier development will be increased and Purchasing will be more intensively involved in the product engineering process. Standardized processes, methods and key figures were defined for this purpose.

Important resources for developing suppliers were gained thanks to the acquisition of shares in Zeversolar. As part of the integration, SMA will concentrate primarily on improving long-term conditions together with the existing Purchasing organization in China.

### **PRODUCT RISKS**

One of SMA's major targets is technology leadership, i.e. peak efficiency, a comprehensive portfolio for all applications and power classes and high product quality. We are always striving to develop new products and solutions and to improve existing ones. For this reason, we use new materials in development or even sometimes employ new technologies to make innovations possible. This can result in products and services of the SMA Group being non-conforming or defective. Large delivery lots bear the risk of errors or defects affecting a product series or several product batches. Production shortcomings may on the one hand derive from errors on the part of the SMA Group or from defects in primary products provided by suppliers of the SMA Group. Therefore, the proper hand-

ling and communication of instances of product defects are essential. Otherwise, there is a risk that a product defect could cause disruptions, failures or damage, which is a latent risk with a medium- and long-term impact on image and thus directly influences the Company's sales. Unidentified incompatibilities can also emerge after the products are launched on the market and require later improvement to the customer system to prevent the equipment from posing a danger to the customer in the worst-case scenario. A lapse of reliability could result in a long-term loss of trust and to customer migration. In addition, any necessary product recall would have a negative impact on earnings.

In order to improve the quality of products continuously, in addition to general process improvements covering all value-adding processes, new developments are backed by specific stress and qualification tests, tests are carried out on the whole series and advance quality planning is established during the development process. For example, with consistent quality management and appropriate product maintenance, the measured failure rate of CP inverters (the most important product in project business) was reduced by 36% between 2012 and 2013. In 2014, an additional double-digit reduction of the failure rate in the field is planned. Plus, with a sufficient staffing level in Development and more than 700 Service employees, SMA is in a good position to ensure good service. On the basis of the nature and scope of the technical fault, Service assesses the necessity of a repair or replacement of the device and carries out appropriate countermeasures.

If responsibility for the error lies with the supplier, then it must bear the direct costs. If SMA is responsible for the error, then product liability insurance will cover the losses incurred. However, this does not cover the cost of materials. In this respect, new developments are often subject to more failures than established products that have been tried and tested for longer periods. We are able to minimize this risk through comprehensive field testing prior to serial production, accompanying quality inspections during production and product liability insurance, but we cannot completely exclude this risk.

#### **PERSONNEL RELATED RISKS**

Qualified and motivated employees are the key factor for the continued development of our enterprise – above all as regards the area of technology, further internationalization and the business success of the SMA Group. The loss of important employees could impair continued growth or the development of innovative products. This is countered by numerous organizational changes that are being implemented in order to secure SMA's continued existence and future viability. As the cost savings made so far only partially compensated for the decline in volume in the last fiscal year, the personnel structures had to be adapted to the changed level of sales in 2013. In the future, SMA will also be faced with demographic challenges, especially in Germany. This increases the risk of not finding suitable applicants for vacancies or finding them only after a delay. SMA's future success depends largely on whether it is successful on an ongoing basis at hiring engineers and other skilled staff, integrating them and binding them to the Company in the long term as well as filling management positions adequately.

However, the prevailing strong competition for qualified graduates and specialist and management staff could limit SMA's opportunities for growth. We minimize the risk of losing high-performers and subject-matter experts by securing young staff at an early stage and with future-oriented development of specialist and management staff, a broad management structure, and structured knowledge management. Other offerings are performance-based remuneration systems and participation in the Company's success, flexible working hours and opportunities to balance family and career. Through the close integration of university research and education on the Kassel site and other partnerships with universities and institutes, SMA is also making a significant contribution to being perceived as an attractive employer and thereby recruiting highly qualified young staff to the Company in the long term.

### IT-RELATED RISKS

Development, Production, Sales and Service depend on the efficient, uninterrupted operation of data processing and telecommunications systems. Increasing connectivity and the need for permanent availability place ever higher demands on the IT system. We reduce the risks of IT breakdowns by continually reviewing and improving IT security and employing advanced hardware and software solutions. Efficient protective programs are put in place to defend against malware. Alongside securing network and server availability, it is most important to minimize information loss via employees, service providers or external attacks. As a global market leader, trendsetter with regard to technological innovations and publicly traded stock corporation, SMA is in the public eye and therefore heavily under threat of industrial espionage. For example, the results of research and development are a critical success factor in times of intensifying competition and advancing internationalization. Distributed data centers and mirrored databases reduce the risk of data losses. Together with the Group's data protection officer, our employees ensure that personal data is processed in the system in accordance with the regulations of the Federal Data Protection Act. Furthermore, measures taken accordingly enable the protection of business information and the private sphere of our employees and business partners.

## Financial Risks

### FINANCING, CURRENCY AND LIQUIDITY RISKS

Since the SMA Group operates on an international scale, it is inevitably exposed to financial risks. These include risks from changes to general interest rates, risks from exchange rate fluctuations and financing and liquidity risks. The Corporate Treasury department controls Group financing and the limitation of financial risks. The principle underlying our hedging policy is to protect the SMA Group against sharp changes in prices, exchange rates and interest rates by means of contracts and hedging transactions to an economically feasible extent. The permissible hedging instruments have been laid down by the Managing Board in Group-wide guidelines that also regulate the entire process-oriented organization including hedging strategies, responsibilities and control mechanisms.

For detailed information regarding the financial market risks and risk management, please refer to the Notes to the Consolidated Financial Statements on page 164 et seqq. under "(37) Objectives and Methods Concerning Financial Risk Management."

See also page  
164 et seqq.

### THE RISK OF RISING INTEREST RATES AND RESTRICTIONS IN AVAILABLE CREDITS

Some PV systems – especially large-scale projects – are financed with loans to a considerable extent. This is illustrative of the trend that traditional creditors are increasingly active in projects as investors, having a significant say in key decisions. If interest rates change together with demands on equity, this has considerable effects on the profitability of a photovoltaic project. On the other hand, if banks apply credit restrictions, projects are delayed or even not realized. Market developments in 2013 made it more difficult for all companies in the solar industry to access the capital market. In some cases, it remained entirely closed to them due to the difficult environment.

For example, if interest rates rise, the higher borrowing costs reduce the profitability of PV systems and consequently the demand for both PV systems in general and for products manufactured by the SMA Group. Therefore, credit restrictions and rising interest rates can have a negative effect on business and on the results of operation, financial position and net assets at the SMA Group. Our internationalization strategy allows us to spread this risk over several markets. Our comprehensive after-sales services ensure that our customers are able to reach a higher degree of technical availability of their PV systems and thus increase earnings. This has a positive effect on the financing of PV systems.

#### **RISK OF DEFAULT OR CUSTOMER INSOLVENCY**

In many target markets, subsidy conditions have worsened and further cuts are planned. This is compounded by the financial and economic crisis in connection with the European debt crisis and erratic conditions on the financial markets. For these reasons, potential risks arise with some customers due to financial problems. The number of insolvencies among our customers and business partners could increase. In addition, the competitive situation and internationalization require the extension of payment periods, paired with the reduction of securities, e.g., in the form of bank guarantees. If customers can no longer keep up with their payment obligations, there is a higher default risk for receivables and as a result potentially considerable write-downs in the future with negative effects on business and on the results of operations, financial position and net assets of the SMA Group.

As part of our credit control, we minimize the risk of nonpayment by individual customers in accordance with the Company's credit guidelines by obtaining references and credit information for the purposes of a credit check and permanently monitoring general payment practices. We request collateral for deliveries to customers depending on the volume and the credit rating of the customer and the country, and also evaluate historical data from our previous business relationship in order to preclude nonpayment. If it can be shown that payment practices in our past business relationship have been impeccable, then SMA allocates each customer a standard credit limit determined by sales in the last 12 months, the market growth factor and the agreed payment terms. If it is envisaged that the credit limit calculated in this manner will not be sufficient for our future business relationship, then we examine whether we should ask the customer to furnish collateral or whether we can cover the gap by means of defined risk reserves.

## Compliance Risks

Our influential position on the market as technology and innovation leader as well as our steadily increasing international business give rise to diverse tax, brand, patent, competition, antitrust and environmental risks.

There is a risk that SMA could be involved in unlawful business conduct or that individual employees could violate SMA's business principles and directives. In particular, this includes the risk of corruption and fraud. The effects of corruption or fraud on SMA's development could be significant.

Group Compliance issued the SMA business principles and directives globally in order to counter this risk. Basic work sequences and processes were derived from these and implemented globally. Therefore, in the context of their work for SMA, all employees are obliged to act in an ethically correct manner and in accordance with the laws and regulations of the legal system of their country. These regulations and obligations are consolidated globally by mandatory business principle training sessions.

SMA has also implemented control measures, such as the "business partner due diligence" process, in order to prevent risks associated with the appointment of external consultants and service providers. Key controls in our business processes were thus identified in order to detect and prohibit corruption on the part of our business partners.

Due to the controlling interest in Zeversolar acquired in 2013 and Asia's long-term growth potential, SMA is exposed to increased country risks in its business in Asia, especially in China.

### **EXPORT RISKS**

As a result of increasing internationalization and an export rate of 71%, there will be more risks for SMA in the future from handling the import and export of materials, services and finished products. SMA must meet the legal requirements for imports from and exports to many countries in order to stay competitive and fulfill the requirements of the increasingly international customers. An additional customs risk has arisen for SMA in connection with the delivery of components from Germany to the production sites abroad.

Violations of these trade restrictions and customs law provisions are subject to significant penalties and could lead to damage to SMA's reputation. SMA takes care to comply with customs and export control regulations and particularly with trade restrictions. Moreover, SMA will purposefully monitor commercial and customs law obligations with an IT system. This will reduce the risk of a potential violation.

### **ANTITRUST LAW**

The primary goal of the endeavor is to minimize antitrust risks from the outset. For this purpose, Group Compliance has issued a new Antitrust Directive. The directive stipulates clear DOs and DON'Ts for all major business situations. In addition, all employees must receive antitrust law training within a specified period.

### **RISKS FROM VIOLATING DATA PROTECTION LAW**

At SMA, the handling of personal data is primarily significant with regard to two groups: employees and PV system operators. SMA is experienced in the handling of employee personal data and is very sensitive to this issue. There is not the same sensitivity with regard to handling the personal data of PV system operators, which is provided to SMA partly by the operators themselves, partly by third parties. Accordingly, there is a risk that the necessary care is not taken in data processing and, for example, data is used for cross-promotion purposes. Risks also include the increasingly widespread storage and processing of data using cloud solutions, where permissibility in terms of data protection law is disputed. Against the backdrop of the changing business environment and the necessary development of new sales channels, this risk is becoming increasingly significant. SMA counters data protection risks by having the Company's data protection officer educate employees on the issue who process personal data and monitor all projects in which personal data of PV system operators is processed. If agreements with third parties are to be made, the necessary data protection clauses must be applied, taking into account EU standards.

### **ENVIRONMENTAL RISKS**

SMA heeds laws that were issued for the protection of the environment. In the working environment, environmentally conscious conduct is ensured every day. Work processes must not result in impermissible damage to the environment; potential consequences are considered as early as the product development stage. SMA employs a small amount of hazardous substances during production that, in principle, pose a risk to the environment. The comprehensive measures we take in production and in quality management ensure that SMA products are manufactured in a way that is environmentally friendly and guarantees compliance with all environmental regulations. Furthermore, SMA has safeguarded itself against certain environmental risks.

To Our Shareholders

Corporate Governance

**Consolidated Management Report** —— Risk and Opportunities Report

Consolidated Financial Statements

Other Information

#### **OVERALL STATEMENT ON THE GROUP'S RISK SITUATION**

On the basis of our Risk Management System, we assess the overall risk situation to be manageable. However, on the basis of the present assessment, individual risks have been identified that, particularly if they all transpired at once, could represent a concrete threat to the Company's existence or at least significantly impair business development should the strategic targets for the increase of sales and earnings be missed. The risk profile has deteriorated considerably year-on-year. In 2013, the global market declined when measured in euros. The Managing Board expects a longer phase of consolidation. Due to the negative development of sales and increasing competition and pricing pressure, all the risks described are given greater weight in the overall risk situation. SMA has taken measures and set up special project groups to counter the described risks and keep the potential negative effects as small as possible. Plus, we are working continuously on improving our organizational structures and processes and thus increasing our efficiency. In our estimation, the opportunities have also changed accordingly year-on-year.

It is our objective therefore to continue optimizing the Risk and Opportunities Management System in order to identify potential risks even faster, to counteract them and to take any opportunities arising. For this purpose, the integration of risk and opportunities management, compliance management and internal control is becoming ever more important. Common to all approaches is the continuous risk reduction to a level acceptable for the Company. There are therefore important interfaces and interactions.

# Forecast Report

## The General Economic Situation: Global Economic Recovery Continues

The World Bank anticipates that global economic recovery will continue for 2014 and increased its growth forecast from 3.0% to 3.2% on January 15. The organization based this decision on the strong economic recovery in the U.S., the euro zone and Japan. This means that the global economy is likely to experience the strongest momentum since 2010 this year. Whereas growth was at 4.3% in 2010, it stood at just 2.4% last year.

In the euro zone, which now numbers 18 member states, the economy is expected to grow by 1.1% in 2014. This puts growth at 0.2%age points higher than previously forecast. At 2.8%, the U.S. is also expected to grow at a much faster rate than in the previous year. The new World Bank report differs considerably from previous studies, which consistently named newly industrialized countries such as China, India and Brazil as the drivers of global growth. However, for the current year the World Bank has somewhat dampened its growth forecasts for the newly industrialized countries. In Brazil, the World Bank now anticipates growth of only 2.4% compared with a previous forecast of 4%. China's economy is now expected to grow by only 7.7% rather than 8%. And in India, the World Bank now anticipates growth of only 6.2% against its previous forecast of 6.5%. At the same time, the World Bank also warned of uncertain times ahead in the newly industrialized countries. Although growth seemed to be strengthening, the downside risks were also continuing to threaten global economic recovery.

The International Monetary Fund (IMF) estimates global growth of 3.7% in 2014, which is slightly up on the previous forecast issued in the fall of 2013. International trade is expected to increase by 4.5% (2013: 2.7%). The International Monetary Fund also improved its forecast for Germany, predicting that German gross domestic product (GDP) will rise by 1.6% this year. In fall, the IMF forecast growth of only 1.4%. According to the IMF, global growth is being driven by the industrialized countries. Following two years of recession in the euro zone, for example, economic growth picked up by 1.0% in 2014. Expected growth of 0.6% each in Italy and Spain in 2014 also spells an end to the recession in these countries. The IMF estimates economic growth of 0.9% in France and, at 2.8%, GDP in the U.S. is expected to rise significantly in the current year. However, the IMF growth forecast of 1.7% for Japan is at the same level as 2013.

## Future General Economic Conditions in the Photovoltaics Sector

### Key Trends in the Energy Sector

According to the Energy Outlook 2013 of the International Energy Agency (IEA), renewable energies will equate to around half of the rise in global power generation by 2035. Fluctuating resources such as wind energy and photovoltaics alone will make up a share of 45%. The IEA experts predict that these specific trends are being driven, for example, by the regionalization of the electricity supply and the resultant need for independence from energy imports and rising fuel costs. There will be a further rise in demand for energy storage solutions in the private, commercial and industrial sectors as well. Energy is increasingly distributed via intelligent electricity grids, and electro-mobility is becoming an important pillar of these new energy supply structures. Intelligent demand-side management in particular can help to manage electricity demand, avoid consumption peaks and take the strain off electricity grids.

## Enduring Transformation of the Photovoltaic Market

These general trends in the energy sector are also having a lasting impact on the photovoltaic market. In the large-scale PV power plant (industrial) segment, which has an increasingly international outlook, issues such as grid integration and photovoltaics with a power plant function are gaining importance. From an economic perspective as well, a fundamental paradigm shift is taking place that has shifted the focus from the pure up-front investment cost of a PV system and instead focuses more heavily on the operating cost of the system over its entire service life. Potential operators therefore no longer view the PV system as a mere income-producing asset but rather see photovoltaics as a cost-efficient, environmentally friendly and independent solution for people to generate their own electricity with a view to saving on their electricity costs through self-consumption and offsetting the rising trend in energy prices. Small and medium-sized systems (residential and commercial) deliver technical standardization, suitability for daily use and self-supply by means of intelligent building technology with ease and no loss of convenience.

## Innovative System Technology Is a Basic Prerequisite for Global Energy Transition

The use of innovative system technology is a basic prerequisite for the outlined reorganization of energy supply systems along the lines of decentralized structures on the basis of renewable energies. The global transformation of our energy systems cannot take place without this technology. Future objectives include intelligently linking together different technologies, providing intermediate storage solutions for generated energy, avoiding consumption peaks by means of intelligent energy management and ensuring a reliable electricity supply – including when there is irregular availability of sun and wind.

## Photovoltaics Is Becoming Increasingly Competitive

In many regions, the electricity generation costs for photovoltaics are lower than the electricity supply costs for diesel generators (fuel parity) and those of power supply companies (grid parity). In the medium to long term, this leads to an increased demand for photovoltaics. Marketing via third parties will play an even more instrumental role here as well. The Managing Board expects to see a continuation in the fragmentation of the photovoltaic markets in both subsidized and non-subsidized markets. On the whole, the Managing Board expects to see growth in global new installations. Nevertheless, it assumes that there will be no easing of price pressure and that the solar sector will continue to face considerable volatility on account of changes and the expiration of government incentive programs. The SMA Managing Board estimates that the medium-term global prospects for the photovoltaics sector remain good. Photovoltaics has proven increasingly competitive in recent years and is gaining importance around the world.

## Global Market Growth Particularly

For the current fiscal year, the Managing Board estimates a global rise in new PV installations of approximately 15%. The Managing Board assumes global market growth of up to 48 GW (2013: approximately 40 GW) and growth in euros of €4.7 billion (2013: €4.5 billion).

## Demand in Europe Declines Further

The main reason for the decline in demand are the German Federal Government's plans to further curb the expansion of photovoltaics in Germany. Federal Minister of Economics and Energy Sigmar Gabriel's draft reform of the Renewable Energy Sources Act (EEG), which was enacted by the Federal Cabinet on January 20, 2014, includes the proposal to charge self-generation of electricity using PV systems at 70% of the EEG apportionment starting at a power output of 10 kW. A move toward a tender system is planned for ground-based PV systems. Gabriel also wants to introduce an obligatory expansion corridor for individual technologies. For photovoltaics, this would prescribe an annual installation volume of 2,500 MW, which is at the lower end of the target previously set by the German Federal Government. Given the further deterioration in the underlying conditions, the SMA Managing Board forecasts a decrease in newly installed PV power in Germany for 2014 as well.

## Growth in Non-European Markets China, North America and Japan

However, strong growth stimuli are especially expected in China, North America and Japan. The Managing Board estimates that they will account for well over half of global demand by 2014. This development is due to the attractive conditions. The Chinese government has increased expansion targets for photovoltaics to 40 GW by 2015 with the enactment of an incentive program. In light of the strong growth in 2013, the Managing Board assumes that the targets set will be exceeded. However, due to the specific certification requirements and tendering processes, the Chinese photovoltaic market is not accessible to all international inverter manufacturers. In Japan, the attractive compensation rates are still acting as strong market drivers, while in North America tax incentive programs are a powerful motivating factor for investing in a PV system.

## Positive Demand Trend in the Newly Industrialized Countries

The Managing Board also expects to see a positive demand trend in the newly industrialized countries. Significant growth rates are expected predominantly in South Africa, India and Thailand. For example, the South African government is pushing photovoltaic expansion with the Renewable Energy Independent Power Producers Program (REIPPP). The Indian market also has attractive conditions. The Indian government is planning installed photovoltaic capacity totaling 22 GW by 2022. Growth stimuli are emanating from Thailand as well. The Thai government wants to install new PV power totaling 3 GW by 2021 with a corresponding incentive program. In Chile, Mexico and the Middle East, the Managing Board expects the photovoltaic markets to show positive development.

