



# Half-Yearly Financial Report

January to June 2023 | SMA Solar Technology AG

# SMA Solar Technology AG

## at a glance

SMA Group		H1 2023	H1 2022	Change	Full year 2022
Sales	€ million	778.9	471.8	65.1%	1,065.9
Export ratio	%	59.5	70.0		68.8
Inverter output sold	MW	7,213	5,757	25.3%	12,225
Capital expenditure <sup>1</sup>	€ million	35.5	29.8	19.1%	65.8
Depreciation	€ million	19.3	18.7	3.1%	38.1
EBITDA	€ million	125.3	15.9	n/a	70.0
EBITDA margin	%	16.1	3.4		6.6
Net income	€ million	103.5	-10.6	n/a	55.8
Earnings per share <sup>2</sup>	€	2.98	-0.31		1.61
Employees <sup>3</sup>		3,945	3,540	11.4%	3,635
in Germany		2,769	2,530	9.4%	2,610
abroad		1,176	1,010	16.4%	1,025

SMA Group		2023/06/30	2022/12/31	Change
Total assets	€ million	1,430.7	1,110.0	28.9%
Equity	€ million	565.7	463.5	22.1%
Equity ratio	%	39.5	41.8	
Net working capital <sup>4</sup>	€ million	250.4	238.5	5.0%
Net working capital ratio <sup>5</sup>	%	18.2	22.4	
Net cash <sup>6</sup>	€ million	304.6	220.1	38.4%
Adjusted free cashflow	€ million	80.6	-33.2	0.0%

<sup>1</sup> Investments including additions of rights of use in accordance with IFRS 16

<sup>2</sup> Converted to 34,700,000 shares

<sup>3</sup> Reporting date; including trainees and learners; excluding temporary employees

<sup>4</sup> Inventories and trade receivables minus trade payables and liabilities from advanced payments received for orders

<sup>5</sup> Relating to the last twelve months (LTM)

<sup>6</sup> Total cash minus interest-bearing financial liabilities to banks

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# CONSOLIDATED INTERIM MANAGEMENT REPORT<sup>1</sup>

## BASIC INFORMATION ABOUT THE GROUP

### Business activity and organization

SMA Solar Technology AG and its subsidiaries (SMA Group) develop, produce and sell systems and solutions for the efficient and sustainable generation, storage and use of solar energy. These include PV and battery inverters, monitoring systems for PV systems, charging solutions for electric vehicles as well as intelligent energy management systems and digital services for the future energy supply. Extensive services up to and including operation and maintenance services for photovoltaic power plants (O&M business) as well as medium-voltage technology and power supplies for hydrogen production round off the product range. With its products and services, the SMA Group actively contributes to making a sustainable, secure and cost-effective energy supply a reality worldwide.

### Organizational structure

#### LEGAL STRUCTURE OF THE GROUP

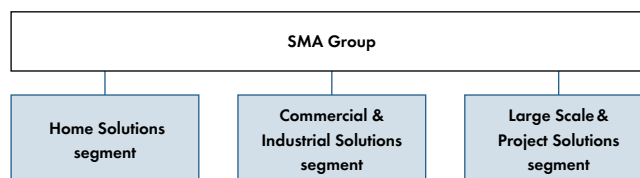
As the parent company of the SMA Group, SMA Solar Technology AG, headquartered in Niestetal near Kassel, Germany, takes over all of the functions required for its operative business. The parent company holds, either directly or indirectly, 100% of the shares of all the operating companies that belong to the SMA Group. The Consolidated Interim Management Report includes information regarding the parent company and all 30 Group companies (H1 2022: 28), including seven domestic companies and 24 companies based abroad. In addition, SMA Solar Technology AG holds an unchanged 42% interest in elxon GmbH compared with December 31, 2022. The joint venture in the field of charging infrastructure facilities was established in 2019 and is recognized as a joint venture in the Half-Year Consolidated Financial Statements according to the equity method as in the previous year.

<sup>1</sup> In individual cases, rounding may result in values in this report not adding up exactly to the totals given and percentages not being derived from the values presented.

#### ORGANIZATIONAL AND REPORTING STRUCTURE

The SMA Group operates as a matrix organization. In this organization, the Home Solutions, Commercial & Industrial (C&I) Solutions and Large Scale & Project Solutions segments manage development, operational service and sales, production and procurement/logistics as well as quality assurance and order processing.

#### REPORTING STRUCTURE



#### MANAGEMENT AND CONTROL

In accordance with the German Stock Corporation Act, 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 shareholder representatives to the Supervisory Board and grants or refuses discharge to the Managing Board and the Supervisory Board.

#### CHANGES TO THE MANAGING BOARD

Since December 1, 2022, the Managing Board of SMA Solar Technology AG has comprised the following members: Dr.-Ing. Jürgen Reinert (Chairman of the Managing Board, Board Member for Strategy and Technology, Sales and Service, Human

Resources, Operations and for the SMA segments) and Barbara Gregor (Board Member for Finance, Legal, Corporate Governance, Compliance, Internal Audit and capital market communication).

## COMPOSITION OF THE SUPERVISORY BOARD

The Supervisory Board of SMA Solar Technology AG, which represents shareholders and employees in equal measure, consists of Roland Bent, Kim Fausing (Deputy Chairman), Alexa Hergenröther, Uwe Kleinkauf (Chairman), Ilonka Nußbaumer and Jan-Henrik Supady as shareholder representatives. The employees are represented on the Supervisory Board by Martin Breul, Oliver Dietzel, Johannes Häde, Yvonne Siebert, Romy Siegert and Dr. Matthias Victor.