## Attractive Business Opportunities for Energy Management Systems in All Power Classes

The SMA Managing Board anticipates good opportunities for business in countries that have an increasing energy demand because of their economic growth and are looking for efficient access to electrical energy. In many countries in the regions of South America, the Middle East, Asia/Pacific and Africa, electricity is supplied via comparatively expensive diesel generators. Diesel prices are rising around the world, while costs for photovoltaic systems are declining. This makes photovoltaic diesel hybrid systems, which combine diesel engines and photovoltaics, a lot more efficient to run, especially in very sunny regions, since the use of photovoltaics dramatically reduces the operating cost. Intelligent system technology allows photovoltaics to be integrated well in existing diesel networks.

The SMA Managing Board also sees attractive opportunities for business in the European and North American markets for manufacturers of innovative system technologies that provide energy management for private households and commercial enterprises. These technologies use both storage systems and predictive instruments and connect the electrical devices with the system. In the future, given the constantly rising prices of conventional household electricity, these system solutions are likely to make a crucial contribution to sustainable energy supply in private households and commercial enterprises in the interests of the energy transition.

## Overall Statement by the Managing Board on the Expected Development of the SMA Group

The following statements on the future development of the SMA Group are based on the estimates drawn up by the SMA Managing Board and the expectations concerning the development of global photovoltaic markets set out above.

SMA's sales and earnings situation depends on market share, price dynamics and the development of the global market. For the current fiscal year, the Managing Board has set the objectives of increasing sales and securing a return to profitability. With SMA's wide range of products, international presence and the access to the Chinese market gained via Zeversolar, the Managing Board also expects that SMA will improve upon its market share of 13% (discounting China: 20%) in the current fiscal year. As a market and technology leader, SMA has resolutely focused its strategy on successfully exploiting international growth opportunities in a market environment characterized by strong competitive and price pressure, responding flexibly to demand fluctuations and reaping the benefits from the transition to a new supply system based on renewable energies. With its strategy, the Managing Board has laid the foundations for this early on and has uniquely positioned SMA as a system technology specialist in a changed market environment.

## Increased Sales Through New Technologies and the Development of New Business Areas

The sales forecast of between €1.0 billion and €1.3 billion was first published on November 4, 2013. At the upper end of the sales forecast of €1.3 billion, the Managing Board anticipates that SMA will benefit from the expanded product range for Japan and America that was launched in 2013 and the successful restructuring of Zeversolar in China, profiting from the subsequent rise in demand in these markets. In this scenario, the non-European photovoltaic markets compensate for the further expected decline in demand in Europe. At the lower end of the sales forecast of €1.0 billion, the Managing Board also assumes that SMA will achieve global growth. However, in this scenario SMA does not benefit as strongly from the growth stimuli in Asia and America. The Managing Board estimates that international business will account for more than around 75% of business in 2014 (2013: 71%).

SMA is a technology-driven Company. Hence, the long-term expansion of its research and development activities and the safeguarding of its technological leadership with a view to developing new business areas lies at the heart of its corporate strategy. At the end of the fiscal year, SMA employed over 1,000 employees worldwide in the area of research and development and set new standards for the photovoltaics industry in all fields of application from PV inverters to energy management systems. The Managing Board sees significant sales potential in the coming years predominantly for the marketing of modern storage technologies for energy management systems in all power classes. In line with this, SMA's approach will include both the small power range business and the medium and large power ranges. For the current fiscal year, the Managing Board expects development expenditure, including capitalized development projects, to increase to approx. €130 million. In addition, we will expand our network of strategic research and development cooperation in a targeted fashion.

In sunny regions, we will take even greater advantage of the opportunities that present themselves in the field of photovoltaic diesel hybrid applications. We will continue to ramp up our sales activities in this area and develop new sales specialists in the relevant markets.

So that we can service the growing market of large-scale PV power plants in an optimum fashion, we are continually expanding our technical know how in medium-voltage technology and developing system technology and service offers to meet demanding requirements such as installation in harsh environments and extreme weather conditions.

## Return to Profitability Through Progressive Cost Reduction and Process Optimization

For its earnings target, SMA aims to generate an operating profit (EBIT) of up to €20 million. The main drivers for this will be the planning and successful implementation of existing projects to reduce costs. In addition, we will also ramp up our sales activities with the help of a global customer- and solutions-focused sales strategy. It is the technological advantages brought about by new products, the service business and financial stability that sets us apart from the many generalists among our competitors. With the specific aim of improving the cost situation and developing new markets more effectively, SMA looks to set up strategic partnerships with other market players.

One concrete measure aimed at reducing material costs over the long term is the expansion of strategic purchasing. With a global procurement process comprising purchasing offices in Germany, Poland, China and the U.S., we have created a solid basis for the systematic reduction of material costs. Zeversolar's resources are also being used in tandem to qualify new suppliers and accelerate our measures. To optimize processes, SMA also sets up market-specific production centers and develops a standardized global logistics concept in order to significantly reduce transportation and waiting times for our products. To dramatically reduce the production costs of our products, we also pursue a rigorous design-to-cost policy. This focuses on using new technologies and a higher proportion of carry-over parts as well as integrating additional functions. On the whole, the Managing Board estimates that implementing these measures will save total costs of between €80 million and €100 million in 2014. In addition, the program we commenced in 2013 to reduce employee numbers in Germany to approximately 3,100 full-time positions by the end of 2014 will result in savings of around €40 million.

## Two-Brand Strategy to Improve Market Share

Another key element of the Group's strategy is to improve our market share of 13% (discounting China: 20%) in 2013. With the aim of increasing our market share as a global market leader even further, we are pursuing a clearly-defined two-brand strategy. While SMA positions itself worldwide as a technological leader and specialist in system technology, the Chinese inverter manufacturer Zeversolar, which SMA acquired in 2013, operates in what is referred to as the budget market (low-price segment) in both the Chinese and international markets. Our primary objective is to use technological unique selling propositions to further improve SMA's strong market position. To consolidate our innovation leadership, we focus on the development of system solutions that are precisely tailored to the specific requirements of the global photovoltaic markets across all power ranges. By contrast, Zeversolar acts as an independent brand with specific unique selling propositions in what is known as the budget market (low-price segment). With the restructuring of Zeversolar nearing completion, SMA has also laid the foundations to benefit from the considerable growth opportunities, particularly in the Chinese market.

## Development in the Segments

According to estimates by the Managing Board, the Medium Power Solutions (MPS) division will generate sales of between €600 million and €700 million in 2014, accounting for approximately 50% to 60% of SMA's total sales. Our three-phase inverters have contributed significantly to MPS sales. Their share in the division's total revenues is expected to rise to as high as 60% in 2014. With regard to the operating result, the Managing Board estimates that MPS will break even. This is due to the successful implementation of our savings targets, the newly launched products in the U.S. and Japan and the market launch of the new Sunny Boy Smart Energy inverter, which took place this year.

In the global photovoltaic market, the demand for larger PV systems is growing in 2014. This trend will continue to be reflected in the distribution of SMA's sales. The Managing Board anticipates that large-scale PV power plants with an output of over 500 kW will generate sales of between €300 million and €400 million in 2014, accounting

for approximately 30% to 40% of sales. Above all, a decisive contribution to sales in the Power Plant Solutions (PPS) division in 2014 will be made by international business in North America, Asia and South Africa. The Sunny Central Compact Power is expected to be one of the central inverters that generates the greatest sales in this segment in 2014 alongside the complete solution including medium-voltage technology. The SMA Managing Board estimates an EBIT margin of as high as 4% (2013: 9.5%). The decline in the EBIT margin can be attributed to rising price pressure and the shift in the markets as well as the market launch of the new medium-voltage solution, which will take place at the end of 2014 and is therefore not yet recognized in profit or loss.

Our service business will continue to benefit in 2014 from the high level of commissioning in the Power Plant Solutions division. We also anticipate new acquisitions through long-standing service and maintenance contracts with larger volumes. Long-term contracts for the operational management of large-scale PV power plants in particular form the basis of a profitable service business. After a successful start in North America, SMA is aiming to acquire further complete plant service contracts in 2014. We also want to develop our service portfolio in the service business in 2014 with additional, new services, thus taking advantage of new sales potential. The 50.2 Hz switchover in Germany is also likely to considerably revive the German service business in the current year. Overall, the SMA Managing Board expects the service business to achieve sales of between €35 million and €50 million in 2014. The target EBIT margin is between 2% and 5%.

In the Zeversolar division, we anticipate sales of between €50 million and €70 million. With the acquisition of the Chinese inverter manufacturer Zeversolar, SMA has secured access to the world's largest photovoltaic market of China. Once the restructuring is complete, the Managing Board assumes that SMA will benefit from this division in 2014 with better quality products and a new international Sales team. Given the growth forecast of 18 GW of new installations in China and the attractive international budget segment, the Managing Board expects Zeversolar to break even in 2014.

In the Railway Technology division, the SMA Managing Board anticipates sales of between €30 million and €40 million. The operating result is particularly dependent on the further development of business in Brazil and China. Given that the market launch of the new, high-performance platform for supplying energy to local passenger trains will only begin to have a positive impact in 2015, the SMA Managing Board believes that an EBIT margin of between 1% and 4% is realistic for the Railway Technology division for 2014.

## Decrease in Net Working Capital

The Managing Board expects net working capital to decrease in the current fiscal year. In the future, this is expected to amount to between 20% and 23% of sales (December 31, 2013: 26.6%). We aim to progressively reduce inventories further through various optimization projects. Compared with the reporting date, we expect to see a further increase in receivables, primarily due to stronger foreign and project business. These businesses are generally accompanied by longer payment periods.

To Our Shareholders

Corporate Governance

**Consolidated Management Report** —— Forecast Report

Consolidated Financial Statements

Other Information

## Stable Investment Volumes and Solid Financial Basis

For the fiscal year 2014, SMA is planning investments of between €70 million and €90 million. The investments in land and buildings amount to as much as €10 million. SMA is expected to invest up to €50 million in machinery and equipment. These investments, among others, are scheduled for the start of production of new product lines in the years of 2014 and 2015. Investments in intangible assets primarily concern the capitalization of development projects and are between €20 million and €30 million. In the medium-term, SMA is aiming for total annual investments to comprise up to 8% (2013: 5.7%) of sales. SMA will continue with its successful strategy of producing primarily on the basis of orders received. The annual worldwide production capacity of 15 GW is sufficient to meet global demand. A net working capital ratio of between 20% and 23%, an equity ratio of almost 60% and net cash of more than €300 million underline SMA's eligibility for financing and help toward generating sales.

## Laying Foundations Early for Long-Term Success

As a specialist for system technology and a global market leader, SMA offers complete system solutions for all markets, module types and power classes. None of our competitors has an innovation rate that even comes close to rivalling SMA's and such a strong positioning as a technological leader. In addition to this, our strong sales and service structures are also extremely well positioned to use the opportunities presented by a globally growing photovoltaic market to the best possible advantage and successfully achieve our target of increased sales. Our flexible business model and solid financial basis help us to exploit new markets. By significantly reducing production costs, optimizing our processing and making extensive structural adjustments across the entire organization, we have also satisfied all the conditions required to achieve a return to profitability in the current fiscal year. The acquisition of Zeversolar will help us to take advantage of growth in the Chinese market and improve our market share. SMA is characterized by an extraordinary corporate culture and motivated employees, who all make a decisive contribution to the Company's long-term success – even in a challenging market environment.

Niestetal, February 21, 2014

SMA Solar Technology AG

The Managing Board



### % EQUITY RATIO

THE COMPANY'S EQUITY AMOUNTS TO €724.4 MILLION BASED ON THIS, WE ARE ABLE TO LARGELY FINANCE OUR CONTINUED GROWTH WITH EQUITY.

# Consolidated Financial Statements

114	— Income Statement SMA Group	147	— <b>Notes to the Consolidated Balance Sheet SMA Group</b>
115	— Statement of Comprehensive Income SMA Group	147	— 16. Intangible Assets
116	— Balance Sheet SMA Group	149	— 17. Fixed Assets
117	— Statement of Cash Flows SMA Group	150	— 18. Inventories
118	— Statement of Changes in Equity SMA Group	151	— 19. Trade Receivables and Other Receivables
120	— <b>Notes SMA Group</b>	152	— 20. Other Financial Assets
120	— 1. Basic Information	152	— 21. Cash and Cash Equivalents
121	— 2. Consolidation	152	— 22. Shareholders' Equity
124	— 3. Accounting Methods and Amendments to Accounting Standards	153	— 23. Provisions
134	— 4. Business Combinations	154	— 24. Financial Liabilities
136	— 5. Segment Reporting	155	— 25. Trade Payables
140	— <b>Notes to the Income Statement SMA Group</b>	155	— 26. Other Financial Liabilities
140	— 6. Cost of Sales	155	— 27. Other Liabilities
141	— 7. Selling Expenses	156	— 28. Additional Disclosures Relating to Financial Instruments
141	— 8. Research and Development Expenses	160	— 29. Obligations under Leases and Other Financial Obligations
142	— 9. General Administrative Expenses	161	— 30. Contingencies
142	— 10. Other Operating Income	161	— <b>Notes to the Statement of Cash Flows SMA Group</b>
143	— 11. Other Operating Expenses	161	— 31. Net Cash Flow From Operating Activities
143	— 12. Benefits to Employees and Temporary Employees	161	— 32. Net Cash Flow From Investing Activities
144	— 13. Financial Result	162	— 33. Net Cash Flow From Financing Activities
144	— 14. Income Taxes	162	— 34. Cash and Cash Equivalents
146	— 15. Earnings per Share	162	— <b>Other Disclosures</b>
		162	— 35. Events After the Balance Sheet Date
		162	— 36. Related Party Disclosures
		164	— 37. Objectives and Methods Concerning Financial Risk Management
		167	— 38. Auditor Fees
		167	— 39. Declaration on the German Corporate Governance Code in Accordance with Section 161 AktG
		167	— 40. Consolidated Financial Statements
168	— <b>Responsibility Statement</b>		
169	— <b>Auditors' Report</b>		

## Income Statement SMA Group

	Note	2013	2012
in €'000			
<b>Sales</b>	5	<b>932,523</b>	<b>1,463,363</b>
Cost of sales	6	787,580	1,119,802
<b>Gross profit</b>		<b>144,943</b>	<b>343,561</b>
Selling expenses	7	59,167	68,866
Research and development expenses	8	79,573	87,917
General administrative expenses	9	70,718	74,400
Other operating income	10	35,635	27,646
Other operating expenses	11	60,261	38,036
<b>Operating profit (EBIT)</b>		<b>-89,141</b>	<b>101,988</b>
Financial income		5,876	4,828
Financial expenses		5,539	2,074
<b>Financial result</b>	13	<b>337</b>	<b>2,754</b>
<b>Profit before income taxes</b>		<b>-88,804</b>	<b>104,742</b>
Income tax	14	-21,952	29,637
<b>Consolidated net result</b>		<b>-66,852</b>	<b>75,105</b>
of which attributable to non-controlling interests		-234	0
of which attributable to shareholders of SMA AG		-66,618	75,105
Earnings per share, basic (in €)	15	-1.92	2.16
Earnings per share, diluted (in €)	15	-1.92	2.16
Number of ordinary shares (in thousands)		34,700	34,700

To Our Shareholders

Corporate Governance

Consolidated Management Report

**Consolidated Financial Statements** —— Income Statement | Statement of Comprehensive Income

Other Information

## Statement of Comprehensive Income SMA Group

in €'000	Note	2013	2012
<b>Consolidated net result</b>		<b>-66,852</b>	75,105
Changes in fair values of available-for-sale assets		-469	456
Income tax		142	-138
<b>Changes recognized outside profit or loss<sup>1</sup> (available-for-sale financial assets)</b>		<b>-327</b>	318
Unrealized gains (+)/losses (-) from currency translation of foreign subsidiaries		-3,875	1,044
<b>Changes recognized outside profit or loss<sup>1</sup> (currency translation differences)</b>		<b>-3,875</b>	1,044
<b>Overall comprehensive result</b>		<b>-71,054</b>	76,467
of which attributable to non-controlling interest		-228	0
of which attributable to shareholders of SMA AG		-70,826	76,467

<sup>1</sup> Items of other comprehensive income may be reclassified to profit or loss.

## Balance Sheet SMA Group

in €'000	Note	12/31/2013	12/31/2012
<b>Non-current assets</b>			
Goodwill	16	13,173	311
Other intangible assets	16	78,974	66,424
Fixed assets	17	348,886	377,107
Other financial investments		5	75
Other financial assets	20	53,451	51,073
Deferred taxes	14	63,782	25,184
		<b>558,271</b>	<b>520,174</b>
<b>Current assets</b>			
Inventories	18	184,131	221,369
Trade receivables	19	124,259	119,288
Other financial assets	20	169,194	257,398
Claims for income tax refunds	14	12,996	11,302
Other receivables	19	18,725	13,846
Cash and cash equivalents	21	192,366	185,299
		<b>701,671</b>	<b>808,502</b>
<b>Total assets</b>		<b>1,259,942</b>	<b>1,328,676</b>
<b>Shareholders' equity</b>			
Share capital		34,700	34,700
Capital reserves		119,200	119,200
Retained earnings		570,363	666,761
Equity attributable to non-controlling interests		163	2
	22	<b>724,426</b>	<b>820,663</b>
<b>Non-current liabilities</b>			
Provisions	23	101,752	112,815
Financial liabilities	24	46,714	32,775
Other financial liabilities	26	1,624	2,078
Other liabilities	27	113,632	94,422
Deferred taxes	14	23,320	21,553
		<b>287,042</b>	<b>263,643</b>
<b>Current liabilities</b>			
Provisions	23	96,804	89,879
Financial liabilities	24	26,665	2,788
Trade payables	25	60,806	72,691
Other financial liabilities	26	37,650	55,892
Income tax liabilities	14	2,267	681
Other liabilities	27	24,282	22,439
		<b>248,474</b>	<b>244,370</b>
<b>Total equity and liabilities</b>		<b>1,259,942</b>	<b>1,328,676</b>

## Statement of Cash Flows SMA Group

	Note	2013	2012
in €'000			
Consolidated net result		- 66,852	75,105
Income tax		- 21,952	29,637
Financial result		- 337	- 2,754
Depreciation and amortization		83,640	69,923
Change in other provisions		- 4,138	25,933
Losses from the disposal of assets		4,503	4,118
Other non-cash expenses/revenue		31,882	26,654
Interest received		3,087	4,553
Interest paid		- 3,680	- 1,286
Income tax paid		- 14,989	- 66,087
<b>Gross cash flow</b>		<b>11,164</b>	<b>165,796</b>
Decrease in inventories		19,733	8,780
Decrease in trade receivables		15,440	20,900
Decrease in trade payables		- 24,669	- 43,069
Change in other net assets/other non-cash transactions		- 24,115	- 36,273
<b>Net cash flow from operating activities</b>	31	<b>- 2,447</b>	<b>116,134</b>
Payments for investments in fixed assets		- 25,189	- 72,906
Proceeds from the disposal of fixed assets		3,687	60
Payments for investments in intangible assets		- 28,004	- 27,304
Payments for the acquisition of companies net of cash/payments			
for the acquisition of business units		- 22,125	0
Proceeds from the disposal of securities and other financial assets		441,000	228,631
Payments for the acquisition of securities and other financial assets		- 335,000	- 388,543
<b>Net cash flow from investing activities</b>	32	<b>34,369</b>	<b>- 260,062</b>
Change in non-controlling interests		162	0
Proceeds of financial liabilities		44,870	3,739
Redemption of financial liabilities		- 35,533	- 1,862
Dividends paid by SMA Solar Technology AG		- 20,820	- 45,110
Cash outflows for the acquisition of non-controlling interests in subsidiaries		- 5,060	0
<b>Net cash flow from financing activities</b>	33	<b>- 16,381</b>	<b>- 43,233</b>
Net increase/decrease in cash and cash equivalents		15,541	- 187,161
Net increase/decrease due to exchange rate effects		- 8,474	1,359
Cash and cash equivalents as of 01/01		185,299	371,101
<b>Cash and cash equivalents as of 12/31</b>	34	<b>192,366</b>	<b>185,299</b>