## Research and development

The SMA Group uses its systems expertise to develop holistic solutions comprising hardware, software and operative as well as digital services for different applications in the fields of photovoltaics, battery-storage systems and electric vehicle charging, as well as for comprehensive energy management across all segments and sectors (power generators, household appliances, storage systems, heating, ventilation and air-conditioning, e-mobility). To offer our customers technically mature and economic system solutions in all market segments and regions, we selectively collaborate with strong partners. With our continuous research and our market- and customer-focused development, we can further reduce the consumer cost of PV electricity, optimize the use of energy and decrease the complexity in the new, decentralized and digital energy world.

## Forward-looking development approach

With the growing importance of photovoltaics for the global power generation and the increasing integration of PV systems into complete systems, system technology demands on system integration, connectivity and the provision of grid services for a reliable energy supply are taking center stage. In this context, the SMA Group's development focus is on highly integrated and digitalized solutions that cover as many functions as possible (all-in-one solution). Focus areas of our research and development activities also include energy storage systems, e-mobility, energy market integration and power-to-gas.

In product development, we are pursuing a platform strategy aimed at being able to quickly respond to market changes and systematically reducing product costs. By standardizing the architecture of the core components and integrating key system functions, we are increasing the proportion of identical components

and software modules across the entire portfolio while also reducing the number of components in the system in order to offer our customers highly efficient solutions. Customization in line with different markets and customer needs is implemented partly through the connection area and software as well as through different power classes based on the platform.<sup>1</sup>

SMA Solar Technology AG had 1,621 protected patents and utility models worldwide at the end of the reporting period. In addition, more than 562 other patent applications were still pending as of June 30, 2023. Furthermore, SMA Solar Technology AG holds the rights to 1,472 registered trademarks.

In addition to the (further) development of solutions for the efficient generation, storage and use of solar energy, for electric vehicle charging and charging management and for intelligent energy management across various sectors, the focus of development in the reporting period was on optimizing hydrogen production. The SMA Group was already involved in the implementation of related projects on several continents (see "Project business" section).

## Holistic solutions for the energy supply of the future<sup>2</sup>

### APPLICATIONS FOR PRIVATE HOMES: HYBRID INVERTERS AT THE HEART OF RENEWABLE ENERGY MANAGEMENT

The Sunny Boy Smart Energy inverter system and the modular SMA Home Storage battery were presented at the Intersolar Europe 2023 in June. These products offer flexibility and a comprehensive solution from a single source in order to deliver customized PV systems that are tailored to home owners' budgets and requirements.

The Sunny Boy Smart Energy is an all-in-one inverter for PV and battery. Thanks to expandable backup options, clean energy is available even during grid failures. The Sunny Boy Smart Energy is compatible with the new SMA Home Storage battery and with HV batteries from all leading brands. Designed for intensive use and adaptability to different applications, the SMA Home Storage battery offers expandable capacity.

The Sunny Boy Smart Energy will be available in the U.S. from the fourth quarter of 2023. Depending on the country-specific certification, Germany, Austria, Benelux, Spain, Italy and Switzerland will follow at the beginning of 2024. Australia and other European countries will follow in the course of 2024. The SMA Home Storage battery will be available in Germany and Austria from August 2023 followed by the Benelux countries, Spain and Italy.

<sup>1</sup> This paragraph is not a subject of the financial audit.

<sup>2</sup> This section is not a subject of the financial audit.

Back in the first quarter of 2022, the SMA Group closed a gap in its portfolio in the Home Solutions segment with the launch of the Sunny Tripower Smart Energy. The three-phase hybrid inverter with integrated backup function is available with four power classes for use in private homes. As a solar and battery inverter in one, it manages the energy flows between the PV array, the connected battery and the household's public electricity supply via the Sunny Home Manager 2.0. The Sunny Tripower Smart Energy thus reduces the power drawn from the utility grid and, combined with the backup function, continues supplying important home appliances in the event of a power outage. Integrated services and software solutions ensure user convenience and safety. This includes the unique digital SMA Smart Connected service solution for swift service in the event of a fault.

SMA Smart Connected monitors PV systems 24/7, analyzes anomalies, reports these directly to the SMA service organization, if necessary, and informs system operators and/or installers about system data, failures and measures. Spare parts or replacement devices are sent automatically or reserved for the installer in the online shop. The high degree of automation shortens and simplifies the service process and minimizes PV system downtimes.

The SMA apps for solar power professionals and system operators are also supplemented with additional functions. The SMA 360° app for solar power professionals now allows installers to connect system simulation, planning, commissioning and monitoring as well as automatic notifications when servicing is required. The SMA Energy app for end users is expanded by a module for managing the charging of electric vehicles.

In addition to its own electricity tariff SMA JOIN, the SMA Group has introduced the JOIN Charge Card for charging electric vehicles with green electricity in Germany.

Since May 2022, the SMA JOIN Charge app has been providing a Europe-wide overview of available charging stations for drivers of electric vehicles in Germany. Drivers can navigate to one of these locations, start charging and pay and view statements.

#### COMMERCIAL APPLICATIONS: INVERTER WITH ENERGY MANAGEMENT FUNCTIONS AND FLEET CHARGING SOLUTION

In the Commercial & Industrial (C&I) Solutions segment, the SMA Group presented the new integrated SMA Commercial Storage Solution for grid-connected commercial storage solutions for the first time. This enables business owners and industrial companies to optimize their self-consumption and avoid expensive load peaks. The modular design also allows for flexible expansion of the overall system, for example with PV inverters or EV chargers, as well as simplified planning for professional partners and optimization of current and future energy costs for commercial customers.

At the Intersolar Europe 2023 in June, the SMA Group presented the expanded SMA Commercial eMobility Solution, with which business owners can act as charging infrastructure operators themselves. With the newly available version of the EV Charger Business charging station in compliance with calibration laws, kilowatt-hours can now also be billed precisely in Germany. In addition, a roaming function in the SMA eMobility Portal allows for billing to third parties. Starting from the fourth quarter of 2023, SMA will also offer a product for marketing greenhouse gas reduction quotas (GHG quotas), thereby creating an additional source of income for commercial customers.

Moreover, the SMA Group expanded its Sunny Design software for planning renewable energy systems in the first half of 2023. In addition to product improvements to increase efficiency and provide optimal support for the current product portfolio, expanded planning options were established, particularly in the field of e-mobility. In Sunny Design Pro, an import function for 3D models from drone flyovers and from architecture programs was also integrated.

On the U.S. market, the new STP-X inverter for the local market was presented at the end of the third quarter of 2022. Delivery started in the second quarter of 2023. Plus, the SMA Group is currently working on new models in the Sunny Tripower product family (the next generation of three-phase SMA PV inverters for small to medium-sized commercial applications) for the global PV markets. It is also working on new models for Sunny Island (battery inverter for the integration of storage into off-grid power supply systems). The new inverters will complement the range of the SMA Commercial Energy Solution.

Our wholly-owned subsidiary coneve is constantly expanding its range of intelligent charging solutions for electric vehicles. As of December 31, 2022, coneve managed over 2,200 charging points at more than 100 German and international locations of logistics companies, car dealerships and SMEs with its dynamic load control solution for optimized charging of electric vehicles. At the same time, coneve ensures the internal administration and billing of the charging points (CPO services). coneve is also pressing ahead with the integration of charging infrastructure, battery-storage systems and other flexible loads into the energy markets for cost-optimized operation, e.g., at the Hilden charging park. In 2023, these coneve (charging) solutions are also incorporated into the expanded SMA Energy System Business so as to offer commercial enterprises a complete solution for climate-neutral charging and the management and billing of electric vehicle fleets.

#### PROJECT BUSINESS: OPTIMIZED GRID INTEGRATION AND HYDROGEN PRODUCTION

In the Large Scale & Project Solutions segment, development in the reporting period focused on the optimization of customer-specific turnkey PV and storage solutions for handling challenges in grid integration and increasing innovations in power-to-gas applications.

SMA's medium-voltage power plants are turnkey container systems that combine PV or battery inverters with coordinated medium-voltage systems with a nominal system power of up to 4.6 MW.

SMA is a leader in the development of grid-forming solutions. This makes a crucial contribution to the expansion of renewable energy sources. SMA grid-forming solutions enable ever larger quantities of renewable energy to be integrated into the utility grids while maintaining grid stability as conventional energy carriers are gradually phased out.

In the area of green hydrogen generation, the SMA Group offers the Electrolyzer Converter for the grid-friendly processing of electricity for electrolysis into the growing market via its wholly-owned subsidiary Altenso. As a turnkey container solution, including medium-voltage technology, this SMA development enables the construction of highly efficient systems without additional filters or compensation units for the operation of the electrolyzer. The converter has a wide DC operating window for electrolyzer operation. This makes it possible to work with almost all types of electrolyzers. Carefully selected low- and medium-voltage components ensure highly efficient and reliable operation over the entire lifetime of the electrolyzers.

The service offering for PV power plants was systematically expanded in the reporting period. This includes remote service from experts for quick fault analysis and rectification and the provision of software updates via remote transmission according to the highest security standards and system availability. The SMA Virtual Support app enables the maintenance of central inverters on-site with expert support via remote service for both corrective and preventive maintenance, including the replacement of components.

# ECONOMIC REPORT

## General economic conditions and economic conditions in the sector

### General economic conditions

The outlook for the global economic development remains subdued owing to the effects of the Ukraine war, high inflation and the associated interest rate increases. This also affects the German economy, which fell into recession in the first quarter. From January to March 2023, its gross domestic product (GDP) shrank by 0.3% compared to the previous quarter. In the fourth quarter of 2022, there had already been a decline of 0.4%. The economy was slowed by a decline in private consumer spending, which fell by 1.0% in the first quarter of 2023. According to the German Federal Statistical Office, this was partly due to losses in consumer purchasing power as a result of high inflation. The experts do not see any sign of a fundamental improvement for the time being, as indicated by the decrease in the Ifo Business Climate Index to 91.7 points in May 2023 (April 2023: 93.4 points). The German Central Bank (Bundesbank) nonetheless anticipates slight growth in the second quarter of 2023. Easing supply bottlenecks, a large order backlog and lower energy prices should then bring about a recovery in industry. This is also likely to support exports, especially since the global economy regained its footing somewhat.

### Economic conditions in the sector

Photovoltaics (PV) is now one of the most cost-effective energy sources in most regions of the world. For example, large-scale solar projects in the Middle East are already generating solar power at less than \$0.02 per kWh. This points the way to an environment in which the industry continues to grow even without subsidization. In the wake of the transformation of global energy supply structures, current and future objectives include offering holistic solutions, intelligently interlinking different technologies, providing intermediate storage and management solutions for generated energy, and integrating users into the energy market. This is the basis for ensuring a reliable and cost-effective electricity supply from renewable energies.

### GLOBAL PV MARKET: NEW INSTALLATIONS IN FIRST HALF OF YEAR SIGNIFICANTLY ABOVE PREVIOUS YEAR'S LEVEL

Based on newly installed PV power of around 145 GW to 153 GW (H1 2022: approximately 86 GW), according to SMA's estimates, the global photovoltaic market was significantly above the previous year's level in the first half of 2023.<sup>1</sup> SMA estimates that global PV inverter technology sales<sup>2</sup> increased to between €6.5 billion and €7.3 billion (H1 2022: €4.2 billion).