## Statement of Changes in Equity SMA Group

in € '000	Note	Share capital	Capital reserves
Shareholders' equity as of January 1, 2012		34,700	119,200
Dividend payments of SMA Solar Technology AG		0	0
Consolidated net profit		0	0
Other comprehensive income after tax	22	0	0
Overall result			
<b>Shareholders' equity as of December 31, 2012</b>	22	<b>34,700</b>	<b>119,200</b>
<b>Shareholders' equity as of January 1, 2013</b>		<b>34,700</b>	<b>119,200</b>
Dividend payments of SMA Solar Technology AG		0	0
Consolidated net loss		0	0
Other comprehensive income after tax	22	0	0
Overall result			
Additions of non-controlling interests		0	0
Put option on non-controlling interests		0	0
Acquisition of non-controlling interests		0	0
Proceeds from owners (capital increase Zeversolar)		0	0
Other changes in equity		0	0
<b>Shareholders' equity as of December 31, 2013</b>	22	<b>34,700</b>	<b>119,200</b>

To Our Shareholders

Corporate Governance

Consolidated Management Report

**Consolidated Financial Statements** — Statement of Changes in Equity

Other Information

**Equity attributable to the shareholders of the parent company**

<b>Market valuation of securities</b>	<b>Difference from currency translation</b>	<b>Other retained earnings</b>	<b>Total</b>	<b>Equity attributable to non-controlling interests</b>	<b>Consolidated shareholders' equity</b>
— 47	158	635,293	789,304	2	789,306
0	0	-45,110	-45,110	0	-45,110
0	0	75,105	75,105	0	75,105
318	1,044	0	1,362	0	1,362
					76,467
<b>271</b>	<b>1,202</b>	<b>665,288</b>	<b>820,661</b>	<b>2</b>	<b>820,663</b>
<b>271</b>	<b>1,202</b>	<b>665,288</b>	<b>820,661</b>	<b>2</b>	<b>820,663</b>
0	0	-20,820	-20,820	0	-20,820
0	0	-66,618	-66,618	-234	-66,852
-327	-3,881	0	-4,208	6	-4,202
					-71,054
0	0	0	0	3,933	3,933
0	0	-3,343	-3,343	0	-3,343
0	0	-2,712	-2,712	-2,394	-5,106
0	0	1,150	1,150	-1,150	0
0	0	153	153	0	153
<b>-56</b>	<b>-2,679</b>	<b>573,098</b>	<b>724,263</b>	<b>163</b>	<b>724,426</b>

# Notes SMA Group

## Basic Information

### 1. Basics

The Consolidated Financial Statements of SMA Solar Technology AG for the year ended December 31, 2013 were prepared in compliance with the International Financial Reporting Standards (IFRS) as adopted by the EU, as well as in compliance with the regulations of Section 315a of the German Commercial Code (HGB). The requirements of the standards applied were fulfilled completely and provide a fair view of the net assets, financial position and results of operations of SMA Solar Technology AG and the subsidiary companies included in the scope of consolidation (hereinafter: the SMA Group or the Group).

The registered office of the Company is Sonnenallee 1, 34266 Niestetal, Germany. The shares of SMA Solar Technology AG are traded publicly. They are listed in the Prime Standard of the Frankfurt Stock Exchange. Since September 22, 2008, they have been listed in the technology index TecDAX.

The Consolidated Financial Statements are prepared on the basis of the amortized historical cost principle. Exceptions to this are provisions, deferred taxes, leases, derivative financial instruments and available-for-sale securities.

The income statement is classified according to the cost of sales method. The Consolidated Financial Statements were prepared in euros. Unless indicated otherwise, all amounts stated are rounded to full thousands of euros (€ '000) or millions of euros (€ million).

The Managing Board of SMA Solar Technology AG authorized the Consolidated Financial Statements on February 21, 2014, for submission to the Supervisory Board. The Supervisory Board has the duty of reviewing the Consolidated Financial Statements and declaring whether it approves the Consolidated Financial Statements.

The SMA Group develops, manufactures and distributes PV inverters, transformers, chokes and monitoring and energy management systems for PV systems and power-electronic components for railway technology.

See also section 5  
page 136 et seqq.

More detailed information on segments is provided in Section 5.

## 2. Consolidation

### 2.1. CONSOLIDATION PRINCIPLES

All domestic and foreign subsidiaries in which SMA Solar Technology AG, directly or indirectly, has the option of controlling the financial and operating policies of these subsidiaries are included in the Consolidated Financial Statements of the SMA Group.

Subsidiaries are fully consolidated from the date of acquisition, i.e., from the date on which the Group obtains control. Consolidation takes place according to the purchase method of accounting. In line with the purchase method of accounting, the cost of acquisition of the business combination is offset against the fair value of the assets acquired and liabilities assumed from the subsidiary at the date of acquisition. The cost of acquisition of the business combination consists of the fair value of the purchase price paid and the carrying amount of any non-controlling interests. The non-controlling interests may either be recognized at the proportionate value of the assets acquired and liabilities assumed (applied at SMA) or at their fair value. Transaction costs that are directly attributable to the acquisition are recognized in the consolidated financial result provided they do not refer to the issue of shares in the SMA Group.

In case of a business combination as a result of the successive acquisition of shares, the existing shares are revalued at their fair value and any effects are recognized in the consolidated financial result.

Conditional components of the acquisition price are valued at their fair value at the date of acquisition.

A positive difference resulting from the offsetting is capitalized as goodwill. It may, if applicable, also include the goodwill corresponding to non-controlling interests. Negative differences resulting from the consolidation at the date of acquisition are recognized directly in the income statement.

Intercompany transactions, balances, sales, expenses and income, profits and losses as well as receivables and payables amongst the consolidated companies are eliminated. In the event of consolidation measures affecting income, the income-tax-related effects are measured and deferred taxes are recorded.

The Financial Statements of SMA Solar Technology AG and of the subsidiaries are prepared on identical reporting dates using uniform accounting and valuation methods.

### 2.2. SCOPE OF CONSOLIDATION

The scope of consolidation as at December 31, 2013, was expanded compared with December 31, 2012, to include the newly founded companies SMA New Energy Technology (Shanghai) Co., Ltd. (Shanghai, China) and SMA Sub - Sahara Production Pty. Ltd. (Randburg, South Africa), and the acquisition of the subgroup Jiangsu Zevversolar New Energy Co., Ltd. (Suzhou, China). All companies were fully consolidated. Those companies entitled investments in the list of shareholdings are not consolidated due to their subordinate importance. Non-controlling interests, share in equity of the consolidated companies is shown separately within equity.

The scope of consolidation of the SMA Group is presented in the complete list of shareholdings shown below pursuant to Section 313 of the German Commercial Code:

Name	Registered office	Share in capital	Consolidation
<b>Parent company</b>			
SMA Solar Technology AG	Niestetal, Germany		F
<b>Shares in affiliated companies</b>			
Australia Zeversolar New Energy Pty. Ltd.	Sydney, Australia	100% <sup>4</sup>	F
dtw Sp. z o.o.	Zabierzów, Poland	100%	F
Jiangsu Zeversolar New Energy Co., Ltd.	Suzhou, China	98.81% <sup>5</sup>	F
Jiangsu ZOF New EngeryCO., Ltd.	Yangzhong, China	100% <sup>4</sup>	F
Shanghai ZOF New Energy Co., Ltd.	Shanghai, China	100% <sup>4</sup>	F
SMA America Holdings LLC	Denver, USA	100%	F
SMA America Production LLC	Denver, USA	100% <sup>4</sup>	F
SMA Australia Pty. Ltd.	North Ryde, Australia	100%	F
SMA (Beijing) Commercial Co. Ltd.	Beijing, China	100%	F
SMA Benelux BVBA	Mechelen, Belgium	100% <sup>2</sup>	F
SMA Brasil Tecnologia Ferroviaria Ltda.	Itupeva, Brazil	100% <sup>4</sup>	F
SMA Central and Eastern Europe s.r.o.	Prague, Czech Republic	100%	F
SMA France S.A.S.	Saint Priest Cedex, France	100%	F
SMA Ibérica Tecnología Solar, S.L.	Barcelona, Spain	100%	F
SMA Immo Beteiligungs GmbH	Niestetal, Germany	94% <sup>1</sup>	F
SMA Immo GmbH & Co. KG	Niestetal, Germany	100%	F
SMA Italia S.r.l.	Milan, Italy	100%	F
SMA Japan Kabushiki Kaisha	Tokyo, Japan	100%	F
SMA Middle East Limited	Abu Dhabi, United Arab Emirates	100%	F
SMA New Energy Technology (Shanghai) Co., Ltd.	Shanghai, China	100%	F
SMA Railway Technology GmbH	Kassel, Germany	100%	F
SMA Service International GmbH	Niestetal, Germany	100%	F
SMA South America SpA	Santiago, Chile	100%	F
SMA Solar Beteiligungs GmbH	Niestetal, Germany	100%	F
SMA Solar India Private Limited	Mumbai, India	100% <sup>2</sup>	F
SMA Sub-Sahara Production Pty. Ltd.	Randburg, South Africa	100%	F
SMA Solar Technology America LLC	Rocklin, USA	100% <sup>4</sup>	F
SMA Solar Technology Beteiligungs GmbH	Niestetal, Germany	100%	F
SMA Solar Technology Canada Inc.	Vancouver, Canada	100%	F
SMA Solar Technology Portugal, Unipessoal LDA	Palmela, Portugal	100%	F
SMA Solar (Thailand) Co. Ltd	Bangkok, Thailand	100% <sup>3</sup>	F
SMA Solar UK Ltd.	Banbury, Great Britain	100%	F
SMA Technology Hellas AE	Glyfada, Greece	100% <sup>2</sup>	F
SMA Technology Korea Co., Ltd.	Seoul, South Korea	100%	F
SMA Technology South Africa (Pty) Ltd.	Centurion, South Africa	100%	F
Zeversolar GmbH	Munich, Germany	100% <sup>4</sup>	F
<b>Investments</b>			
IdE Institut dezentrale Energietechnologien gemeinnützige GmbH	Kassel, Germany	10%	N
Uni Kassel International Management School KIMS GmbH	Kassel, Germany	10%	N

F = fully consolidated; N = not consolidated

<sup>1</sup> The remaining shares are held by SMA Technologie-Holding GmbH. <sup>2</sup> 0.1 % are held by SMA Solar Technology Beteiligungs GmbH.

<sup>3</sup> 0.001 % are held by SMA Solar Technology Beteiligungs GmbH and 0.001 % are held by SMA Solar UK Ltd. <sup>4</sup> indirect investment

<sup>5</sup> the remaining shares are distributed among minority shareholders

To Our Shareholders

Corporate Governance

Consolidated Management Report

**Consolidated Financial Statements** —— Basic Information

Other Information

All companies of the SMA Group prepare their Annual Financial Statements as at December 31 with the exception of our Indian subsidiary SMA Solar India Private Limited, which prepares its Financial Statements as at March 31.

SMA Immo GmbH & Co. KG has made use of the exemption clause pursuant to Section 264b of the German Commercial Code.

### **2.3. TRANSLATION OF FINANCIAL STATEMENTS IN FOREIGN CURRENCIES**

The Consolidated Financial Statements are prepared in euros, which is the reporting currency of the Group. Each company within the Group defines its own functional currency, which is normally the local currency. The items contained in the Financial Statements of the relevant company are valued using this functional currency.

Transactions denominated in foreign currencies are translated initially to the functional currency by applying the spot rate valid at the time of the transaction. On each subsequent due date, monetary assets and liabilities denominated in foreign currencies are translated to the functional currency by applying the spot rate valid on that day. All translation differences are recognized through profit or loss.

Assets and liabilities of subsidiaries preparing their balance sheets in a currency other than the euro are translated using the current exchange rate at the balance sheet date. Items of the income statement are translated periodically using the average rate of the relevant month. The equity components of subsidiaries are translated at the corresponding historical exchange rate applicable upon accrual. Any resulting translation differences are recorded under other income within equity as adjustment items for foreign currency translation or in shares of other shareholders. The accumulated amount recorded in equity is recognized through profit or loss upon the disposal of the relevant foreign subsidiary.

The relevant exchange rates for translating the Financial Statements prepared in foreign currencies have evolved as follows in relation to the euro:

in €	2013	2012	12/31/2013	12/31/2012	Average rate	Closing rate
1 Chinese renminbi (CNY)	0.12567	0.12356	0.11994	0.12172		
1 US dollar (USD)	0.75319	0.77839	0.72637	0.75844		

### 3. Accounting Methods and Amendments to Accounting Standards

#### 3.1. NEW IASB ACCOUNTING STANDARDS

STANDARDS AND INTERPRETATIONS TO BE APPLIED FOR THE FIRST TIME IN THE FISCAL YEAR

Standard/interpretation		Date of compulsory application <sup>1</sup>	Endorsement (until December 31, 2013) <sup>2</sup>
Amendment — Annual Improvements	Annual improvements 2009 – 2011	01/01/2013	yes
Amendment — IFRS 1	Government Loans	01/01/2013	yes
Amendment — IFRS 1	Severe Hyperinflation	01/01/2013	yes
Amendment — IFRS 7	Disclosures – Offsetting Financial Instruments	01/01/2013	yes
New — IFRS 13	Fair Value Measurement	01/01/2013	yes
Amendment — IAS 1	Presentation of Financial Statements	07/01/2012	yes
Amendment — IAS 12	Income Tax Expenses	01/01/2013	yes
Amendment — IAS 19	Employee Benefits	01/01/2013	yes
New — IFRIC 20	Stripping Costs in the Production Phase of a Surface Mine	01/01/2013	yes

1 Application to the first reporting period of a fiscal year beginning on or after that date.

2 Adoption of IFRS standards or interpretations by the EU Commission.

#### IFRS 1 Government Loans

The amendments to IFRS 1 relate to low-interest government loans. First-time adopters are not required to implement complete retrospective application of IFRS when accounting for such loans.

#### IFRS 1 Severe Hyperinflation

The first amendment replaces references to the fixed transition date "January 1, 2004" with "date of transition to IFRS". The second amendment provides guidance on how to deal with the presentation of IFRS financial statements if an entity was unable to comply with the IFRS provisions for a period of time because its functional currency was subject to severe hyperinflation.

#### IFRS 7 Financial Instruments: Disclosures – Offsetting Financial Instruments

New disclosure requirements are put in place for transfers of financial instruments, with particular regard to risks remaining at the transferring company, as well as disproportionate transfers at the end of the reporting period.

#### IFRS 13 Fair Value Measurement

IFRS 13 defines the approach to measuring fair value as a kind of basic standard. Whether fair value measurement is required will continue to be regulated in the individual standards. The measurement is primarily to be based on an active market and thus on sale price. In the absence of an active market, the two subordinated measurement levels shall be used. The new standard is mainly used in the Group for the measurement of financial instruments.

### **IAS 1 Presentation of Financial Statements**

The requirements on the presentation of financial statements were amended so that separate subtotals are required in other comprehensive income for items that are recycled (e.g., in future cash flow hedging, foreign currency translation) and those that are not (e.g., items recognized in income through other comprehensive income under IFRS 9).

### **IAS 12 Income Taxes**

The amendment provides a practical solution for the problem of delimiting the question of whether the book value of an asset is recovered through use or sale, by introducing a rebuttable presumption that the book value is normally recovered through sale.

### **IAS 19 Employee Benefits**

The amendments of IAS 19 relate to the accounting of defined benefit plans and post-employment benefits. The amendment has no substantial influence on the consolidated statements of the SMA Group.

### **IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine**

The interpretation provides guidance on recognition and measurement after recognition in connection with stripping cost. The interpretation has no influence on the consolidated statements of the SMA Group.

### STANDARDS AND INTERPRETATIONS THAT HAVE BEEN PUBLISHED BUT ARE NOT YET MANDATORY

The following standards and interpretations were issued by the IASB in the run-up to the balance sheet date. However, they will only be applied by the SMA Group at a later date.

Standard/interpretation	Date of compulsory application <sup>1</sup>	Endorsement (until December 31, 2013) <sup>2</sup>
Amendment — IAS 19 — Employee Benefits	07/01/2014	no
Amendment — IAS 27 — Separate Financial Statements (2011)	01/01/2014	yes
Amendment — IAS 28 — Investments in Associates and Joint Ventures	01/01/2014	yes
Amendment — IAS 32 — Offsetting Financial Assets and Financial Liabilities	01/01/2014	yes
Amendment — IAS 36 — Disclosures on Recoverable Amount of Non-Financial Assets	01/01/2014	yes
Amendment — IAS 39 — Novation of Derivatives and ongoing Hedge Accounting	01/01/2014	yes
New — IFRS 9 — Financial Instruments – Classification and Measurement	01/01/2017	no
New — IFRS 10 — Consolidated Financial Statements	01/01/2014	yes
New — IFRS 11 — Joint Arrangements	01/01/2014	yes
New — IFRS 12 — Disclosure of Interests in Other Entities	01/01/2014	yes
New — IFRIC 21 — Levies	01/01/2014	no

<sup>1</sup> Application to the first reporting period of a fiscal year beginning on or after that date.

<sup>2</sup> Mandatory application according to adoption by the EU Commission – the standards themselves sometimes stipulate earlier mandatory application.

Of the applicable standards and interpretations that have been published but are not yet mandatory, the following are expected to have an impact on the Financial Statements of the SMA Group. They will be implemented at the very latest in the year of compulsory first-time application.

**IAS 19 Employee Benefits**

Clarification of the assignment of employee contributions or contributions of third parties, related to the period of service and the simplification for period of service independent amounts.

**IAS 27 Separate Financial Statements**

As before, the provisions for separate financial statements remain part of the amended IAS 27. The other parts of IAS 27 have been replaced by IFRS 10.

**IAS 28 Investments in Associates and Joint Ventures**

The amended IAS 28 contains consequential amendments resulting from the publication of IFRS 10, IFRS 11 and IFRS 12.

**IAS 32 Offsetting Financial Assets and Financial Liabilities**

The amendments to IAS 32 represent only a clarification of the previous provisions on offsetting.

**IAS 36 Disclosures on Recoverable Amount of Non-Financial Assets**

The amendments relate to disclosures on the recoverable amount of impaired assets, if the amount is based on the fair value less cost to sell.

**IAS 39 Novation of Derivatives and ongoing Hedge Accounting**

With the amendment derivatives remain designated as hedging instruments in an ongoing hedge despite of a novation, if the novation leads to an involvement of a Central Counterparty (CCP) following legal or regulatory requirements.

**IFRS 9 Financial Instruments – Classification and Measurement**

In November 2009, the IASB adopted the Standard for the Classification and Measurement of Financial Assets and added a corresponding regulation for financial liabilities in November 2010. The standard is part of the comprehensive IASB project to replace IAS 39 Financial Instruments – Recognition and Measurement. The adopted version stipulates that in the future, financial assets should in principle be recorded at amortized cost or at fair value through profit or loss. In addition, it provides for a non-reversible choice on a case-by-case basis for the measurement of equity instruments at fair value. The category of financial instruments is determined upon acquisition and may not be changed subsequently. In addition, the standard contains related regulations concerning for instance embedded derivatives, the fair value option and impairment losses/reversal of impairment losses. It is envisaged that the standard will apply mandatorily from 2017 onwards following its endorsement by the EU. SMA Solar Technology AG will observe the further development of the entire project to revise IAS 39 Financial Instruments – Recognition and Measurement.

#### **IFRS 10 Consolidated Financial Statements**

IFRS 10, applicable from 2014, supersedes the SIC 12 assessment of opportunities and risks. The sole decisive factor for consolidation is control over the investee. IFRS 10 is to be applied retrospectively. From the current standpoint, this will not lead to any changes in the presentation of the SMA Group.