In the photovoltaic markets in Europe, the Middle East and Africa (EMEA), SMA estimates that inverter technology sales increased to around €1.9 billion to €2.2 billion (H1 2022: €1.5 billion). The share of the EMEA region in global sales was thus approximately 31% (H1 2022: 35%). System technology for storage applications and the retrofitting of existing PV systems accounted for a significant portion of sales in the EMEA region at approximately 30%. Investments in North and South America (Americas) amounted to €1.9 billion to €2.1 billion (H1 2022: €1.1 billion). The region thus accounted for around 28% of global inverter technology sales (H1 2022: 26%). The Chinese PV market recorded a particularly strong increase. With an investment volume of between €1.9 billion and €2.1 billion, China accounted for around 28% of global sales in the reporting period (H1 2022: €800 million; 19%). The Asia-Pacific photovoltaic markets (excluding China) were only slightly up year on year with sales of around €850 million to €950 million, accounting for about 13% of the global market (H1 2022: €850 million; 19%).

### EMEA: GERMANY IS MOST IMPORTANT MARKET AGAIN

In the Europe, Middle East and Africa (EMEA) region, SMA estimates that newly installed PV power increased to between 27 GW and 29 GW (H1 2022: 22 GW) in the first half of the year. With almost 6 GW (H1 2022: 3.7 GW), Germany was again the most significant market in Europe in terms of newly registered PV power in the reporting period.

Most other European countries also recorded rising installation figures. The main reasons for this include the EU's ambitious plans for decarbonization and the desire for greater independence from fossil fuel imports against the backdrop of Russia's war of aggression on Ukraine.

<sup>1</sup> The installation figures do not include retrofitting of existing PV systems with new inverters or battery inverter technology.

<sup>2</sup> Including inverter retrofitting and battery inverter technology



## AMERICAS: U.S. MARKET TO GROW AGAIN

According to SMA estimates, newly installed PV power in the North and South American (Americas) region amounted to a total of approximately 23 GW to 25 GW in the reporting period (H1 2022: 14 GW). Against the backdrop of significantly reduced regulatory uncertainties, improved availability of PV modules and despite increased financing costs, new PV installations in the U.S. market, which continues to be dominated by large-scale PV projects, increased to more than 13 GW in the first half of 2023 according to SMA estimates (H1 2022: 8.8 GW).

## APAC: GROWTH SURGE IN CHINA

According to SMA estimates, around 77 GW to 79 GW of new PV power was installed in China in the first half of 2023 (H1 2022: 31 GW). New PV installations in the Asia-Pacific region, excluding China (APAC), were slightly above previous year's level at around 18 GW to 20 GW (H1 2022: 19 GW). Among the PV markets in the APAC region, newly installed PV power in the key Australian market stabilized at over 2 GW in the first half of 2023 (H1 2022: 2 GW).

SMA is well positioned internationally and generates sales in all relevant regions. In the reporting period, 75.3% of external sales calculated before sales deductions were generated in Europe, the Middle East and Africa (EMEA), 19.6% in the North and South America (Americas) region and 5.1% in the Asia-Pacific (APAC) region (H1 2022: 57.0% EMEA, 26.8% Americas, 16.2% APAC).

The Home Solutions segment generated the largest share of sales in the first half of 2023 at 42.1% (H1 2022: 28.7%). The Large Scale & Project Solutions segment made a contribution to sales of 33.0% (H1 2022: 46.2%), while the Commercial & Industrial Solutions segment generated 24.9% of the SMA Group's sales (H1 2022: 25.1%).

Earnings before interest, taxes, depreciation and amortization (EBITDA<sup>1</sup>) increased year on year to €125.3 million (EBITDA margin: 16.1%; H1 2022: €15.9 million; 3.4%). Earnings before interest and taxes (EBIT) came to €106.1 million (H1 2022: -€2.8 million). This equates to an EBIT margin of 13.6% (H1 2022: -0.6%). The increase in profitability is due chiefly to sales growth as a result of improved material supply and strong demand for SMA products along with the associated fixed cost depression effects in production, as well as a favorable product mix. Net income amounted to €103.5 million (H1 2022: -€10.6 million). Earnings per share thus amounted to €2.98 (H1 2022: -€0.31).

# Results of operations

## Sales and earnings

### SIGNIFICANT INCREASE IN SALES AND PROFITABILITY

From January to June 2023, the SMA Group sold PV inverters with accumulated power of 7,213 MW (H1 2022: 5,757 MW). At €778.9 million, sales were 65.1% higher than in the previous year (H1 2022: €471.8 million). The significant year-on-year increase in sales reflects the strong demand for SMA products and the improved supply situation. All segments significantly increased their sales and generated positive earnings (EBIT<sup>1</sup>).

### ORDER BACKLOG REMAINS AT A HIGH LEVEL

Demand for SMA products is undiminished. As of June 30, 2023, SMA had a large order backlog of €2,453.7 million (June 30, 2022: €1,290.3 million). Of this amount, €2,075.3 million is attributable to product business. The product-related order backlog has thus increased again in comparison to December 31, 2022 (€1,700.7 million) and June 30, 2022 (€861.3 million). In total, €378.4 million of the order backlog is attributable to Service business (June 30, 2022: €429.0 million). Most of this share will be implemented over the next five to ten years.

## Sales and earnings per segment

### HOME SOLUTIONS SEGMENT SIGNIFICANTLY INCREASES SALES AND EARNINGS IN FIRST HALF OF YEAR

In the Home Solutions segment, the SMA Group caters to global markets for small PV systems with and without battery storage systems and connections to a smart home solution. The SMA Energy System Home is an end-to-end, single-source system package featuring all the hardware, software and service components required for an independent household electricity supply. It comprises single- and three-phase string inverters with power of up to 12 kW, integrated services, storage systems and charging solutions for electric vehicles. Communication products and accessories, services, such as extended warranties, spare parts, modernization of PV systems (Repowering) to enhance performance and digital energy services complete the offering.