#### **IFRS 11 Joint Arrangements**

IFRS 11 deals with joint ventures and joint operations and the different ways they are recognized. In the future, joint ventures must be included in the consolidated financial statements at equity; the option to apply proportionate consolidation is discontinued. The standard is to be applied from 2014. At the moment, this standard has no significance for the SMA Group.

#### **IFRS 12 Disclosure of Interests in Other Entities**

The new IFRS 12 summarizes the disclosure requirements from IAS 27, 28 and 31 and adds additional ones. It is to be applied from 2014.

#### **IFRIC 21 Levies**

The Interpretation provides guidance when a liability for levies imposed by a government has to be recognised.

#### **3.2. DISCLOSURES TO THE ACCOUNTING POLICIES**

**Intangible assets acquired** with a finite useful life are valued at cost. They decline via straight-line amortization over their useful lives and accumulated impairments.

The costs for internally generated intangible assets are recognized in the period in which they accrue, with the exception of development costs that can be capitalized.

**Research and development expenses** include all expenses that can be attributed directly to research or development activities. Expenditure on research is recognized as expenditure in the period in which it is incurred. The development costs of a project are capitalized as an intangible asset only after the SMA Group can demonstrate both the technical feasibility of completing the intangible asset so that it will be available for internal use or sale and the intention to complete the intangible asset and either use or sell it. In addition, the SMA Group must demonstrate how the intangible asset will generate future economic benefits, the availability of resources to complete the intangible asset and the ability to reliably measure the expenditure attributable to the intangible asset during its development. Development costs are recognized at cost pursuant to IAS 38.66, less accumulated amortization and accumulated impairment losses. Amortization commences at the end of the development phase and from the moment the asset can be used. Amortization is effected over the period during which future benefit is to be expected. Incomplete development projects are tested annually for impairment. When the reasons that have resulted in impairment cease to exist, a corresponding addition is made.

With the purchase of dtw Sp. z o.o. in fiscal year 2011, the Group formed goodwill for the first time. Additional goodwill arose from the acquisition of Jiangsu Zeversolar New Energy Co., Ltd. in 2013. There were no other intangible assets with an indefinite useful life in the periods under review.

Intangible assets with a finite useful life are written down over three to five years using straight-line amortization. In the case of intangible assets with a finite useful life, the period of amortization and the amortization method are reviewed at least at the end of each fiscal year. Any changes in the amortization period that become necessary because of changes in the expected useful life are accounted for as changes to estimates. Amortization is recorded under the expense category that corresponds to the function of the intangible asset in the enterprise.

Any gains or losses from derecognition of intangible assets are determined as the difference between the net disposal proceeds and the book value of the asset. They are recognized in profit or loss in the period in which the asset is derecognized.

**Fixed assets** are valued at cost less straight-line depreciation and accumulated impairment losses. Borrowing costs are added to cost in the event of qualifying assets. The cost of replacement of a part of a fixed asset is included in the book value of this asset when incurred if the criteria for recognition are fulfilled. When major inspections are carried out, the costs are capitalized according to the book value of the relevant assets if the criteria for recognition are fulfilled. All other maintenance and repair costs are expensed immediately.

The depreciation period is based on the expected useful life. Depreciation is recognized under the expense category that corresponds to the function of assets in the enterprise. Scheduled straight-line depreciation is based on the following useful life of assets:

	Useful life
Leasehold improvements	10 years
Buildings	25 to 35 years
Technical equipment and machinery	6 to 8 years
Business and office equipment	5 to 10 years

A fixed asset is derecognized either upon its disposal or when no further economic benefit is expected from the further use or sale of the asset. Gains or losses from derecognition of the asset are determined as the difference between the net disposal proceeds and the book value of the asset and recognized through profit or loss in the income statement as other operating income or other operating expenses in the period in which the asset is derecognized.

The residual values, useful lives and depreciation methods are reviewed at the end of each fiscal year and adjusted if necessary.

**Impairment of intangible assets and fixed assets:** On each balance sheet date, the Group reviews whether there are any indicators that the value of an asset might be impaired. If such indicators exist or if an annual impairment test of an asset is required, the Group makes an estimate of the recoverable amount of the relevant asset. The recoverable amount of an asset is its fair value less costs to sell or its value in use, whichever is higher. As a rule, the recoverable amount is to be determined for each individual asset. If it proves impossible to determine the recoverable amount for individual assets because the cash flows depend upon those of other assets, the cash flows are determined for the next higher group of assets (cash-generating unit) for which such a cash flow can be determined.

If the book value of an asset or a cash-generating unit exceeds the recoverable amount, the asset or the cash-generating unit is impaired and written down to the recoverable amount. In assessing the value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments regarding the interest effect and the risks specific to the asset. In order to determine the fair value less costs to sell, an adequate valuation model is used. This is based on valuation multipliers, stock prices of quoted shares of entities or other available indicators for the fair value. Impairment costs are recognized under the expense category that corresponds to the function of the impaired asset in the enterprise. In fiscal year 2013, as in the previous year, impairment was taken into account on development projects.

*See also section 16  
page 147 et seqq.*

In the case of assets, a test is carried out on each balance sheet date to determine whether there are any indicators that a previously recognized impairment loss has ceased to exist or has diminished. Additions are made if the recoverable amount has increased in subsequent periods. An impairment loss recognized in prior periods is only reversed if there is a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. If this is the case, the book value of the asset is increased to its recoverable amount. An addition is limited to the amount that would have resulted based on scheduled depreciation without recognizing an impairment. The addition is immediately recognized in the income statement. This was not the case in the year under review and in the previous year.

**Inventories** are stated at the lower of cost of acquisition or production and net realizable value. The costs of acquisition or production include all costs incurred during acquisition and production as well as other costs incurred in bringing the inventories to their present location and condition. Borrowing costs are not taken into account here. In general, when determining the acquisition costs of raw materials, consumables and supplies, moving average prices are used. The cost of production of work in progress and finished goods is determined using detailed cost accounting. The net realizable value consists of the estimated sales proceeds that can be achieved in the ordinary course of business, less the estimated costs incurred up to completion and the estimated necessary selling expenses. If the reasons that have resulted in an impairment of inventories no longer exist, a corresponding addition is made.

A **financial instrument** is a contract that gives rise to both a financial asset held by one entity and a financial liability or an equity instrument held by another entity. If the trading date and the settlement date of financial assets are different, then the settlement date is decisive for initial recognition. The date of contract conclusion is only decisive in the case of financial derivatives.

As a rule, financial instruments are reported as soon as an entity of the SMA Group becomes a contracting party to the provisions of the financial instrument. In the event of purchases or sales usual in the market (purchases or sales in the context of a contract, the conditions of which provide for the delivery of the asset within a certain period which is usually defined by the regulations or conventions of the relevant market), the settlement date, i.e., the date on which the asset is delivered to or by a company of the SMA Group, is decisive for its initial recognition in the balance sheet and for its removal from the balance sheet. Financial assets and financial liabilities are measured at fair value upon their initial recognition. In respect of financial assets and financial liabilities for which there is no measurement at fair value through profit or loss, the transaction costs that are directly attributable to the purchase of the financial asset or the issue of the financial liability are also included. Financial assets and financial liabilities are generally stated separately and only netted if there is a right of offsetting these amounts at the relevant date and if there is an intention to perform the settlement on a net basis.

For subsequent measurements, financial assets as defined in IAS 39 are classified as financial assets at fair value through profit or loss, as loans and receivables, as held-to-maturity investments or as available-for-sale financial assets. Financial liabilities as defined in IAS 39 are classified as financial liabilities at fair value through profit or loss or as other financial liabilities. Financial assets are designated to measurement categories upon their initial recognition. If permitted and necessary, re-designations are made at the end of the fiscal year.

For the SMA Group, the measurement categories loans and receivables, financial assets and liabilities measured at fair value and other financial liabilities are especially relevant.

Any loans and receivables granted by the enterprise and other financial liabilities are measured at amortized cost using the effective interest method. These are primarily trade receivables and payables, other financial receivables and assets, and long-term loans.

Held-for-trading assets are measured at their fair value. These include primarily derivative financial instruments that are not part of an effective hedging relationship as defined in IAS 39 and which must therefore be designated mandatorily as held for trading. Derivative financial instruments are reported as assets if their fair value is positive and as liabilities if their fair value is negative. Gains and losses resulting from changes in the fair value of derivative financial instruments are recognized directly through profit or loss, since no hedging relationship was created for them. Gains or losses resulting from subsequent measurement are recognized through profit or loss in the income statement. The derivative financial instruments held by the SMA Group are not part of effective hedging relationships in accordance with IAS 39.

On each balance sheet date, the book values of financial assets which are not measured at fair value through profit and loss are tested to determine whether objective substantial indicators for an impairment exist (such as considerable financial difficulties of the debtor, high probability of bankruptcy proceedings being initiated against the debtor, elimination of an active market for the financial asset, significant changes in the technological, economic, legal or market environment of the issuer or a permanent fall in the fair value of the financial assets below the amortized cost of acquisition). A possible impairment loss which is due to the fair value being lower than the book value is recognized through profit and loss. If impairments of the fair values of financial assets available for sale have previously been recognized directly in equity, these are eliminated from equity up to the amount of the identified impairment and transferred to the income statement. If subsequent measurements show that the fair value has increased objectively due to events occurring after the impairment loss was originally recognized, the impairment loss is reversed by applying the relevant amount through profit and loss. Impairments relating to unquoted available-for-sale equity instruments that are reported at cost may not be reversed.

A financial asset is removed from the books if the enterprise has relinquished control of the contractual rights that are related to the financial asset. A financial liability is removed from the books if the obligation underlying the liability is discharged, cancelled or has expired.

**Cash and cash equivalents** reported in the balance sheet include cash in hand as well as bank balances, checks, payment instruments in transit and short-term deposits with a total term to maturity of less than three months. The cash and cash equivalents in the Consolidated Statements of Cash Flows are accrued in line with the aforementioned definition and include any bank overdrafts that have been granted.

**Government grants** for assets are accrued under other liabilities and written back at identical annual installments through other operating income over the estimated useful life of the related asset. Government grants are only recorded if there is reasonable assurance that the entity will comply with the conditions attached to them and that the grants will be received.

**Provisions** account for all recognizable present (legal and constructive) obligations of the Group to third parties as a result of past events which are expected to lead to an outflow of resources with an economic benefit to settle the obligation, and the amount of which can be determined reliably. The provisions are recognized in line with IAS 37 at the estimated amount required to settle them. Insofar as the Group expects to receive a repayment, at least in part, for a reported provision (such as for an insurance contract), the repayment is recorded as a separate asset if the inflow of the payment is highly probable. The expense for the formation of the provision is recognized in the income statement. Non-current provisions are carried in the balance sheet at their settlement amount discounted to the balance sheet date using corresponding term-dependent market interest rates. If the amount is discounted, the increase of provisions caused by expiration is recorded under finance costs.

The determination as to whether an agreement contains a lease is made based on the economic content of the agreement on the date of its conclusion and requires an assessment of whether fulfillment of the agreement depends upon the use of a specific asset or specific assets and whether the agreement grants a right to use the asset:

An **operating lease** exists if the substantial rewards and risks regarding the leased object are retained by the lessor. Lease payments on operating leases are recorded over the term of the lease as an expense in the income statement.

**Borrowing costs** directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of those assets until such time as the assets are substantially ready for their intended use or sale. Qualifying assets refer to those assets that necessarily require a longer period of time before they are available for their intended use or sale. All other borrowing costs are recognized as profit or loss in the period in which they are incurred. Like in the previous year, no borrowing costs were capitalized in the current period under review.

**Employee benefits** are, as a rule, reported as a liability if an employee has provided work in exchange for benefits payable in the future and are recognized as an expense if the entity has received the economic benefit resulting from the work provided by an employee in exchange for future benefits.

Long-service and death benefits are granted on the basis of a Company agreement. Measurement of obligations to pay benefits is carried out by applying the projected unit credit method. This method takes into account both the claims for payment of long-service rewards and death benefits and the acquired pension rights known as of the balance sheet date and payments of long-service rewards and death benefits expected in the future.

In 2009, SMA Solar Technology AG introduced value-based lifelong working-time accounts. Under certain conditions, employees may have time credits or special benefits reposted to these value accounts and may later take paid leave of absence using the credit balances extrapolated based on income. The employees' value claims are protected against insolvency and reinsured.

**Revenue** is recognized if it is probable that the economic benefit will flow to the Group and the amount of the revenue can be measured reliably. Revenue is measured at the fair value of the consideration received. Discounts, rebates and other deductions are not taken into account. Revenue from the sale of goods and products is recognized if the material rewards and risks associated with the ownership of the goods and products sold have passed to the buyer. This is normally the case upon delivery of the goods and products. Revenue from services is recognized as soon as the services are rendered. Interest income is recognized when interest has accrued (using the effective interest rate, i.e., the internal rate used to discount estimated future cash inflows over the expected term of the financial instrument to the net book value of the financial asset). Dividends are recognized when the right to receive payment is established.

**Current tax receivables and tax liabilities** for the ongoing and for previous periods are measured at the amount which is expected to be reimbursed from the tax authority or to be paid to the tax authority. In order to calculate this amount, the tax rates and tax laws applicable at the balance sheet date are used. Current taxes that relate to items stated directly in equity are not recognized in the income statement but rather are recognized in equity.

**Deferred taxes** are calculated according to IAS 12 on the basis of the standard international balance-sheet-related liability method. This requires deferred tax items to be recognized for all temporary differences between the tax base of an asset or liability and its carrying amount in the consolidated balance sheet as well as for tax loss carryforwards. However, deferred tax assets are only recognized if realization is sufficiently likely.

Deferred taxes are measured using the tax rates that, under current legislation, would apply in the future on the probable date of reversal of the temporary differences. The effects of amendments to tax legislation on deferred tax assets and liabilities are recognized in profit or loss in the period in which the material conditions for such amendments to come into force arise. Deferred tax assets and liabilities are not discounted according to the regulations of IAS 12. Deferred tax assets and liabilities are offset within individual companies on the basis of maturity.

### 3.3. SIGNIFICANT JUDGEMENTS, ESTIMATES AND ASSUMPTIONS

The preparation of the Consolidated Financial Statements requires the Company Management to make judgements, estimates and assumptions that affect the amounts of revenues and expenses, assets and liabilities reported on the reporting date as well as the disclosure of contingent liabilities. Uncertainty related to these assumptions and estimates may lead to results that require material adjustments to the book values of the relevant assets or liabilities in the future.

When applying the accounting and valuation policies, the Company Management made the following judgements, which had a significant effect on the amounts recognized in the Consolidated Financial Statements. Judgements containing estimates are not taken into account here.

See also section 28  
page 156 et seqq.

The Company Management made a judgement on the first-time categorization of other financial assets. More information is provided in Section 28.

The key **assumptions** concerning the future and other key sources of **estimation uncertainty** on the reporting date associated with a significant risk of causing a material adjustment to the book values of assets and liabilities during the next fiscal year are explained below:

Development costs are capitalized in line with the accounting policies presented when all required conditions are given. Initial capitalization of costs is based on an estimate by the Company Management that a project's technical and economic feasibility has been proven. This is normally the case when a development project has reached a specific milestone or a specific quality gate in the development process. When determining the amounts to be capitalized, the Company Management makes further valuation assumptions regarding the amount of expected future cash flows from the assets, the discounting rates to be applied and the period of inflow of expected future cash flows generated by the assets. With this in mind, €22.9 million (2012: €20.2 million) were capitalized during the fiscal year. The increase in capitalization reflects the increasing development activities carried out by SMA in order to retain its technology leadership. The research and development costs recognized as expenses are presented in Section 8.

See also section 8  
page 141 et seqq.

In addition to individual circumstances, provisions for overall warranty risks are also taken into account when setting aside provisions for warranty obligations. In the case of warranty risks, an obligation of five or ten years is generally adopted as a base. The expected warranty expenditure is based on historical values from the past. The expected warranty expenditure is calculated by referring to a weighted percentage determined by comparing actual warranty expenditure in the last five to ten years leading up to the previous year's sales and applying these percentages to the sales covered by warranty obligations. The warranty provisions are used up equally over the five- to ten-year warranty period. The value of the provision for individual cases and overall warranty risks amounted to €158.7 million (2012: €178.5 million) as at December 31, 2013. Accrued payments received for non-gratuitous warranties are collected over the warranty period as sales revenues on a straight-line basis since, in this case, a linear progression of warranty costs is also adopted as the best possible estimation method.

On each balance sheet date, the Group examines whether there are indicators for an impairment of non-financial assets. Estimating the value in use requires the Company Management to make an estimate of the expected future cash flows from the asset or the cash-generating unit and to choose a suitable discount rate in order to calculate the present value of these cash flows. As in the previous year, impairment was recognized on development projects in fiscal year 2013. More information is provided in Section 16.

See also section 16  
page 147 et seqq.

Deferred tax assets are formed for all unused tax loss carry-forwards to the extent that it is probable that there will be sufficient taxable profit to enable the loss carry-forwards to be actually used. Determining the amount of deferred tax assets requires the Company Management to use significant discretion regarding the expected time of accrual and the amount of taxable income in the future as well as regarding the future tax planning strategies. Deferred tax assets for loss carry-forwards amounting to €29.4 million (2012: €0.8 million) were recorded.

#### 4. Business Combinations

As of March 12, SMA acquired 72.5% of the shares in Jiangsu Zeversolar New Energy Co., Ltd. (Zeversolar). Jiangsu Zeversolar New Energy Co., Ltd. is a Chinese subgroup. It includes the following fully consolidated companies: Jiangsu Zeversolar New Energy Co., Ltd. (parent company of the subgroup, Suzhou, China), Jiangsu ZOF New Energy Co., Ltd. (Yangzhong, China), Shanghai ZOF New Energy Co., Ltd. (Shanghai, China), Zeversolar GmbH (Munich, Germany) and Australia Zeversolar New Energy Pty Ltd. (Sydney, Australia).

Zeversolar manufactures inverters in low to medium power classes, Jiangsu ZOF inverters of higher power classes. Part of the research department is located in Shanghai. As one of the leading manufacturers in China, Zeversolar continues to offer products under its own name, primarily serving the Chinese photovoltaic market and the budget market (low-price segment) in foreign markets.

It was consolidated for the first time on the basis of the IFRS book values of the assets and liabilities as of March 12, 2013. The goodwill determined as part of the purchase price allocation amounts to €12.9 million. The goodwill reflects the expectations with regard to the future economic benefits related to the market entry in China and the budget market. No goodwill deductible for tax purposes arised.

The purchase price was paid with cash funds. Including the acquired cash and cash equivalents, the net outflow of funds from the acquisition amounted to €22.1 million. The gross amount, equal to the fair value of acquired receivables is €25.0 million. This relates primarily to receivables from Chinese state-owned companies, so they are assumed to be recoverable. The value of the minority interests as of March 12, 2013, was €3.8 million. The full goodwill method was not applied.

As a result of the inclusion of Zeversolar, consolidated sales increased by €13.0 million. Its share of the consolidated loss amounted to €19.8 million. If Zeversolar had already been included in the Group as of January 1, consolidated sales would have increased by €0.8 million to €933.3 million. The consolidated loss would have increased by €1.2 million (€-68.1 million).

As part of the acquisition, SMA wrote a put option for shares in Jiangsu Zeversolar New Energy Co., Ltd. in exchange for financial assets. In this connection, SMA recorded a written put option in the amount of the present value of the repurchase amount of these shares (€4.8 million), which must be recognized in profit or loss in compliance with IAS 39 in subsequent periods.

The transaction costs recognized in other operating expenses amounted to €2.1 million.