<sup>1</sup> For the definition of the above key figure, we refer to the Financial Glossary contained in the Annual Report 2022.

In the first half of 2023, external sales rose by 141.5% to €327.3 million (H1 2022: €135.5 million) as a result of the improved delivery situation combined with strong demand. Its share of the SMA Group's total sales was 42.1% (H1 2022: 28.7%). The EMEA region accounted for the largest share of gross sales at 95.5% (H1 2022: 84.8%), while the Americas region contributed 3.1% (H1 2022: 9.3%) and the APAC region 1.4% (H1 2022: 5.9%).

Earnings before interest and taxes (EBIT) improved considerably year on year to €93.4 million (H1 2022: €17.0 million) as a result of the increase in sales combined with a higher-margin product mix. As in the previous year, segment earnings include a positive effect in a low, single-digit million amount from the recognition of updated quality parameters as part of the remeasurement of warranty provisions for products already sold, which is a regularly occurring practice at the end of the reporting period. In total, this provision is increasing due to the increased sales volume. In relation to external sales, the EBIT margin was 28.5% (H1 2022: 12.5%).

#### COMMERCIAL & INDUSTRIAL SOLUTIONS SEGMENT SIGNIFICANTLY INCREASES SALES AND EARNINGS

In the Commercial & Industrial Solutions segment, the focus is on global markets for medium-sized PV systems with and without energy management, battery storage and electric vehicle charging solutions. SMA Energy System Business, featuring matched hardware, software, tools and services, gives small and medium-sized commercial enterprises and the housing sector the option of producing, storing, using and selling solar power themselves. The application shows the companies' energy flows in a transparent way and thus contributes to cost savings. It comprises three-phase inverters, storage solutions and holistic energy management solutions for smaller and medium-sized PV systems. Solutions for charging management and billing of electric vehicle fleets complete the offering. Additionally, the SMA Group offers services up to and including system repowering and operational management of commercial PV systems (O&M business) as well as digital services.

In the first half of 2023, external sales revenue increased by 64.0% to €194.2 million (H1 2022: €118.4 million). Its share of the SMA Group's total sales was 24.9% (H1 2022: 25.1%). 80.4% of gross sales were attributable to the EMEA region, 11.7% to the Americas region and 7.9% to the APAC region (H1 2022: 77.1% EMEA, 13.3% Americas, 9.6% APAC).

Earnings before interest and taxes (EBIT) improved to €6.7 million in the first half of 2023 (H1 2022: –€11.1 million) due to increased sales and the resulting improvement in production capacity utilization. In relation to external sales, the EBIT margin was 3.5% (H1 2022: –9.4%). Segment earnings include a positive effect in a low, single-digit million amount from the recognition of updated quality parameters as part of the remeasurement of warranty provisions for products already sold, which is a regularly occurring practice at the end of the reporting period. In total, this provision is increasing due to the increased sales volume.

#### LARGE SCALE & PROJECT SOLUTIONS SEGMENT WITH POSITIVE TREND IN SALES AND EARNINGS

The Large Scale & Project Solutions segment focuses on complete solutions on international PV power plant markets that perform grid service and monitoring functions on the basis of central inverters and system controllers. The outputs of string and central inverters in this segment range from 100 kW to the megawatts. Another focus is on storage solutions for large-scale PV and storage power plants and on solutions for the hydrogen production. The portfolio is supplemented by services, for example, for the modernization and functional enhancement of PV power plants (Repowering), and operation and maintenance services (O&M business). In addition, the SMA Group implements PV diesel hybrid and large-scale storage projects in this segment worldwide.

In the first half of 2023, external sales revenue increased by 18.1% to €257.4 million (H1 2022: €217.9 million). Its share of the SMA Group's total sales was 33.0% in the reporting period (H1 2022: 46.2%). The Americas region accounted for 48.1% (H1 2022: 46.0%) of the segment's gross sales, the EMEA region for 43.9% (H1 2022: 27.2%) and the APAC region for 8.0% (H1 2022: 26.8%).

Earnings before interest and taxes (EBIT) were positive at €8.8 million, having increased significantly compared to the same period of the previous year (H1 2022: –€6.3 million) due to improved production capacity utilization along with the associated fixed cost degeneration. This was also due to the receipt of compensation payments in the mid-single-digit million range as a result of contract terminations by customers. The balance in this segment included an increase in provisions in a low, single-digit million amount from the recognition of updated quality parameters and the increased sales volume as part of the remeasurement of warranty provisions for products already sold, which is a regularly occurring practice at the end of the reporting period. In addition, a provision for anticipated losses in the low single-digit million range was recognized for the exit from the O&M business in North America. This is offset by a reversal of the anticipated loss provision from the settlement of a long-term contract for operation and maintenance services for PV power plants (O&M). The balanced effect of these two issues is insignificant.<sup>1</sup> In relation to external sales, the EBIT margin was 3.4% (H1 2022: –2.9%).

## Development of significant income statement items

### SMA ON TRACK FOR GROWTH IN ALL AREAS

At €543.8 million, the cost of sales was well above the previous year's level (H1 2022: €375.8 million) due to the significant increase in sales. The gross margin improved significantly to 30.2% (H1 2022: 20.3%) as a result of the strong sales growth and positive capacity utilization effects with regard to fixed cost coverage in production, as well as the large share of sales attributable to the high-margin Home Solutions segment.

Personnel expenses included in cost of sales increased by 29.9% to €80.0 million in the first half of 2023 (H1 2022: €61.6 million). This was due to an increase in personnel driven by greater production volumes and the recognition of provisions for performance-related variable remuneration. Material costs, including changes in inventories, came to €423.2 million (H1 2022: €288.1 million).

From January to June 2023, depreciation and amortization included in the cost of sales amounted to €16.7 million (H1 2022: €15.9 million). This covers scheduled depreciation on capitalized development costs of €4.2 million (H1 2022: €3.3 million). Other costs increased to €23.9 million (H1 2022: €10.3 million). The year-on-year increase mainly resulted from the increase in warranty provisions. These have not increased in proportion to sales, as quality parameters have improved. In the same period of the previous year, this provision was partly reversed. In addition, costs for external operational services increased.

Selling expenses increased to €59.2 million (H1 2022: €47.8 million). This was predominantly due to the increase in headcount resulting from the business expansion and the recognition of provisions for performance-related variable remuneration. The cost of sales ratio was 7.6% in the reporting period (H1 2022: 10.1%).

Research and development expenses, excluding capitalized development projects, amounted to €31.4 million in the first half of 2023 (H1 2022: €22.6 million), chiefly reflecting higher personnel costs due to an increase in the headcount as well as the recognition of provisions for performance-related variable remuneration. The research and development cost ratio thus amounted to 4.0% (H1 2022: 4.8%). Total research and development expenses, including capitalized development projects, amounted to €51.2 million (H1 2022: €41.4 million). Development projects were capitalized in the amount of €19.9 million (H1 2022: €18.8 million). This increase in capitalization can be attributed to several projects that are at an advanced stage of development. The ratio of the research and development expenses, including capitalized development costs, thus amounts to 6.6% (H1 2022: 8.8%).

General administrative expenses increased to €36.3 million in the first half of 2023 (H1 2022: €29.3 million). This rise was chiefly due to an increase in the headcount and the recognition of provisions for performance-related variable remuneration. The ratio of administrative expenses amounted to 4.7% (H1 2022: 6.2%).

The balance of other operating income and expenses resulted in an effect on earnings of –€2.3 million in the reporting period (H1 2022: €0.9 million). As in the previous year, the receipt of compensation payments in the mid-single-digit million range as a result of contract terminations by customers had a positive effect. Expenses of €12.5 million (H1 2022: €22.1 million) and revenue of €8.8 million (H1 2022: €17.8 million) from foreign currency valuation and foreign currency hedging are also included. Additionally, this comprises expenses and revenue from the rental of own buildings as well as expenses from the recognition and income from the reversal of specific valuation allowances on receivables.

<sup>1</sup> Further explanations can be found in the Condensed notes under "Significant judgments, estimates and assumptions".

## INCREASE IN EMPLOYEE HEADCOUNT IN ALL AREAS DUE TO GROWTH IN KEY FUTURE FIELDS

SMA had 3,771 employees worldwide as of June 30, 2023, representing a year-on-year increase of 373 (June 30, 2022: 3,398 employees). This increase results from the further expansion of the employee headcount in all areas in order to drive growth in strategically important future fields.

SMA still uses temporary employees to absorb order fluctuations. Their hourly rate of pay is in line with that of SMA employees. As of the reporting date, SMA had 586 temporary employees worldwide, 406 more than in the previous year (June 30, 2022: 180 temporary employees) and 107 more than at the end of 2022 (December 31, 2022: 479 temporary employees).

### Employees

Reporting date	2023/ 06/30	2022/ 06/30	2021/ 06/30	2020/ 06/30	2019/ 06/30
Employees (excl. trainees, learners and temporary employees)	3,771	3,398	3,305	3,084	2,940
Learners	124	96	100	73	53
Trainees	50	46	47	42	46
Temporary employees	586	180	220	478	399
<b>Total employees (incl. trainees, learners and temporary employees)</b>	<b>4,531</b>	<b>3,720</b>	<b>3,672</b>	<b>3,677</b>	<b>3,438</b>

### Full-time equivalents

Reporting date	2023/ 06/30	2022/ 06/30	2021/ 06/30	2020/ 06/30	2019/ 06/30
<b>Full-time equivalents (excl. trainees and temporary employees)</b>	<b>3,597</b>	<b>3,215</b>	<b>3,129</b>	<b>3,019</b>	<b>2,877</b>
of which domestic	2,450	2,229	2,164	2,076	2,017
of which abroad	1,147	986	965	943	860

## Financial position

### SMA generates strong operating cash flow

Gross cash flow reflects operating income prior to commitment of funds. In the first half of 2023, it amounted to €143.2 million (H1 2022: –€3.2 million), particularly due to the positive development of sales and EBIT.

In the first six months of the reporting year, net cash flow from operating activities amounted to €112.9 million (H1 2022: –€14.1 million). In the context of the positive development in sales that is still anticipated, the SMA Group is taking advantage of the improved availability of components for increased stockpiling.

The described stockpiling strategy meant that inventories, at €468.5 million, were once again considerably higher than at the end of the previous year (December 31, 2022: €308.7 million). This resulted in a significant increase in trade payables by €93.3 million. Combined with the increase in trade receivables by €37.0 million relevant to the statement of cash flows and an increase in liabilities from advance payments received, this resulted in a slight rise in net working capital to €250.4 million (December 31, 2022: €238.5 million). The net working capital ratio<sup>1</sup> in relation to sales over the past 12 months dropped to 18.2% (December 31, 2022: 22.4%). The net working capital ratio therefore continued to be below the range of 20% to 23% targeted by the Managing Board.