ACQUIRED ASSETS AND LIABILITIES

in € million	<b>Fair values at date of acquisition</b>
Goodwill	12.9
Intangible assets	14.2
Fixed assets	6.6
Inventories	9.0
Trade receivables	25.0
Cash and cash equivalents	0.8
Other receivables	6.1
Deferred tax receivables	1.4
Liabilities towards credit institutions	- 25.6
Other liabilities	- 8.8
Trade payables	- 12.8
Deferred tax liabilities	- 2.1
Net assets	26.7
of which attributable to non-controlling interests	3.8
Purchase price	22.9
Acquired cash and cash equivalents	0.8
Net outflow from acquisitions	22.1

In September 2013, another 16.7% of the shares were acquired at a price of €5.1 million. The acquisition following the transfer of control on March 12, 2013, is an acquisition of additional interest and not part of the purchase price allocation. Following the acquisition of additional interest, the SMA Group's share in Zeversolar amounted to 89.2%.

The net outflow of funds from the acquisition of a majority shareholding is shown in the cash flow from investing activities. According to IFRS, the acquisition of further non-controlling shares is shown in the cash flow from financing activities.

In October 2013, a capital increase of €20.8 million was resolved. The SMA Group's share in Zeversolar thereupon increased to 98.81% as of December 31, 2013.

## 5. Segment Reporting

At the beginning of fiscal year 2013, the SMA Group reorganized its photovoltaics operations and adjusted the Group structure accordingly. In accordance with the regulations of IFRS 8, this reorganization led to a change in the segment reporting and an adjustment of the comparative periods. To leverage synergies within the organization more effectively, dtw was integrated in the Medium Power Solutions (MPS) division from January 1, 2013. Likewise, the Off-Grid Solutions business activities were integrated into the Medium Power Solutions division.

The majority shareholding acquired in March in Jiangsu Zeversolar New Energy Co., Ltd., is shown in the new Zeversolar segment.

The Power Plant Solutions (PPS) segment will remain unchanged and serve the rapidly growing market for large-scale PV power plants having outputs ranging from 500 kW to the three-digit megawatt range with Sunny Central type central inverters.

As before, the Service segment pools the functional service activities relating to photovoltaics.

The Railway Technology segment includes SMA Railway Technology GmbH and its Brazilian subsidiary. This segment manufactures converters as individual devices and complete energy supply systems for railway coaches and multiple-unit trains for short- and long-distance railway traffic.

Segment	Activities
Medium Power Solutions	Development, production and distribution of system technology for photovoltaic applications in the grid-tied building and commercial field. Responsible for the Sunny Boy, Sunny Mini Central, Sunny Tripower and Sunny Island product families. The division also develops and distributes products used for monitoring PV systems and energy management. The subsidiary company dtw, which is allocated to the Medium Power Solutions division, produces transformers, chokes and coils.
Power Plant Solutions	Development, production and distribution of system technology for photovoltaic applications in the power plant sector. This includes the Sunny Central product family in the market for large-scale PV power plants with outputs ranging from 500 kW to several megawatts.
Service	After-sales services in Germany and abroad to guarantee the technical availability of SMA products during a service life of more than 20 years. Services include warranty extensions, service and maintenance contracts, operational management, remote system monitoring and spare parts business.
Zeversolar	The business area Zeversolar comprises Jiangsu Zeversolar New Energy Co., Ltd. – which was acquired in March – and its subsidiary companies and serves the Chinese photovoltaic market with its central inverters. String inverters are offered in selected foreign markets.
Railway	The Railway Technology business area comprises the business activities of SMA Railway Technology GmbH and its Brazilian subsidiary company. Both companies manufacture converters as individual devices and complete energy supply systems for railway coaches and multiple-unit trains for short- and long-distance railway traffic.

To Our Shareholders

Corporate Governance

Consolidated Management Report

**Consolidated Financial Statements** —— Basic Information

Other Information

The operating result of the segments is monitored separately by the Managing Board in order to make decisions on the allocation of resources and to determine the profitability of the segments. Group financing, currency and interest rate hedging and the income tax burden are controlled at Group level and are therefore not allocated to the individual operating segments.

As regards information about geographical segments, sales are assigned to countries using the destination principle. The Company waives presenting non-current assets based on this classification. SMA Solar Technology AG develops and manufactures its products mainly in Germany. There are no material non-current assets tied to the production sites outside Germany in China, North America and Poland. Accordingly, an apportionment of assets by regions is likewise not a part of internal management reporting.

The Group measures the performance of its segments through a measurement of segment profit or loss, which is referred to as "EBIT" in the internal management and reporting system. This measurement comprises gross profit, selling and general administrative expenses, research and non-capitalized development costs as well as other operating income (balance of other operating income and expenses).

Segment assets include the intangible assets attributed to the relevant segments and fixed assets, inventories and trade receivables. Segment liabilities include trade payables that are directly attributable to the relevant segments. Internal management reporting is in line with the accounting policies of external reporting.

The transfer prices between the business segments are determined using management prices based on usual arm's length market conditions. Income from external third parties is reported using the same valuation parameters as shown in the income statement.

Sales revenue in the Medium Power Solutions and Power Plant Solutions segments is subject to fluctuations for reasons including discontinuous incentive programs.

FINANCIAL RATIOS BY SEGMENTS AND REGIONS

Segments	Medium Power Solutions		Power Plant Solutions		Service	
in € million	2013	2012	2013	2012	2013	2012
External sales	479.6	969.0	375.2	440.8	29.2	26.9
Internal sales	76.2	103.5	15.2	27.4	97.0	84.7
Total sales	555.8	1,072.5	390.4	468.2	126.2	111.6
Depreciation and amortization	45.0	33.2	4.2	3.9	2.9	2.4
Operating profit (EBIT)	-77.9	101.0	37.0	45.2	-1.4	-15.8
Segment assets	255.9	304.0	119.4	148.5	42.5	38.9
Segment liabilities	13.6	17.2	17.5	32.3	3.4	2.3
Capital expenditure	21.2	40.6	13.5	3.4	1.0	7.3
<b>Sales by regions</b>						
Germany	213.2	534.0	45.8	106.1	8.7	8.4
European Union	104.9	270.5	60.5	78.7	9.8	14.4
Third-party countries	179.7	200.3	269.7	258.6	10.8	4.4
Sales deductions	-18.2	-35.8	-0.8	-2.6	-0.1	-0.3
<b>External sales</b>	<b>479.6</b>	<b>969.0</b>	<b>375.2</b>	<b>440.8</b>	<b>29.2</b>	<b>26.9</b>

Reconciliation of segment figures to the relevant figures stated in the Financial Statements is as follows:

in € million	2013	2012
Total segment earnings (EBIT)	-63.2	129.4
Eliminations	-25.9	-27.4
Consolidated EBIT	-89.1	102.0
Financial result	0.3	2.7
<b>Profit before income taxes</b>	<b>-88.8</b>	<b>104.7</b>
Total segment assets	472.0	505.4
Other central items and eliminations	277.3	279.1
Cash and long-term time deposits	377.5	480.8
Financial instruments not designated and other assets	56.3	26.8
Deferred tax assets and income tax receivables	76.8	36.5
Other financial investments	0.0	0.1
<b>Group assets</b>	<b>1,259.9</b>	<b>1,328.7</b>
Total liabilities	47.2	52.9
Other central items and eliminations	13.6	19.8
Financial instruments not designated, liabilities and provisions	449.1	413.1
Income tax liabilities and deferred tax liabilities	25.6	22.2
<b>Group liabilities</b>	<b>535.5</b>	<b>508.0</b>

To Our Shareholders

Corporate Governance

Consolidated Management Report

**Consolidated Financial Statements** — Basic Information

Other Information

	Zevversolar		Railway Technology		Reconciliation		Continuing operations	
	2013	2012	2013	2012	2013	2012	2013	2012
	13.0	-	35.5	26.7	0.0	0.0	932.5	1,463.4
	0.0	-	0.6	3.1	-189.0	-218.7	0.0	0.0
	13.0	-	36.1	29.8	-189.0	-218.7	932.5	1,463.4
	1.1	-	0.8	0.5	29.6	29.9	83.6	69.9
	-22.2	-	1.3	-1.0	-25.9	-27.4	-89.1	102.0
	33.8	-	20.5	14.0	787.8	823.3	1,259.9	1,328.7
	9.5	-	3.1	1.1	488.4	455.1	535.5	508.0
	0.3	-	2.2	0.4	15.0	48.5	53.2	100.2
	0.0	-	8.5	8.7	0.0	0.0	276.2	657.2
	0.6	-	10.9	12.9	0.0	0.0	186.7	376.5
	12.4	-	16.5	6.1	0.0	0.0	489.1	469.4
	0.0	-	-0.4	-1.0	0.0	0.0	-19.5	-39.7
	13.0	-	35.5	26.7	0.0	0.0	932.5	1,463.4

Circumstances are shown in the reconciliation which by definition are not part of the segments. In addition, unallocated parts of the Group head office, including cash and cash equivalents, and buildings are included, the expenses of which are assigned to the segments. Business relations between the segments are eliminated in the reconciliation.

In 2013, as in the previous year, no customer accounted for a share of more than 10% of Group sales.

## Notes to the Income Statement SMA Group

### 6. Cost of Sales

in € '000	2013	2012
Material expenses	522,601	788,778
Personnel expenses	138,833	178,197
Depreciation and amortization	74,887	63,341
Other	51,259	89,486
	<b>787,580</b>	<b>1,119,802</b>

Cost of sales include, as direct costs, the product-related material expenses as well as all other expenses for the areas of Production, Purchasing and Service as well as Facility Management and IT.

A reduction in the cost of sales was successfully achieved again in 2013. Material costs were reduced thanks to the close cooperation of Purchasing, Production and Development. Material expenses per watt were reduced by 11.8% to 9.7 cents per watt (2012: 11.0 cents per watt). As a result of shifts in the product mix and price reductions for PV inverters, the material expenses ratio rose to 56.0% in 2013 (2012: 53.9%). Personnel costs were reduced by 22.1% by means of various personnel measures and amounted to €138.8 million (2012: €178.2 million).

The €11.6 million rise in depreciation and amortization to €74.9 million (2012: €63.3 million) is due in particular to the increase in scheduled and unscheduled amortization of development projects. Depreciation and amortization of capitalized development projects including intangible assets in progress amounted to €22.9 million in 2013 (2012: €11.2 million).

The lower additions to warranty provisions and the systematic reduction of operating expenses resulted in a decline in other costs of €38.2 million to €51.3 million in 2013. (2012: €89.5 million) Although the costs for regular business operations were lowered further during the year by various improvement projects, the savings are partly offset by the acquisition of Zeversolar.

## 7. Selling Expenses

	in €'000	2013	2012
Material expenses	471	578	
Personnel expenses	31,625	35,951	
Depreciation and amortization	960	565	
Other	26,111	31,772	
	<b>59,167</b>	<b>68,866</b>	

Selling expenses include expenditure for global sales activities, internal sales departments and marketing. SMA has adapted the international sales organization in line with the new structure of demand in order to benefit from the global development of the photovoltaic markets. In 2013, the existing sales companies in Japan, South America and South Africa were expanded. Following the acquisition of Zeversolar, the sales organization in China was adapted.

As a result of the staff reduction in Europe and various personnel measures, personnel expenses fell by 12.0% to €31.6 million (2012: €35.9 million). The decrease is partly offset by the acquisition of Zeversolar.

The 17.8% decline in other expenses to €26.1 million is primarily attributable to the adjustment of global marketing activities and other operating cost savings.

## 8. Research and Development Expenses

	in €'000	2013	2012
Material expenses	5,058	6,365	
Personnel expenses	58,682	64,328	
Depreciation and amortization	6,236	4,875	
Other	32,455	32,539	
	<b>102,431</b>	<b>108,107</b>	
Capitalized development projects	- 22,858	- 20,190	
	<b>79,573</b>	<b>87,917</b>	

Research and development expenses include all costs that may be attributed to the areas of product development, development-related testing and product management. In order to strengthen its technological leadership even further, SMA systematically expanded the area of development. Among other projects, a new Development Center was established in Denver, Colorado, U.S. Compared to the previous year, SMA has 5.2% more employees in this area, partly due to the acquisition of Zeversolar. Despite the higher number of employees, personnel costs fell by 8.8% to €58.7 million as a result of various personnel measures. Other expenses remained constant at €32.5 million. The rise in depreciation and amortization is the result of increased investments in our Test Center.

## 9. General Administrative Expenses

	in €'000	2013	2012
Material expenses	39	271	
Personnel expenses	39,813	48,783	
Depreciation and amortization	1,558	1,143	
Other	29,308	24,203	
	<b>70,718</b>	<b>74,400</b>	

Administrative expenses include expenses for the Managing Board and for the Finance, Human Resources, Legal and Compliance, Corporate Communications and Quality Management departments. Personnel expenses decreased by 18.4% to €39.8 million as a result of the staff reduction and other personnel measures. The staff reduction is partly offset by the acquisition of Zeversolar. The €0.4 million year-on-year increase in depreciation and amortization to €1.6 million is due to investments in this area.

Other expenses increased by 21.0% to €29.3 million. The realized cost savings achieved are more than offset by the acquisition of Zeversolar and the associated one-off integration expenses.

## 10. Other Operating Income

	in €'000	2013	2012
Revenues from foreign currency translation	21,693	18,783	
Government grants	946	718	
Other miscellaneous income	12,996	8,145	
	<b>35,635</b>	<b>27,646</b>	

Other operating income mainly comprises income from the reversal of provisions in the amount of €4.6 million and income from the reversal of impairment losses on receivables in the amount of €2.6 million.

## 11. Other Operating Expenses

in € '000	2013	2012
Expense from foreign currency translation	21,688	20,159
Other miscellaneous expenses	38,573	17,877
	<b>60,261</b>	<b>38,036</b>

Other miscellaneous expenses include expenses for a voluntary severance program amounting to €25.1 million and expenses from the disposal of non-current assets amounting to €4.7 million, as well as expenses for additions to impairment losses on receivables in the amount of €6.5 million.

## 12. Benefits to Employees and Temporary Employees

in € '000	2013	2012
Wages and salaries	237,835	254,460
Expenses for temporary employees	18,815	31,933
Social security contribution and welfare payments	37,390	45,960
	<b>294,040</b>	<b>332,353</b>

As in the previous year, voluntary contributions to private pensions amounted to €1.7 million in 2013.

The average number of employees in the Group amounted to:

	2013	2012
Research and Development	1,024	973
Production and Service	3,071	3,140
Sales and Administration	1,117	1,119
	<b>5,212</b>	<b>5,232</b>
Apprentices and interns	332	431
Temporary employees	728	1,055
	<b>6,272</b>	<b>6,718</b>

## 13. Financial Result

in € '000	2013	2012
Interest income	3,485	4,593
Other financial income	2,138	235
Income from interest derivatives	253	0
<b>Financial income</b>	<b>5,876</b>	<b>4,828</b>
Interest expenses	3,859	1,074
Other financial expenses	1,010	398
Expenses from interest derivatives	275	298
Interest portion from valuation of provisions	395	304
<b>Financial expenses</b>	<b>5,539</b>	<b>2,074</b>
<b>Financial result</b>	<b>337</b>	<b>2,754</b>

Total interest income from financial assets not classified as at fair value through profit or loss amounted to €3.5 million (2012: €4.6 million) in the fiscal year. The income of €1.5 million out of the revaluation of the written put option in connection with the remaining minority interests of Zeversolar was recognised as other financial income. Interest expenses from financial liabilities not classified as at fair value through profit or loss amounted to €3.9 million (2012: €1.1 million). The effects of changes in interest rates have had no significant influence on consolidated profits.

## 14. Income Taxes

Current income taxes (paid or payable) and deferred taxes are recognized as income taxes. They break down as follows:

in € '000	2013	2012
Current income tax	13,080	26,215
for current fiscal year	13,080	26,215
for previous years	1,702	- 443
Deferred taxes	-	-
from temporary differences	- 8,082	4,279
from tax loss carryforwards	- 28,652	- 414
<b>Tax income/expense</b>	<b>- 21,952</b>	<b>29,637</b>

Income taxes comprise trade tax, corporation tax and the solidarity surcharge in Germany, and comparable income taxes abroad. Expected income tax expense that would result from applying the tax rate of the parent company SMA Solar Technology AG to the IFRS consolidated result before taxes can be reconciled as follows to income taxes shown in the income statement:

	in €'000	2013	2012
<b>Consolidated result before income taxes</b>	- 88,804	104,742	
Tax rate of the parent company	30.7%	30.3%	
<b>Expected tax income/expense</b>	- 27,263	31,738	
Differences related to differing tax rates domestic and abroad	1,481	- 1,265	
Effects due to changes in tax rates	76	- 38	
Tax-free income	- 128	- 1,614	
Non-deductible expenses	853	1,372	
Taxes relating to previous years	1,702	1,247	
Other tax effects	1,327	1,803	
<b>Actual tax income/expense (according to income statement)</b>	- 21,952	29,637	
Effective Group tax rate	24.7%	28.3%	

The corporation tax rate of 15% and the solidarity surcharge rate of 5.5% are to be applied for corporations based in Germany. In addition, domestic companies and partnerships are subject to trade tax, which is influenced by assessment rates specific to the particular municipality. The average trade tax rate to be applied at the level of the parent company is 14.9% (2012: 14.5%). The overall tax rate of the Group's parent company is thus 30.7% (2012: 30.3%).

The effects of deviations between the relevant tax rates at the level of the domestic and foreign Group subsidiaries and the tax rate at the level of the Group's parent company are shown in the reconciliation statement under tax-rate-related deviations in Germany and abroad.

No deferred taxes were formed aside for the undistributed profits of foreign subsidiaries, including accrued currency translation differences, since this income and these translation differences are either not subject to corresponding taxation or must not be distributed in the foreseeable future.

As at December 31, 2013, there were current income tax receivables amounting to €13.0 million (2012: €11.3 million) and current income tax liabilities of €2.3 million (2012: €0.7 million).

The deferred tax assets and deferred tax liabilities were recorded directly in equity at €1.5 million (2012: €-0.12 million). Deferred tax assets and liabilities are distributed across the following items:

	12/31/2013	12/31/2012		
in €'000	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Intangible assets	166	-15,783	186	-13,168
Fixed assets	2,259	-3,113	1,777	-3,473
Financial assets	858	0	0	-3
Inventories	3,141	-526	2,031	-757
Other assets	1,707	-3,271	1,291	-1,989
Other provisions	10,913	-182	8,735	-1,188
Other liabilities	15,292	-445	10,369	-975
Loss carryforwards	29,446	0	795	0
	<b>63,782</b>	<b>-23,320</b>	<b>25,184</b>	<b>-21,553</b>
of which non-current	8,460	-19,078	8,722	-17,832

Deferred tax assets are recorded and regarded as fully realizable, since a sufficient amount of taxable income is expected in the future. Deferred tax assets on loss carry forwards were mainly generated in SMA Solar Technology AG. A planning period of four years was taken as a basis.

## 15. Earnings per Share

Earnings per share are calculated by dividing the consolidated earnings attributable to the shareholders by the weighted average of ordinary shares in circulation during the period. The number of shares in fiscal year 2013 amounted to 34.7 million, as in the previous year.

The consolidated earnings attributable to the shareholders are the consolidated net result after tax. Since there are no shares held by the Company on the reporting date or any other special cases, the number of ordinary shares issued equates to the number of shares in circulation.

The calculation of earnings in relation to the weighted average number of shares in accordance with IAS 33 yields earnings of €-1.92 per share for the period from January 1, 2013 to December 31, 2013 with an average weighted number of shares of 34.7 million, and earnings of €2.16 per share for the period from January 1, 2012 to December 31, 2012 with an average weighted number of shares of 34.7 million.

There are no options or conversion options as at the reporting date. Therefore, there are no diluting effects so that the diluted and undiluted basic earnings per share are the same.

Pursuant to the German Stock Corporation Act, the distributable dividend is based on the net profit, which is recorded in the Annual Financial Statements of SMA Solar Technology AG prepared according to the provisions of the German Commercial Code and the Stock Corporation Act.