In the first half of 2023, cash flow from investing activities amounted to –€32.2 million after €38.5 million in the previous year. The balance of cash inflows and outflows from financial investments was €0.1 million (H1 2022: €66.7 million). The outflow of funds for investments in fixed assets and intangible assets amounted to €32.3 million in the reporting period (H1 2022: €28.3 million). With €19.9 million (H1 2022: €18.8 million), a large part of the investments was attributable to capitalized development projects.

Cash flow from financing activities amounted to €1.8 million in the first half of 2023 (H1 2022: –€11.9 million) and was attributable to the first-time recognition of a long-term financing component under a sale-and-leaseback agreement and to the repayment of liabilities in the context of leases. The previous year's figure was significantly influenced by the repayments of liabilities to credit institutions.

<sup>1</sup> For the definition of the above key figure, we refer to the Financial Glossary contained in the Annual Report 2022.

As of June 30, 2023, cash and cash equivalents totaling €248.9 million (December 31, 2022: €165.4 million) included cash on hand, bank balances and short-term deposits with an original term to maturity of less than three months. Together with time deposits that have a term to maturity of more than three months, fixed-interest-bearing securities, liquid assets pledged as collateral, and after deducting interest-bearing financial liabilities to banks, this resulted in net cash of €304.6 million (December 31, 2022: €220.1 million). Total cash also came to €304.6 million (December 31, 2022: €220.1 million).

In June 2023, the SMA Group successfully concluded talks regarding a new revolving syndicated credit line with various banks. This replaces the previous syndicated credit line of €100.0 million. Following the conclusion of the new agreement, the SMA Group has a credit volume of €380.0 million. This additional financial headroom at considerably improved conditions will allow for further growth of the SMA Group.

## Investment analysis

In the first half of 2023, investments in property, plant and equipment (including additions from rights of use under IFRS 16) and intangible assets amounted to €35.5 million and were thus above the previous year's figure of €29.8 million. This equates to an investment ratio in relation to sales of 4.6% compared with 6.3% in the first half of 2022.

In total, €11.7 million was invested in fixed assets (H1 2022: €9.1 million), primarily for technical equipment and machinery. The investment ratio for fixed assets was 1.5% in the first half of 2023 (H1 2022: 1.9%). Additions to rights of use under leases amounted to €3.2 million (H1 2022: €1.5 million). Depreciation of fixed assets, including depreciation of rights of use under leases, amounted to €14.3 million (H1 2022: €14.2 million).

Investments in intangible assets amounted to €20.6 million (H1 2022: €19.2 million). These largely related to capitalized development projects. Amortization of intangible assets amounted to €4.9 million and was thus above the previous year's figure of €4.5 million.

## Net assets

Total assets went up by 28.8% to €1,430.7 million as of June 30, 2023 (December 31, 2022: €1,110.0 million). At €414.9 million, non-current assets were above the level observed at the end of 2022 (December 31, 2022: €386.6 million).

Net working capital<sup>1</sup> increased to €250.4 million (December 31, 2022: €238.5 million) in the context of the continued positive development of sales. This put the net working capital ratio in relation to sales over the past twelve months at 18.2%. Compared to December 31, 2022, trade receivables increased by 22.7% to €188.4 million as of the end of the first half of 2023 (December 31, 2022: €153.5 million) due to the sales development in the second quarter of 2023. Days sales outstanding came to 45.3 days and were lower than at the end of the previous year (December 31, 2022: 50.7 days). Inventories increased to €468.5 million (December 31, 2022: €308.7 million) in anticipation of a continued dynamic business development. As a result, trade payables were up significantly compared to the end of 2022 at €226.7 million (December 31, 2022: €133.4 million). The share of trade credit in total assets increased to 15.8% and was thus above the comparative figure at the end of the previous year (December 31, 2022: 12.0%).

The Group's equity capital base also rose to €565.7 million (December 31, 2022: €463.5 million). With an equity ratio of 39.5%, SMA continues to have a solid equity capital base.

<sup>1</sup> For the definition of the above key figure, we refer to the Financial Glossary contained in the Annual Report 2022.

# RISKS AND OPPORTUNITIES REPORT

## Risk and opportunity management

The 2022 Annual Report details risk and opportunity management, individual risks with a potentially significant negative impact on our business, results of operation, financial position and net assets and information on the company's reputation. The SMA Group's key opportunities are also outlined. Using our Risk and Opportunity Management System, we assess the overall risk situation to be manageable. The statements made in the 2022 Annual Report generally continue to apply. Compared to the fourth quarter of 2022, overall risk decreased further and the total number of risks is slightly lower, because, for example, the coronavirus pandemic is no longer regarded as a risk.

The war in Ukraine has not significantly changed the risk situation of the SMA Group, although a short-term change in the situation could occur anytime. Any effects from this situation can therefore not be conclusively assessed at this time. In the first six months of the 2023 fiscal year, we did not identify any additional significant risks or opportunities aside from those presented in the section on business activity and organization and in the additional information on the results of operation, financial position and net assets.

There are currently no discernible risks that, either alone or combined with other risks, could seriously jeopardize the livelihood of the company or significantly impair business performance. For more information, please refer to the forward-looking statements in the Forecast Report.

# FORECAST REPORT

## Preamble

The Managing Board's forecasts include all factors with a likelihood of impacting business performance that were known at the time this report was prepared. General market indicators and industry- and company-specific circumstances are factored into the forecasts. All assessments cover a period of one year.

## The general economic situation

The outlook for global economic development continues to be determined by the effects of the Ukraine war, high inflation and the associated interest rate increases. Following an economic forecast of 2.8% issued in April 2023, the International Monetary Fund (IMF) economists are now more optimistic about the global economy this year. They have raised their growth forecast to 3.0% and are expecting growth of 3.0% in 2024 as well. In 2022, the global economy still grew by 3.5%.