# Notes to the Consolidated Balance Sheet SMA Group

## 16. Intangible Assets

Intangible assets evolved as follows in the fiscal years under review:

	<b>Goodwill</b>	<b>Development projects</b>	<b>Patents/ licenses/ other rights</b>	<b>Software</b>	<b>Intangible assets in progress</b>	<b>Pre-payments</b>	<b>Total</b>
in €'000							
<b>Acquisition costs</b>							
01/01/2013	311	47,823	224	32,129	24,945	560	105,992
Changes in currency	0	-126	10	-9	4	0	-121
Additions from acquisitions	12,862	0	14,065	132	0	0	27,059
Additions	0	6,902	0	156	20,936	10	28,004
Disposals	0	0	0	3	0	0	3
Transfers	0	20,367	240	7,449	-27,526	-558	-28
12/31/2013	13,173	74,966	14,539	39,854	18,359	12	160,903
<b>Amortization</b>							
01/01/2013	0	17,213	27	21,259	758	0	39,257
Changes in currency	0	-18	-8	-3	0	0	-29
Additions from acquisitions	0	0	286	28	0	0	314
Additions	0	22,375	267	6,034	537	0	29,213
Disposals	0	0	0	2	0	0	2
Transfers	0	1,295	0	-2	-1,295	0	-2
12/31/2013	0	40,865	573	27,318	0	0	68,756
<b>Net value 12/31/2012</b>	<b>311</b>	<b>30,610</b>	<b>197</b>	<b>10,870</b>	<b>24,187</b>	<b>560</b>	<b>66,735</b>
<b>Net value 12/31/2013</b>	<b>13,173</b>	<b>34,101</b>	<b>13,966</b>	<b>12,536</b>	<b>18,359</b>	<b>12</b>	<b>92,147</b>
<b>Acquisition costs</b>							
01/01/2012	311	29,937	3	27,508	20,023	617	78,399
Changes in currency	0	341	0	5	0	0	346
Additions	0	5,788	0	-945	22,458	3	27,304
Disposals	0	0	0	54	0	0	57
Transfers	0	11,757	221	5,615	-17,536	-57	0
12/31/2012	311	47,823	224	32,129	24,945	560	105,992
<b>Amortization</b>							
01/01/2012	0	6,681	3	14,915	0	0	21,599
Changes in currency	0	57	0	3	0	0	60
Additions	0	10,475	22	6,398	758	0	17,653
Disposals	0	0	0	55	0	0	55
Transfers	0	0	2	-2	0	0	0
12/31/2012	0	17,213	27	21,259	758	0	39,257
<b>Net value 12/31/2011</b>	<b>311</b>	<b>23,256</b>	<b>0</b>	<b>12,593</b>	<b>20,023</b>	<b>617</b>	<b>56,800</b>
<b>Net value 12/31/2012</b>	<b>311</b>	<b>30,610</b>	<b>197</b>	<b>10,870</b>	<b>24,187</b>	<b>560</b>	<b>66,735</b>

In relation to development projects, amortization of intangible assets is posted in the income statement under cost of sales. Amortization of development projects and intangible assets in progress include an impairment loss of €8.0 million (2012: €1.8 million) due to changed sales forecasts (relates to products of the Medium Power Solutions segment). The amortization was made to the value in use. A discount rate of 9.9% (2012: 7.7%) was applied. Amortization of software is allocated to the functional areas dependent on use. The change in goodwill, licenses and software are the result of the first-time consolidation of Jiangsu Zeversolar New Energy Co., Ltd. (Suzhou, China), acquired in March 2013, in the Consolidated Financial Statements of SMA. €15.2 million (2012: €21.4 million) of the additions of intangible assets in progress relates to development projects.

The goodwill is assigned to cash generating units on company level. The goodwill is related to dtw Sp. z o.o. (€0.3 million) and the Zeversolar Group (€12.9 million). In the annual impairment review the book values of the cash generating units were compared to the value in use. The value in use is based on the present value of the future cash flows, under a going concern assumption. The cash flows are based on the current corporate planning. The forecast horizon covers the years 2014 – 2016. For subsequent periods a growth rate of 1.0% is applied.

In the impairment review for Zeversolar at the end of the business year a pre-tax rate of 16.8% and an post-tax rate of 14.6% were applied. The impairment review at the end of the fiscal year confirmed the carrying amount of the existing goodwill.

## 17. Fixed Assets

Fixed assets evolved as follows in fiscal year 2013:

in €'000	<b>Land and buildings incl. buildings on third- party property</b>	<b>Technical equipment and machinery</b>	<b>Other equipment, fixtures and furniture</b>	<b>Prepayments and assets under construction</b>	<b>Total</b>
<b>Acquisition costs</b>					
01/01/2013	265,899	65,027	175,843	10,490	517,259
Changes in currency	- 770	- 322	- 809	- 12	- 1,913
Additions from acquisitions	4,708	2,379	1,652	2	8,741
Additions	928	815	2,433	21,013	25,189
Disposals	8,594	1,154	3,198	214	13,160
Transfers	10,280	515	12,050	- 22,817	28
12/31/2013	272,451	67,260	187,971	8,462	536,144
<b>Depreciation</b>					
01/01/2013	31,968	21,705	86,479	0	140,152
Changes in currency	- 237	- 91	- 419	0	- 747
Additions from acquisitions	510	632	735	0	1,877
Additions	15,835	5,797	32,795	0	54,427
Disposals	3,248	1,627	3,574	0	8,449
Transfers	13	28	- 39	0	2
12/31/2013	44,815	26,388	116,054	0	187,258
<b>Net value 12/31/2012</b>	<b>233,931</b>	<b>43,322</b>	<b>89,364</b>	<b>10,490</b>	<b>377,107</b>
<b>Net value 12/31/2013</b>	<b>227,635</b>	<b>40,872</b>	<b>71,917</b>	<b>8,462</b>	<b>348,886</b>

The additions to land and buildings mainly relate to extensions of existing office buildings and leasehold improvements.

As of December 31, 2013, prepayments and assets under construction include in particular prepayments for tools and machinery.

Investments of €1.7 million were made for the expansion of the infrastructure of our subsidiaries in the U.S.

Of the financial liabilities, approx. €28.5 million (2012: €30.8 million) are secured by mortgage liens.

Fixed assets evolved as follows in fiscal year 2012:

	Land and buildings incl. buildings on third- party property	Technical equipment and machinery	Other equipment, fixtures and furniture	Prepayments and assets under construction	Total
in €'000					
<b>Acquisition costs</b>					
01/01/2012	181,246	52,267	150,516	74,615	458,644
Changes in currency	- 305	47	- 199	11	- 446
Additions	13,727	2,185	2,625	54,369	72,906
Disposals	6,773	389	5,685	998	13,845
Transfers	78,004	10,917	28,586	- 117,507	0
12/31/2012	265,899	65,027	175,843	10,490	517,259
<b>Depreciation</b>					
01/01/2012	21,805	16,804	59,103	0	97,712
Changes in currency	- 89	32	- 108	0	- 165
Additions	15,799	5,157	31,314	0	52,270
Disposals	5,589	278	3,800	0	9,667
Transfers	42	- 12	- 30	0	0
12/31/2012	31,968	21,705	86,479	0	140,152
<b>Net value 12/31/2011</b>	<b>159,441</b>	<b>35,463</b>	<b>91,413</b>	<b>74,615</b>	<b>360,932</b>
<b>Net value 12/31/2012</b>	<b>233,931</b>	<b>43,322</b>	<b>89,364</b>	<b>10,490</b>	<b>377,107</b>

## 18. Inventories

Inventories of the SMA Group are made up as follows:

	12/31/2013	12/31/2012
in €'000		
Raw materials, consumables and supplies	99,688	128,390
Unfinished goods, work in progress	27,491	27,211
Finished goods and goods for resale	56,292	64,998
Prepayments	660	770
	<b>184,131</b>	<b>221,369</b>

Inventories are measured at the lower value of acquisition or production costs and net realizable value. The addition to impairment on inventories, included under expenses as production costs, amounts to €26.9 million (2012: €26.3 million).

## 19. Trade Receivables and Other Receivables

Trade receivables are non-interest-bearing and, with the exception of the Chinese market, are usually due between 30 and 90 days. No significant extensions to payment terms were granted in the reporting period.

The other receivables mainly comprise prepaid expenses and other receivables due from tax authorities which were not overdue at the reporting date.

The ageing structure of trade receivables was as follows on the reporting dates:

	<b>Neither overdue nor impaired</b>	<b>&lt;30 days</b>	<b>30 to 60 days</b>	<b>60 to 90 days</b>	<b>&gt;90 days</b>	<b>Overdue, but not impaired</b>
in €'000	<b>Book value</b>					
2013	124,259	93,741	8,658	4,225	3,122	14,513
2012	119,288	101,965	10,596	2,957	863	2,907

As of December 31, 2013, value adjustments with a nominal value of €17.1 million (2012: €11.6 million) were carried out on trade receivables. No value adjustments were carried out on overdue receivables as of December 31, 2013 in the amount of €30.5 million (12/31/2012: €17.3 million). As there were no significant changes in the credit rating of the customers, the settlement of the receivables is expected.

The value adjustment account evolved as follows:

	<b>Individual value correction</b>	<b>Value correction on portfolio basis</b>	<b>Total</b>
in €'000			
01/01/2012	7,546	2,247	9,793
Additions with effect on the expenses (net)	7,205	136	7,341
Usage	-2,017	0	-2,017
Release	-2,189	-1,287	-3,476
Exchange rate difference	-3	-11	-14
12/31/2012	10,542	1,085	11,627
Change due to addition of Zevversolar to scope of consolidation	1,885	0	1,885
Additions with effect on the expenses (net)	6,312	208	6,520
Usage	-169	0	-169
Release	-1,812	-824	2,636
Exchange rate difference	-150	-2	-152
12/31/2013	16,607	467	17,074

Apart from this, there was no need to carry out value adjustments on the other receivables and financial assets. The maximum non-payment risk corresponds to the book value disclosed in the balance sheet.

## 20. Other Financial Assets

As at December 31, 2013, other current financial assets include in particular financial assets and time deposits with a term to maturity of over three months and accrued interest totaling €133.8 million (2012: €246.7 million). The other non-current financial assets primarily include financial assets of €51.3 million (2012: €48.8 million) and a rent deposit for buildings in the U.S. amounting to USD 2.5 million (2012: USD 2.5 million).

## 21. Cash and Cash Equivalents

Cash and cash equivalents include cash in hand as well as bank balances, checks, payments in transit and deposits with an original term to maturity of less than three months. Bank balances bear interest at variable interest rates applicable to deposits subject to call.

As at December 31, 2013, the Group had unused credit lines amounting to €22.2 million (2012: €24.0 million) in respect of which all the conditions for using them had been fulfilled. The credit lines have been provided on an "until further notice" basis.

## 22. Shareholders' Equity

The change in equity, including effects not shown in the income statement, is presented in the statement of changes in equity. The individual effects are currency gains/losses, the put option for the minority interests in Zeversolar for the first time and the one-off adjustment of the partial retirement liability in line with the revised version of IAS 19.

The capital reserve contains agio amount from the issuance of shares of the SMA Solar Technology AG. The other retained earnings contain mainly the retained profit and also the statutory reserve.

Shares in SMA AG are no-par-value bearer shares.

The Articles of Incorporation include the provisions on the powers of the Managing Board regarding Authorized Capital II. The Managing Board, after obtaining the consent of the Supervisory Board, is entitled to increase the share capital on one or several occasions by up to a total of €10 million by issuing new bearer shares in return for cash contributions and/or contributions in kind in the period up to May 22, 2018. The Managing Board, with the consent of the Supervisory Board, is entitled to cancel the statutory subscription rights of shareholders a) in the case of capital increases in return for contributions in kind for the acquisition of or investment in companies, parts of companies or investments in companies, b) for the purpose of issuing shares to employees of the Company and companies affiliated with the Company, c) to exclude fractions and d) in the case of capital increases in return for cash contributions if the issue amount of the new shares does not fall significantly below the stock exchange price of shares of the same class and terms that are already listed at the time the Managing Board sets the final issue amount and the total pro rata amount of the issued capital attributable to the new shares in respect of which the subscription right is excluded may not exceed 10% of the issued capital available at the time the new shares are issued.

Furthermore, following a resolution adopted by the Annual General Meeting on May 27, 2010, the Managing Board, in the period up to May 26, 2015, is entitled to acquire its own shares up to a value of 10% of the existing capital stock, at the time the resolution is adopted by the Annual General Meeting, and to dispose of shares acquired in this way with the consent of the Supervisory Board by means other than through the stock exchange, or an offer made to all the shareholders, provided, the shares are sold in return for cash at a price that does not fall significantly below the stock exchange price of shares in the Company issued under the same terms or the shares are sold in return for in-kind contributions, or they are offered in return for shares held by persons that either had or have an employment relationship with the Company, or with one of its affiliated companies, or members of bodies in companies that depend on the Company. Furthermore, if the Managing Board sells its own shares by offering them to all the shareholders with the consent of the Supervisory Board, the Managing Board is entitled to exclude the shareholders' right of subscription for fractions. In addition, the Managing Board is entitled to cancel any shares it has acquired after obtaining the consent of the Supervisory Board.

On May 23, 2013, the Annual General Meeting of SMA Solar Technology AG passed a resolution to distribute a dividend for the fiscal year 2012 amounting to €0.60 per qualifying bearer share (2011: €1.30). At the next Annual General Meeting, the Managing Board will propose that no dividend be distributed.

The objective of capital management is to maintain SMA's financial substance and ensure the necessary flexibility.

The equity ratio is used to measure the financial security of SMA. This is the ratio of equity shown in the consolidated balance sheet to total assets. Accordingly, the financing structure is characterized by a conservative capital structure dominated by internal financing. As of the reporting date, the equity ratio is 57.5% (2012: 61.8%). External financing occurs almost exclusively through liabilities arising from operative business.

## 23. Provisions

Provisions account for all discernible risks from pending transactions and all contingent liabilities at the balance sheet date and break down as follows:

in €'000	<b>Warranties</b>	<b>Other</b>	<b>Total</b>
01/01/2013	178,519	24,175	202,694
Additions	34,104	21,336	55,440
Usage	50,482	3,795	54,277
Release	2,803	1,791	4,594
Compounding	331	64	395
Changes in currency	- 952	- 150	- 1,102
<b>12/31/2013</b>	<b>158,717</b>	<b>39,839</b>	<b>198,556</b>
Current in 2013	75,189	21,615	96,804
Non-current in 2013	83,528	18,224	101,752
	<b>158,717</b>	<b>39,839</b>	<b>198,556</b>
Current in 2012	80,482	9,397	89,879
Non-current in 2012	98,037	14,778	112,815
	<b>178,519</b>	<b>24,175</b>	<b>202,694</b>

Warranty provisions consist of general warranty obligations (periods of between five and ten years) for the various product areas within the Group. In addition, provisions are set aside for individual cases, which are expected to be used the following year.

Other provisions mainly contain obligations for the voluntary severance program agreed by the Managing Board and the Works Council, for restoration obligations, purchase commitments and obligations for long-service anniversaries, death benefits, partial retirement and service-related benefits. SMA expects that these provisions will normally affect cash within the next 12 months to 20 years.

## 24. Financial Liabilities

in €'000	12/31/2013	12/31/2012
Liabilities towards credit institutions	69,455	34,515
Derivative financial liabilities	3,924	1,048
	<b>73,379</b>	<b>35,563</b>

The change in liabilities to credit institutions resulted from the inclusion of the subgroup Jiangsu Zeversolar New Energy Co., Ltd. in SMA's consolidated financial statements.

In the current reporting period, there were delays in the payment of a loan obligation at Zeversolar in the Group. The delay arose due to obstacles when transferring currency to China. As of September 30, 2013, the book value of the loan was €5.6 million. Due to the obstacles, a postponement of the due date to December 31, 2013, was agreed with the lender.

The liabilities due to credit institutions were incurred for the financing of SMA Immo properties and an SMA AG PV system and have an average time to maturity of 11 years. They have an average time to maturity of 10 years.

Derivative financial liabilities as of December 31, 2013 consist of a written put option of the shares of Jiangsu Zeversolar New Energy Co., Ltd. (amounting to €3.3 million). As in previous years also interest rate derivatives were included.

## 25. Trade Payables

Trade payables are non-interest-bearing and are normally due within 30 and 90 days.

## 26. Other Financial Liabilities

in €'000	12/31/2013	12/31/2012
Liabilities Human Resources department	25,887	43,001
Liabilities Sales department	8,070	11,900
Other	5,317	3,070
	<b>39,274</b>	<b>57,970</b>
Current	37,650	55,892
Non-current	1,624	2,078
	<b>39,274</b>	<b>57,970</b>

Liabilities in the Human Resources area contain obligations towards employees regarding positive vacation and flexitime balances as well as variable salary components and contributions to the worker's compensation association. The liabilities in the Sales area primarily contain liabilities towards customers from advance payments received and bonus agreements.

## 27. Other Liabilities

in €'000	12/31/2013	12/31/2012
Deferred income for extended guarantees	115,392	92,952
Liabilities from prepayments received	18,120	18,023
Liabilities due to tax authorities	1,997	4,507
Liabilities from subsidies received	1,077	1,204
Other	1,328	175
	<b>137,914</b>	<b>116,861</b>
Current	24,282	22,439
Non-current	113,632	94,422
	<b>137,914</b>	<b>116,861</b>

The accrual item for extended warranties includes liabilities from chargeable guarantee extensions granted for products in the Medium Power Solutions segment. The main items included in the liabilities towards tax authorities are tax liabilities from payroll accounting. The liabilities from subsidies received relate to taxable government grants from funds of the common-task program "Improvement of the Regional Economic Structure" (EU GA), granted as investment subsidies. The total amount of retransfer of government grants is stated under other operating income.

## 28. Additional Disclosures Relating to Financial Instruments

	IAS 39	12/31/2013	12/31/2012		
	Assessment category according to IAS 39	Market value	Book value	Market value	Book value
in € '000					
<b>Assets</b>					
Cash and cash equivalents	LaR	192,366	192,366	185,299	185,299
Trade receivables	LaR	124,259	124,259	119,288	119,288
Other financial investments	Afs	5	5	75	75
<b>Other financial assets</b>		<b>222,645</b>	<b>222,645</b>	<b>308,464</b>	<b>308,471</b>
of which debentures	Afs	51,725	51,725	49,729	49,729
of which institutional mutual funds	FAHfT	48,276	48,276	49,298	49,298
of which debentures	HtM	0	0	5,410	5,417
of which other (time deposits)	LaR	121,177	121,177	203,331	203,331
of which derivatives that do not qualify for hedge accounting	FAHfT	1,467	1,467	696	696
<b>Liabilities</b>					
Trade payables	FLAC	60,806	60,806	72,691	72,691
<b>Financial liabilities</b>		<b>73,379</b>	<b>73,379</b>	<b>35,563</b>	<b>35,563</b>
of which liabilities towards credit institutions	FLAC	69,455	69,455	34,515	34,515
of which derivatives that do not qualify for hedge accounting	FLHfT	3,924	3,924	1,048	1,048
Other financial liabilities	FLAC	39,274	39,274	57,970	57,970
<b>Of which summarized by categories according to IAS 39:</b>					
Loans and receivables	LaR	437,802	437,802	507,918	507,918
Financial liabilities measured at amortized cost	FLAC	169,535	169,535	165,176	165,176
Financial assets held for trading	FAHfT	49,743	49,743	49,994	49,994
Financial liabilities held for trading	FLHfT	3,924	3,924	1,048	1,048
Held to maturity	HtM	0	0	5,410	5,417
Available for sale financial assets	Afs	51,730	51,730	49,804	49,804

To Our Shareholders

Corporate Governance

Consolidated Management Report

**Consolidated Financial Statements** —— Notes to the Consolidated Balance Sheet

Other Information

Cash and cash equivalents, trade receivables and time deposits mainly have short terms to maturity. Accordingly, their book values on the reporting date are almost identical to their fair value.

The fair values of other non-current receivables correspond to the present values of the payments related to the assets while taking into account current interest parameters, which reflect market- and partner-related changes to conditions and expectations.

The item 'other financial investments' relates to investments not included in the scope of consolidation. However, since no active market exists for these investments and a reliable measurement of their fair value was not possible, measurement on the relevant reporting dates was effected at amortized cost.

The fair value for held-to-maturity investments is determined with the help of prices listed on active markets (Level 1). Impairment on held-to-maturity investments is not necessary, as there is no lasting impairment.

Trade payables and other current financial liabilities normally have short terms to maturity. The recognized values are almost identical to the fair values.

Fair values of other non-current financial liabilities are determined by referring to the present values of the payments associated with the debts. For discounting term-related commercially available interest rates were used (Level 2).

Derivative financial instruments are used to hedge against currency risks arising from operative business. These include currency futures and options. In principle, these instruments are only used for hedging purposes. As is the case with all financial instruments, they are recognized at fair value upon initial recognition. The fair values are also relevant for subsequent measurements. The fair value of traded derivative financial instruments is identical to the market value. This value may be positive or negative. The measurement of forward transactions is based on forward contract rates. Options are measured in line with the Black-Scholes and Heath-Jarrow-Morton option pricing models. The parameters that were used in the valuation models are in line with market data.

The put option in the amount of the present value of the redemption amount of the shares (€3.3 million) granted in connection with the acquisition of Zeversolar shares is posted under derivative financial liabilities without a hedge relationship.

There was a major change in the present value of the redemption amount recognized in profit and loss between the time of recognition and the balance sheet date amounting to €1.5 million. This change was due to an adjustment of the contractual regulation of the put option.

The present value of the redemption amount was determined using a discounted cash flow methodology (level 3 of the fair value hierarchy), taking account of the adjusted contractual regulation of the put option. This regulation stipulates that the redemption amount will lie within a contractually agreed corridor of between €3.3 million and €4.9 million. Within this corridor, the redemption amount varies mainly depending on EBIT as a non-observable input factor, which is derived from Zeversolar's internal planning. A sensitivity analysis shows that a 10% increase in the Zeversolar EBIT, taking account of the corridor, would not result in any change in the present value of the redemption price, and that a 10% reduction in its EBIT also would not have any effects with regard to the range. An increase or decrease in the interest rate of 100 basis points similarly would not result in any change in the present value of the redemption amount, with regard to the range.

The following table shows the allocation of our financial assets and liabilities measured at fair values in the balance sheet to the three levels of the fair value hierarchy:

2013	Level 1	Level 2	Level 3	Total
in €'000				
Financial assets, measured at fair value				
Debentures	51,725			51,725
Institutional mutual funds	48,276			48,276
Derivative financial instruments		1,467		1,467
Financial liabilities, measured at fair value				
Derivative financial instruments		667	3,257	3,924
2012				
in €'000				
Financial assets, measured at fair value				
Debentures	49,729			49,729
Institutional mutual funds	49,298			49,298
Derivative financial instruments		696		696
Financial liabilities, measured at fair value				
Derivative financial instruments		1,048		1,048

The levels of the fair value hierarchy and their application to our assets and liabilities are described below:

Level 1: Quoted prices for identical assets or liabilities in active markets.

Level 2: Inputs other than quoted prices that are observable directly (e.g. prices) or indirectly (e.g. derived from prices).

Level 3: Inputs that are not based on observable market data for assets and liabilities.

The net results 2013 for financial instruments are as follows:

	<b>From interest</b>	<b>From subsequent measurement</b>	<b>From disposal</b>	<b>Net result</b>
in €'000	Currency	Value		
	translation	correction		
Loans and Receivables (LaR)	897	- 4,945	- 9,156	- 585
Financial Liabilities Measured at Amortised Cost (FLAC)	- 3,489	0	0	0
Financial Assets Held for Trading (FAHft)	1,323	801	339	3,419
Financial Liabilities Held for Trading (FLHft)	- 253	0	275	0
Held to Maturity (HtM)	56	0	0	0
Available for Sale (Afs)	956	0	0	528
<b>Total</b>	<b>- 510</b>	<b>- 4,144</b>	<b>- 8,542</b>	<b>3,362</b>
				<b>- 9,834</b>

Interests from financial instruments are shown in the financial result. The SMA Group recognizes other components of the net result in other operating expenses and other operating income.

The net results 2012 for financial instruments are as follows:

	<b>From interest</b>	<b>From subsequent measurement</b>	<b>From disposal</b>	<b>Net result</b>
in €'000	Currency	Value		
	translation	correction		
Loans and Receivables (LaR)	1,899	357	- 3,865	- 291
Financial Liabilities Measured at Amortised Cost (FLAC)	- 1,074	0	0	0
Financial Assets Held for Trading (FAHft)	1,285	- 909	- 44	- 824
Financial Liabilities Held for Trading (FLHft)	0	0	- 298	0
Held to Maturity (HtM)	383	0	0	0
Available for Sale (Afs)	1,026	0	- 75	0
<b>Total</b>	<b>3,519</b>	<b>- 552</b>	<b>- 4,282</b>	<b>- 1,115</b>
				<b>- 2,430</b>

In detail, the nominal payment obligations of financial liabilities are as follows:

	in €'000	Book value	Total	<1 year	1 to 3 years	4 to 5 years	>5 years
<b>2013</b>							
Trade payables	60,806	<b>60,806</b>	60,806	0	0	0	0
Financial liabilities	73,379	<b>80,240</b>	41,579	7,763	10,698	20,200	
from liabilities towards credit institutions	69,455	<b>76,118</b>	41,353	7,451	7,228	20,086	
from derivatives that do not qualify							
for hedge accounting	3,924	<b>4,122</b>	226 <sup>1</sup>	312	3,470	114	
Other financial liabilities	39,274	<b>39,274</b>	39,274	0	0	0	0
<b>2012</b>							
Trade payables	72,691	<b>72,691</b>	72,691	0	0	0	0
Financial liabilities	35,563	<b>43,521</b>	4,928	7,589	7,394	23,610	
from liabilities towards credit institutions	34,515	<b>42,473</b>	3,880	7,589	7,394	23,610	
from finance lease agreements	0	<b>0</b>	0	0	0	0	0
from derivatives that do not qualify							
for hedge accounting	1,048	<b>1,048</b>	1,048	0	0	0	0
Other financial liabilities	57,970	<b>57,970</b>	57,970	0	0	0	0

<sup>1</sup> Contains the net cash flow from forward exchange transactions amounting to €'000 35, providing a gross fulfilment. Payment obligations amount to €'000 1,405, payment claims amount to €'000 1,370. For the conversion of the foreign currency transaction the closing rate was used.

## 29. Obligations under Leases and Other Financial Obligations

The obligations of the SMA Group under operating leases relate mainly to buildings and, to a minor extent, to plant and office equipment. Expenses recognized through profit and loss amounted to €27.1 million (2012: €27.3 million) in the year under review.

Other financial obligations arose primarily from tenancy agreements and operating leases for buildings, office containers, plant and office equipment concluded by the Group as the lessee. The terms to maturity of future payments to the end of the minimum term of the agreements are as follows:

	in €'000	12/31/2013	12/31/2012
Maturity of less than 1 year		13,065	13,846
Maturity of 1 to 5 years		34,973	38,661
Maturity of more than 5 years		9,911	19,111
		<b>57,949</b>	<b>71,618</b>

On the reporting date, there were no obligations from finance leasing in the SMA Group.

In addition, there were financial obligations towards third parties under the purchase order commitment for investment orders placed amounting to €5.4 million (2012: €7.2 million). There are financial obligations for intangible assets amounting to €2.5 million (2012: €3.0 million). The other financial obligations were within the framework customary for the business.

### 30. Contingencies

As of December 31, 2013, there were no changes compared to the previous year (€0.05 million).

## Notes to the Statement of Cash Flows SMA Group

The liquid funds shown in the Statement of Cash Flows correspond to the balance sheet item "Cash and cash equivalents."

### 31. Net Cash Flow From Operating Activities

The gross cash flow of €11.2 million (2012: €165.8 million) reflects the operating income prior to commitment of funds. It declined in line with the operating result.

Net cash flow from operating activities in fiscal 2013 amounted to €-2.4 million (2012: €116.1 million). The decrease is mainly attributable to the year-on-year reduced gross cash flow (€-154.6 million), which is due to the reduced earnings before taxes.

The change in net working capital is partly due to a significant decrease in inventories. The change to inventories relevant to the Statement of Cash Flows amounted to €19.7 million. Furthermore, a €24.7 million decrease in trade payables relevant to the Statement of Cash Flows occurred.

### 32. Net Cash Flow From Investing Activities

In fiscal year 2013, net cash flow from investing activities amounted to €34.4 million compared to the previous year's figure of €-260.1 million. This increase reflects the adjusted investment strategy. The outflow of funds for investments in fixed assets and intangible assets amounted to €53.2 million (2012: €100.2 million). In March 2013, 72.5% of the shares carrying voting rights in Jiangsu Zeversolar New Energy Co., Ltd. (Zeversolar) were acquired. Including the acquired cash and cash equivalents of Jiangsu Zeversolar New Energy Co., Ltd., the net outflow of funds from the acquisition of the majority shareholding amounted to €22.1 million.

Pursuant to IAS 7.17, monetary investments with a term to maturity of more than three months are allocated to the net cash flow from investing activities.

### 33. Net Cash Flow From Financing Activities

In fiscal year 2013, net cash flow from financing activities included the dividend payment of SMA Solar Technology AG in the amount of €20.8 million (2012: €45.1 million), the repayment of loan liabilities and Jiangsu Zeversolar New Energy Co., Ltd. Loans, as well as the cash flows for the acquisition of further minority shares of the company.

### 34. Cash and Cash Equivalents

Cash and cash equivalents amounting to €192.4 million (2012: €185.3 million) include cash in hand, bank balances and short-term deposits with an original term to maturity of less than three months. Together with the time deposits with a term to maturity of more than three months and other financial assets, this results in financial resources amounting to €377.5 million (2012: €480.8 million). On the reporting date, the Group had unused credit lines amounting to €22.2 million (2012: €24.0 million).

## Other Disclosures

### 35. Events After the Balance Sheet Date

There were no significant events on or after the balance sheet date.

### 36. Related Party Disclosures

According to the definition contained in IAS 24, related parties are persons responsible for planning, controlling and monitoring the Company's activities. Accordingly, related parties include the members of the Managing Board and the Supervisory Board of SMA Solar Technology AG as well as their close relatives. The restructuring of SMA as of January 1, 2012 extended the group of related parties by the management of the divisions and their close relatives.

**In the year under review, the following persons were members of the Managing Board of SMA Solar Technology AG:**

Jürgen Dolle, Dipl.-Soz. Päd. (until May 15, 2013)  
Chief Human Resources and Operating Officer

Pierre-Pascal Urban, Dipl.-Kfm.  
Chief Executive Officer

Roland Grebe, Dipl.-Ing.  
Chief Technology Officer

Marko Werner, Dipl.-Ing.  
Chief Sales Officer

Lydia Sommer,  
Chief Financial and Human Resources Officer

**The management of the divisions of the SMA Group comprised:**

Patrik Baumstark (OGS up to and including May 2013)	Souleymane Niang (Service)
Jürgen Dolski (Zeversolar)	Jürgen Reinert (PPS)
Jon Ivar Ekker (Zeversolar)	Andreas Schmidt (MPS)
Jeanette Klockgether (PPS)	Sven Schreiber (Zeversolar)
Günther König (PPS up to and including September 2013)	Franz Sistemich (Service)
Rainer Krug (MPS)	Volker Wachenfeld (OGS up to and including April 2013)
Rolf Merte (MPS until October 2013)	Michael Wengeler (PPS)

**In the year under review, the following persons were members of the Supervisory Board of SMA Solar Technology AG:**

Dr.-Ing. h. c. Günther Cramer, Chairman of the Foundation Managing Board Chairman of the Supervisory Board	Dr. Günther Häckl Employee Representative
Dr. Erik Ehrentraut, Enterprise Consultant Deputy Chairman	Johannes Häde, Dipl.-Ing. Employee Representative
Peter Drews, Dipl.-Ing. Chairman of the Foundation Managing Board	Mirko Zeidler Employee Representative
Reiner Wetzlaufer, Dipl.-Ing. Chairman of the Foundation Managing Board	Joachim Schlosser Employee Representative
Prof. (em.) Dr.-Ing. Werner Kleinkauf, University Professor	Ullrich Meßmer (until May 23, 2013) Trade Union Secretary
Dr. Winfried Hoffmann Consultant	Oliver Dietzel (from May 24, 2013) Trade Union Secretary
	Alexander Naujoks Trade Union Secretary

Remuneration of key management members of the Group, which must be disclosed under IAS 24, includes remuneration of the active Managing Board, the division management and the Supervisory Board.

Total compensation of the members of the active Managing Board and the division management in the year under review amounted to €3.9 million, with no variable salary components granted for 2013 (2012: €4.4 million, of which €0.9 million was attributable to variable salary components, not including division management in both cases). No compensations for tasks in subsidiaries were granted. The total compensation of the members of the Supervisory Board in the year under review amounted to €0.5 million (2012: €0.4 million). This figure does not include any variable salary components (2012: €0.2 million). The remuneration paid to the members of the Managing and Supervisory Boards is shown in detail in a separate remuneration report in line with the criteria of the German Corporate Governance Code. The complete Remuneration Report is included in the Consolidated Management Report.

**Members of the Supervisory Board hold the following positions in statutory supervisory boards and similar controlling bodies of commercial enterprises:**

Dr. Ing. h. c. Günther Cramer  
Member of the Supervisory Board  
of EnBW Energie Baden-Württemberg AG

Prof. (em.) Dr.-Ing. Werner Kleinkauf  
Member of the Supervisory Board  
of Seeger Engineering AG

Dr. Winfried Hoffmann  
Chairman of the Supervisory Board of Solar Fabrik AG  
Member of the Supervisory Board of the Institute for  
Solar Energy Research Hamelin (ISFH)  
Member of the Supervisory Board of the Helmholtz  
Zentrum Berlin  
Member of the Board of Trustees of Fraunhofer ISE  
Member of the Board of Trustees of ZSW (Stuttgart)

Other related parties are the Günther Cramer Foundation, Peter Drews Foundation and Reiner Wettlaufer Foundation, which together established cdw Stiftungsverbund gGmbH (formerly SMA Stiftungsverbund gGmbH). No transactions requiring disclosure under IAS 24 were made in the reporting period.

### 37. Objectives and Methods Concerning Financial Risk Management

Financial risk management is integrated into the Group-wide hedging policy. Deliberate treatment of potential risks and sound control as well as successful management of such risks when they occur are supported by an accompanying information and communication policy as well as by the further education and training of employees. The principle underlying the Group's hedging policy in the financial field is to protect against significant price, currency and interest risks by means of contracts and hedging transactions to an economically reasonable extent.

The financial instruments of the Group relate primarily to trade receivables as well as cash resulting directly from operating activities. In addition, there is a particular amount of trade payables that also arise from operating activities. The Group also uses derivative financial instruments as part of exchange and interest rate hedging. The Group's main risks in relation to financial instruments are interest-based cash flow risks as well as liquidity, currency and credit risks. The strategies and procedures for controlling individual types of risks, which have been defined in the context of the Group's overall hedging policy, are presented below:

#### **INTEREST RISK**

Interest rate risks within the SMA Group mainly arise in the case of financial liabilities and non-current portions of certain provisions. Interest on the aforementioned liabilities is not paid by the contracting party and is therefore discounted at the interest rate usual in the market, which means that there is no separate control of the interest risk. The variable interest-bearing portion of existing financial liabilities is secured through an interest rate swap. This ensures interest rates are hedged in the long term and allows financing costs to be reliably calculated over the contract's term.

The following sensitivities can be calculated for the financial instruments held on the balance sheet date:

If the market interest rate had increased by 1.0%age point, the impact on the financial result would have been €0.3 million (2012: €0.4 million). The effect on equity in relation to the market valuation of financial instruments of the available-for-sale category would have amounted to €0.5 million (December 31, 2012: €0.5 million). The calculation of sensitivities with regard to interest rates decreasing by 1.0%age point assumed a base rate of a minimum of 0%. In these circumstances, there would have been effects on earnings before taxes of €-0.1 million (2012: €-0.2 million) and on equity of €-0.6 million (December 31, 2012: €-0.5 million).

#### **FOREIGN CURRENCY RISK**

As a globally active Company, the SMA Group is exposed to both transaction-related and translation-related foreign currency risks.

SMA assesses risks from an economical point of view. From an economical point of view, foreign currency risks arise in the form of direct transaction risks that derive from any (current or planned) receivable or payable denominated in a foreign currency and the resulting payment flow. The SMA Group's intense business activity in North America means that foreign currency risks at present mainly arise in US dollars or Canadian dollars. In view of the fact that a large portion of the added value attributable to the North American companies is generated locally and sales in the local currency are balanced by expenditure in the local currency, the operative foreign currency risk in the SMA Group is limited. An intra-Group guideline ensures that SMA companies report their foreign currency risks to the Corporate Treasury. The remaining Group-wide risk is hedged by the Corporate Treasury through the use of currency derivatives concluded externally with banks. Forward exchange transactions are the most commonly used method in this case. The use of options as part of the hedging strategy is also envisaged.

Translation risks mainly occur when the assets and liabilities of subsidiaries denominated in a foreign currency are converted to the parent company's domestic currency when preparing the Consolidated Financial Statements. Translation risks are not included within the scope of the active control of foreign currency risks.

Items denominated in foreign currencies, and the development of the exchange rate of those currencies, are monitored continuously and the risks are hedged, provided this is economically reasonable. The risks from hedging transactions in themselves are limited to the possibility that opportunities of better price performance cannot be realized.

In order to present market risks, IFRS 7 requires sensitivity analyses, which show the effects of hypothetical changes in relevant risk variables on earnings and equity. Currency risks are caused by financial instruments that are denominated in a currency other than the functional currency and which are of a monetary nature; exchange-rate-related differences from the translation of Financial Statements into the Group currency are not taken into account. The US dollar is deemed to be a relevant risk variable. The currency sensitivity analysis is based on original financial instruments in the form of receivables. Through the use of hedging transactions (derivatives), which are designed to hedge the underlying transaction, the opposing effects that accompany changes in the exchange rate of the dollar are evened out. Accordingly, exchange rate changes have no impact on equity and minor effects on earnings if hedging transactions are made.

An increase of 5% in the euro with respect to the US dollar on December 31, 2013 would have led to a positive change in the currency derivatives of €1.5 million (2012: €0.8 million). A decrease of 5% in the euro with respect to the US dollar on December 31, 2013 would have led to a reduction in the value of the currency derivatives of €1.7 million (2012: €0.9 million). An increase of 5% in the euro in relation to the Canadian dollar on December 31, 2013, would have led to a positive change in the corresponding derivatives of €0.2 million. In comparison,

a decrease of 5% in the euro would have resulted in impairment of €0.3 million. This exchange rate effects would have increased the EBT by €1.7 million (2012: €0.8 million), or decreased by €2.0 million (2012: €-0.9 million). The accumulated result of differences in exchange rates and exchange hedging in the fiscal year amounts to 0.9 million (2012: -1.4 million).

Pursuant to IFRS, currency risks affect monetary financial instruments that are denominated in a foreign currency, i.e., in a currency other than the functional currency. This means that the foreign currency is the relevant risk variable. Translation-related risks are not taken into account. Since the individual Group companies mainly conduct their operative business in their own functional currency, we regard the risk from exchange rate fluctuations resulting from our ongoing business activity as insignificant.

#### **CREDIT RISK**

For all deliveries to customers, collateral is requested depending on the volume of the respective transaction and the specific customer and country risk. Data from the previous business relationship, including payment practices and additional credit reports, are also used to avoid non-payment. In addition, the Group performs a customer credit check, which is based on certain financial key ratios. By the timely setting of a credit limit or by suspension of orders, the Group avoids being exposed to a significant risk of non-payment. The maximum non-payment risk is limited to the book value disclosed in Section 19. There are no major concentrations of non-payment risks within the Group.

See also section 19  
page 151 et seqq.

In respect of all the Group's other financial assets such as cash and cash equivalents, available-for-sale financial investments and derivative financial instruments, the maximum credit risk, should the counterparty fail to pay, corresponds to the book value of these instruments. This counterparty default risk is analyzed on a continuous basis and managed by means of corresponding business allocation – also taking account of potential opportunities – with regard to cluster risks and creditworthiness risks.

#### **LIQUIDITY RISK**

The Company uses financial planning tools for the early detection of future liquidity requirements. According to current planning, it can be assumed that the financial requirements will be covered in a reliably predictable time frame. Insurance contracts are concluded to hedge against the financial consequences of possible liability risks and damage claims, insofar as this is reasonable and possible. The cover provided by such contracts is reviewed and adapted regularly.

#### **CAPITAL MANAGEMENT**

The strategic objective of capital management within the SMA Group is to ensure financial flexibility and independence in order to make rapid use of the opportunities in a photovoltaic market characterized by strong growth. Profitable employment of the capital is measured through regular monitoring of net working capital. Within the SMA Group, net working capital is defined as the sum of inventories and trade receivables less trade payables. In order to be able to usefully measure relative capital consumption even in the event of strong corporate growth, net working capital is expressed in relation to sales. Through debtor management, which ensures that receivables are collected in good time, the linkage of the evolution of inventories to sales as well as a constant dividend policy, the Company creates the requirements for its objectives in terms of financial flexibility and independence. In accordance with our intra-Group guidelines, the net working capital ratio determined in this way has to be below 21%. In the year under review, the equity ratio of the SMA Group was 57.5% (2012: 61.8%) and the Net Working Capital ratio was 26.6% (2012: 18.3%).

## 38. Auditor Fees

The fees paid to the auditor and recorded as an expense in the year under review break down as follows:

	2013	2012
in €'000	—————	—————
Financial statement auditing	359	339
Other audit-related services	17	17
Other services	39	17
	<b>415</b>	<b>372</b>

The cost of financial statement auditing comprises the fees for the audit of the Consolidated Financial Statements as well as for the audit of the Financial Statements of SMA Solar Technology AG and its domestic subsidiaries, provided they are obliged to perform an audit pursuant to Section 316 of the German Commercial Code. The fees for audit-related services and other audit work include expenses for the review of the Interim Consolidated Financial Statements. The fees for other services contain expenses for agreed single auditing and consulting activities, which were performed during the reporting year.

## 39. Declaration on the German Corporate Governance Code in Accordance with Section 161 AktG

The declaration required under Section 161 AktG on the recommendations issued by the Government Commission German Corporate Governance Code was given by the Managing Board and the Supervisory Board on December 4, 2013 and made permanently available to shareholders on the website: [www.SMA.de](http://www.SMA.de).

See also  
[www.SMA.de](http://www.SMA.de)

## 40. Consolidated Financial Statements

As the ultimate parent company, SMA Solar Technology AG prepares Consolidated Financial Statements for the largest scope of consolidation as at December 31, 2013, which are filed with the operator of the Electronic Federal Gazette and subsequently published in the Electronic Federal Gazette.

Niestetal, February 21, 2014

SMA Solar Technology AG  
 The Managing Board

Roland Grebe

Lydia Sommer

Pierre-Pascal Urbon

Marko Werner

# Responsibility Statement

We assure to the best of our knowledge that, in accordance with the applicable accounting standards, the Consolidated Financial Statements give a fair view of the net assets, financial position and results of operations of the Group and that the Consolidated Management Report gives a fair view of the course of business including the results of operations and the Group's position and describes the fundamental opportunities and risks of the probable development of the Group.

Niestetal, February 21, 2014

SMA Solar Technology AG  
The Managing Board

Roland Grebe

Lydia Sommer

Pierre-Pascal Urbon

Marko Werner

# Auditors' Report

We have audited the Consolidated Financial Statements prepared by SMA Solar Technology AG, Niestetal – comprising the balance sheet, the income statement, the statement of changes in equity, the statement of cash flows and the Notes on the Consolidated Financial Statements – and the Consolidated Management Report for the fiscal year from January 1, 2013, to December 31, 2013. The preparation of the Consolidated Financial Statements and the Consolidated Management Report in accordance with IFRS, as adopted by the European Union (EU), and the additional requirements of German commercial law pursuant to Section 315a (1) HGB ("German Commercial Code") is the responsibility of the Company's Managing Board. Our responsibility is to express an opinion on the Consolidated Financial Statements and the Consolidated Management Report based on our audit.

We conducted our audit of the Consolidated Financial Statements in accordance with Section 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer. 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 accounting standards and in the Consolidated 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 errors 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 Consolidated 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 the Consolidated Financial Statements, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the Managing Board, as well as evaluating the overall presentation of the Consolidated Financial Statements and the Consolidated 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 of SMA Solar Technology AG, Niestetal, comply with IFRS, as adopted by the EU, the additional requirements of German commercial law pursuant to Section 315a (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 Consolidated 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.

Hanover, February 21, 2014

Deloitte & Touche GmbH  
Wirtschaftsprüfungsgesellschaft

Scharpenberg  
Wirtschaftsprüfer  
(German Public Auditor)

Schwibinger  
Wirtschaftsprüfer  
(German Public Auditor)

5.4

## **GW OF INVERTER OUTPUT**

WE SOLD 5.4 GW OF INVERTER OUTPUT LAST YEAR  
IN GLOBAL TERMS. ACCORDING TO OUR OWN ESTIMATES,  
SMA THUS COVERED CLOSE TO 13% OF GLOBAL  
DEMAND (2012: ROUGHLY 23%).

# Other Information

- 172 — **Glossary**
- 172 — Technical glossary
- 174 — Financial glossary
  
- 176 — **Registered trademarks**
- 176 — **Disclaimer**

# Glossary

## Technical glossary

### AC (Alternating Current)

Grid-compliant current.

### Average Selling Price (ASP)

Sales achieved through inverters (excl. Sunny Island and Sunny Backup) divided by the sold inverter output in watts.

### BSW

Comprising over 800 solar energy companies, the German Solar Industry Association (Bundesverband Solarwirtschaft e. V. – BSW-Solar) represents the interests of the German solar energy sector.

### Central inverter

Inverters for PV large-scale plants. These inverters are used with centralized design concepts.

### Change-of-control clause

Provision in the employment contracts of board members or management providing a special termination right in case of a change of ownership or a change in majority shareholders, usually against payment of a firmly agreed compensation, continued payment of remuneration, often also a corresponding pension provision.

### Commercial range

Photovoltaic inverters suitable for grid-connected photovoltaic systems with a performance range between 30 kW and 500 kW (SMA definition of the target group: tradespersons with supplementary revenue from PV systems).

### Compliance

Legally compliant conduct.

### Corporate Governance

Procedures for managing and controlling companies in a manner that is responsible and aimed at long-term value creation.

### DC (Direct Current)

Direct current must be converted to grid-compliant alternating current (AC) for the network supply.

### Diesel-Powered Grid

An isolated, decentralized power grid with diesel generators as the primary power source. Diesel-powered grids are used mainly where energy supply is not possible via a central utility grid. With PV systems integrated into diesel-powered grids, the use of diesel generators is not a must. Photovoltaic diesel hybrid systems make a considerable contribution to the reduction of fuel costs and CO<sub>2</sub> emissions.

### EEG Apportionment

The EEG apportionment stipulates how subsidization costs resulting from renewable energy power generation are distributed among consumers. The apportionment is based on the difference between the revenues and expenditures which arise from consumption of EEG current generated by renewable energy sources.

### EPIA

European Photovoltaic Industry Association.

### Fuel Parity

Fuel parity exists when costs for generating electricity from a PV system are identical to the selling price and transport and storage costs for fuel to operate power gensets.

### German Renewable Energy Sources Act (EEG)

The Erneuerbare-Energien-Gesetz (EEG) is a law on the process of renewable energies with the aim of supporting the further development of technologies for the production of power from renewable sources.

### Grid management

For decentralized generating plants, the participation in grid management means that they have to orientate themselves toward the current situation of the distribution grid with regard to the feed-in. It affects all solar plants feeding in at medium voltage level.

**Grid parity**

Grid parity exists when the production costs of power from a photovoltaic system are identical to the selling price for domestic power from the public supply network.

**Industrial range**

Photovoltaic inverters suitable for grid-connected photovoltaic systems with a power range > 500 kW (SMA definition of the target group: investors with the primary aim of selling energy).

**Inverter**

An inverter is an electrical device converting direct voltage into alternating voltage or direct into alternating current.

**JET Certification**

Japan Electrical Safety & Environment Technology Laboratories (JET) is an organization, founded in 1963, which is authorized by the government for the safety auditing and certification of products (comparable to the German VDE, TÜV, and the like).

**Medium voltage**

Voltage range from 1,000 V to 60,000 V.

**Off-grid system**

PV island systems are stand-alone power networks fed, for example, by the energy of a solar system; in other words, these systems are not connected to a power grid.

**Photovoltaics (PV)**

Conversion of radiation energy – in particular solar energy – to electricity by means of photovoltaic cells.

**Q at Night**

There is a constant demand for reactive power in PV power plants and large PV systems. During the day, the demand for reactive power is easily met by SMA inverters capable of providing reactive power. With Q at Night, PV power plants with SMA system solutions can now also provide compensating reactive power during the night. Costs, which would otherwise be incurred through the necessary purchase of external reactive power, now no longer apply. Moreover, it provides the opportunity to generate further income by supplying additional reactive power to the grid operator.

**Reactive power**

Reactive power is a term from electronics that describes pulsating power with an alternating positive and negative sign. The positive and negative components of the power output cancel each other out, which yields an average value of zero. This is why it is also referred to as a power grid oscillation. The counterpart to reactive power is active power. In an AC grid, it likewise has a pulsating value, although this is generally positive. Only active power can be used to operate electrical consumers. The sum of active power and reactive power is called 'apparent power'. All electrical operating resources and the entire grid infrastructure must be designed in accordance with this. Apparent power arises if the voltage and current values, likewise pulsating, are out of phase, that is, they attain their maximum or minimum offset with regard to time. This phase displacement can have two directions and is practically unavoidable in the technical application of inverters, because almost every electronic component causes a degree of phase displacement in one direction or the other. Modern inverters are capable of compensating for the phase displacement within a grid, thereby eliminating the useless reactive power from the grid. Through a certain degree of phase displacement, they are also capable of lowering the grid voltage, which usually rises undesirably when active power is fed into the grid.

**Residential range**

Photovoltaic inverters suitable for grid-connected photovoltaic systems with a performance range between 1 kW and 30 kW (SMA definition of the target group: private PV system operators).

**String inverter**

With string technology, the PV generator is divided into individual module areas, and each of these individual "strings" is assigned its own string inverter.

**Sunbelt**

The region between the 20th and 40th parallel in the Northern and Southern Hemispheres, a large portion of which is desert, is also known as the Sunbelt due to the high duration and intensity of sunshine there and is an ideal location for PV systems.

**W, kW, MW, GW**

Units for power:

1 kilowatt (kW) = 1,000 watts (W)  
1 megawatt (MW) = 1,000 kilowatts  
1 gigawatt (GW) = 1,000 megawatts

**Wp**

Abbreviation for Watt peak. Unit for the standardized rated power of a photovoltaic cell or a photovoltaic module under standard conditions.

**Xetra**

Exchange Electronic Trading: fully electronic trading system at the Frankfurt Securities Exchange (FWB) for the spot market. More than 90% of the shares traded in Germany are traded using the Xetra platform.

## Financial glossary

**EBIT**

Earnings before interest and taxes.

**EBITDA**

Earnings before interest, taxes, depreciation and amortization.

**EBIT margin**

$\frac{\text{Operating profit}}{\text{Sales}} \times 100$

(the higher the %age, the higher the earning power)

**EBT**

Earnings before taxes.

**Equity ratio**

Shows the share of equity in the total equity and liabilities.

**Free cash flow**

Operating cash flow minus investments plus negative investments in fixed and intangible assets. Free cash flow is important because it allows a company to pay dividends or to buy back shares. Therefore, free cash flow is a measure of how much cash can be paid to the shareholders of a company.

**Gross cash flow**

Shows the operating income prior to any commitment of funds. It is calculated by considering earnings before income tax and the financial result – plus interest received, depreciation and amortization, changes in other provisions, profit/loss from the disposal of fixed assets and other non-cash expenses/revenues less interest paid and income tax paid.

**Gross profit on sales**

Sales minus cost of sales.

**IAS**

International Accounting Standards; newer standards refer to the initials IFRS.

**IASB**

International Accounting Standards Board.

**IFRIC**

Interpretations of the International Financial Reporting Interpretations Committee on IAS/IFRS.

**IFRS (International Financial Reporting Standards)**

IFRS are international reporting standards defined by the IASB.

**Net cash**

Liquid funds and securities contained within working capital less interestbearing financial liabilities.

**Net cash flow from financing activities**

Outflow/inflow of liquid funds from equity financing and debt financing.

**Net cash flow from investing activities**

Outflow/inflow of liquid funds from investments and disinvestments.

**Net cash flow from operating activities**

Outflow/inflow of liquid funds, unaffected by investments, disinvestments and financing activities.

**Net working capital**

Net working capital, i.e. the total amount of short-term, interest-free working capital (inventories plus trade receivables less trade payables).

**Net working capital ratio**

Net working capital in relation to net sales.

**Operating profit (EBIT)**

Earnings before interest and taxes.

**Return on assets (after taxes)**

The return on assets (after taxes) is the consolidated net profit divided by the averaged total assets of the reporting period (average of total assets at the beginning and end of the reporting period).

**Return on equity (after taxes)**

The return on equity (after taxes) is the consolidated net profit divided by the averaged total equity of the reporting period (average of total equity at the beginning and end of the reporting period).

**Return on sales**

Ratio of EBT to sales.

**REGISTERED TRADEMARKS**

Company logos, SMA, SMA Solar Technology, SMA Railway Technology, SMA Solar Academy, Multi-String, opticool, Sunny, Sunny Backup, Sunny Central, Sunny Boy, Sunny Tripower, Sunny Island, Sunny Portal, Sunny Home Manager are registered trademarks of SMA Solar Technology AG in many countries.

Zeversolar is a registered trademark of Jiangsu Zeversolar New Energy Co., Ltd.

**DISCLAIMER**

The annual report, in particular the forecast report included in the management report, includes various forecasts and expectations as well as statements relating to the future development of the SMA Group and SMA Solar Technology AG. These statements are based on assumptions and estimates and may entail known and unknown risks and uncertainties. Actual development and results as well as the financial and asset situation may therefore differ substantially from the expectations and assumptions made. This may be due to market fluctuations, the development of world market prices for commodities, of financial markets and exchange rates, amendments to national and international legislation and provision or fundamental changes in the economic and political environment. SMA does not intend to and does not undertake an obligation to update or revise any forward-looking statements to adapt them to events or developments after the publication of this annual report.

## FINANCIAL CALENDAR

05/15/2014	Publication of Quarterly Financial Report: January to March 2014
	Analyst Conference Call: 09:00 a.m. (CET)
05/27/2014	Annual General Meeting 2014
08/07/2014	Publication of Half-Yearly Financial Report: January to June 2014
	Analyst Conference Call: 09:00 a.m. (CET)
11/06/2014	Publication of Quarterly Financial Report: January to September 2014
	Analyst Conference Call: 09:00 a.m. (CET)

### Publication Information

#### Published by

SMA Solar Technology AG

#### Text

SMA Solar Technology AG

#### Concept and design (magazine)

SMA Solar Technology AG

#### Concept and design (financial report)

3st kommunikation, Mainz

#### Typesetting (financial report)

Knecht GmbH, Ockenheim

#### Photos

Stefan Daub

Carsten Herwig

Kyocera

#### Printed by

Eberl Print, Immenstadt

### Contact

SMA Solar Technology AG

Sonnendallee 1

34266 Niestetal

Germany

Tel.: +49 561 9522-0

Fax: +49 561 9522-100

E-mail: info@SMA.de

www.SMA.de

Investor Relations

Tel.: +49 561 9522-2222

Fax: +49 561 9522-2223

E-Mail: IR@SMA.de



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**ANNUAL REVIEW 2013**

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**January****Most Popular Inverter Brand in the World**

IMS Research asked 400 consumers of PV inverters for their favorite brand. SMA received almost one third of all votes, thereby finishing in first place as the preferred manufacturer in Germany, Italy, Great Britain and the U.S.

**February****Cooperation Agreement Signed With Miele**

Together with the household appliance manufacturer Miele, SMA enables operators of PV systems to use their self-generated electricity as efficiently as possible.

**March****Award for Patent Management**

The Fraunhofer Institute for Industrial Engineering IAO honored the sustainable patent management of SMA.

**April****Fourth Place in GPTW**

SMA is again one of the most popular employers in Germany in the "Great Place to Work" competition.

**May****Withdrawal From Small Wind Turbine Industry**

The operation of small wind turbines is no longer attractive in many European countries. SMA decided to withdraw the corresponding inverter (Windy Boy) from the market.

**Shareholders Receive €0.60 Dividend**

The Annual General Meeting followed the suggestion of the Managing Board and Supervisory Board and approved the payout of a dividend of €0.60 per qualifying bearer share for the fiscal year 2012.

**June****Third Place in the Women-on-Board-Index**

The Federal Ministry of Family Affairs, Senior Citizens, Women and Youth's Women-on-Board-Index shows where companies stand in comparison to others in terms of equal opportunities for the advancement of women. The Federal Minister of Family Affairs, Senior Citizens, Women and Youth, Kristina Schröder, awarded SMA third place.

**Intersolar AWARD for Sunny Boy Smart Energy**

SMA won the Intersolar AWARD at Intersolar Europe 2013. With this, the jury acknowledged the Sunny Boy Smart Energy as the best product in the "Photovoltaics" category. The Sunny Boy Smart Energy allows PV system operators to store self-generated electricity.

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July



**First PV Diesel Hybrid System Starts in India**

In Palladam, southern India, a PV diesel hybrid system with Sunny Tripower inverters and the SMA Fuel Save Controller ensures the electricity supply of a cotton mill.

September

**Service Contract Signed for the Operational Management of a PV Power Plant**

SMA America received its first long-term Operations and Maintenance (O&M) order for large-scale PV power plants. Starting in 2014, SMA will take on the operational management of a 100 MW PV system in Ontario, Canada. The service contract will run for ten years.

**Reducing Staff Without Layoffs**

SMA announced that the necessary staff reduction could take place as a voluntary severance program without any involuntary layoffs.

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October

**Solar Academy Wins German Solar Prize**

EUROSOLAR – the European Association for Renewable Energy – awarded SMA Solar Academy the German Solar Prize 2013 in the category “Education and vocational training.” At SMA Solar Academy, SMA shares its knowledge of decentralized energy supply.

November

**Forecast for 2013 Fiscal Year Lowered**

Due to the sharp decline in the European market, SMA expects to make a loss in 2013.



**Japan's Largest PV Power Plant Opens**

In the southern Japanese city of Kagoshima, the country's largest PV power plant connected to the grid to date opens. The 70 MW plant is equipped with SMA system technology. At the beginning of 2013, SMA had already established a local sales and service subsidiary in Tokyo.

December

**Large Order From E.ON Mitte**

The energy group E.ON Mitte commissioned SMA to carry out the 50.2 Hz modification of around 13,000 PV systems in Germany.



SMA Solar Technology AG  
Sonnenallee 1  
34266 Niestetal  
Germany  
Tel.: +49 561 9522-0  
Fax: +49 561 9522-100  
E-Mail: [info@SMA.de](mailto:info@SMA.de)