The forecast for Germany, on the other hand, is weaker. The IMF expects German economic output to decline by 0.3% this year. In April, a decline of 0.1% was still being forecasted for 2023. As justification for its forecast, the IMF cited weak industrial production and an economic slowdown in the first quarter. By contrast, the IMF anticipates a slightly stronger recovery in Germany in 2024 than previously projected. Gross domestic product (GDP) is expected to rise by 1.3% instead of the previously expected 1.1%.

The IMF is issuing a mixed forecast for the U.S. economy. The forecast for the current year was raised from 1.6% to 1.8%, due in part to rising real wages and a recovery in car purchases. Nevertheless, the IMF does not expect spending to remain at this level, as the additional money saved during the pandemic has largely been used up and further interest rate hikes are expected from the U.S. Federal Reserve. Therefore, the experts now anticipate economic growth of just 1.0% in 2024.

The IMF is cautiously optimistic overall. The global economy is gradually recovering from the pandemic and the Ukraine war. Labor markets seem surprisingly strong, and falling energy and food prices have eased inflationary pressure at a faster rate than expected. As a result, the IMF lowered its inflation forecast for this year to 6.8% (April 2023: 7.0%). Nevertheless, the economy will still cool significantly compared with 2022. This will be particularly noticeable in the eurozone, which has not yet fully recovered from the high gas prices of recent months. The IMF has, however,

raised its forecast for the eurozone slightly to 0.9% (April 2023: 0.8%), thanks primarily to the current travel boom. Economic output is thus expected to reach 1.5% in 2024.

## Future general economic conditions in the photovoltaics sector

### Solar energy becomes the most important source of energy<sup>1</sup>

The fight against climate change is now one of the most central issues in the public, politics and economics. The global Fridays for Future movement and, more notably, unusual weather phenomena, such as severe storms, heat waves, droughts and flooding in various regions of the world, have helped raise the profile of this issue.

Greater efforts to expand renewable energies are widely regarded as the central pillar in the response to climate change. Politicians are taking account of this with action plans, such as the European Green Deal to achieve climate neutrality within the EU by 2050 and by appointing top-class teams of experts to tackle climate change, like the U.S. government is doing. These attitudes will expedite expansion of renewable energies over the coming years and decades. The experts at the analysis company Wood Mackenzie describe the solar industry as "highly investable" because it is increasingly able to meet both economic and political targets.

The experts at the International Energy Agency (IEA) emphasize the major role of solar energy in combating the climate crisis: In their "Net Zero by 2050 – A Roadmap for the Global Energy Sector" study, they explain that by 2050, the global energy supply will need to be based largely on renewables, with solar energy the single largest source of supply. The experts at the Potsdam Institute for Climate Impact Research (PIK) forecast that green electricity could cover three-quarters of global energy use in the long term, given a consistent climate policy.

<sup>1</sup> Source: McKinsey "Global Energy Perspective 2022"

In this context, the electrification of other sectors, such as mobility and heat, and the production of green hydrogen will additionally drive electricity demand as further important elements in achieving climate protection targets. In their Energy Transition Outlook 2022, the experts of the consulting company DNV predict that electricity's share of global total energy demand will almost double from 19% to 36% within the next 30 years. By 2050, experts estimate that solar and wind energy together could account for 69% of grid-connected power generation, with solar energy alone accounting for 38%. Connectivity, storage and demand response would be critical factors in a decarbonized power system.

According to Bloomberg New Energy Finance's New Energy Outlook 2022, global CO<sub>2</sub> emissions will need to drop by an average of 6% per year to realize the goal of global carbon neutrality by 2050. Decarbonizing the power sector will require such actions as trebling the current level of new PV capacity installations. Global investment in climate-friendly technologies for power generation and storage would need to increase to a total of about \$35 trillion to achieve the goal of carbon neutrality by 2050.

Along with climate change targets, further decreases in its costs are contributing to the anticipated rapid growth of solar and wind energy. According to the PIK, the cost of solar power generation has fallen by 85% over the past ten years alone and further cost reductions can be expected in the future thanks to rapid technological progress. The experts at Bloomberg New Energy Finance classify newly installed wind or PV power plants to be already the most cost-effective form of electricity generation in almost all major markets. These markets cover two-thirds of the world's population, about 77% of global GDP and 91% of total power generation. Moreover, in a growing number of countries, including China, India and a large part of Europe, it is now more cost-effective to build new renewable energy capacity than to operate existing coal- and gas-fired power plants.

In addition to the gradually decreasing consumer cost of electricity from PV systems, their decentralized local generation can be combined particularly well with battery storage systems. The combination of photovoltaics and battery storage systems is therefore extremely attractive for private, commercial and industrial consumers. DNV's experts see photovoltaics combined with battery-storage systems as a separate power plant category that can supply electricity reliably and on demand, just like conventional power plants. According to their projections, combined PV and storage power plants will have a storage capacity of more than 20 TWh by 2050, accounting for around two-thirds of the world's electricity storage capacity.

In the energy system of the future, cutting-edge communication technologies and services for cross-sector energy management will represent key building blocks for the modernization and expansion of the power grid infrastructure. In its World Energy Outlook 2022, the IEA states that, in conjunction with the increasing electrification of the transportation and heating sectors through renewable energies, modern utility grids and smart energy management, there is great potential to sustainably reduce both the high cost of electricity and CO<sub>2</sub> emissions.

The SMA Managing Board is therefore convinced of the market appeal and has thus positioned SMA to ensure it benefits from future developments in the fields of photovoltaics and storage technologies as well as in the markets for e-mobility, digital energy services and green hydrogen production, which experts assess will experience exponential growth in the future.

## Global new PV installations increase to more than 257 GW

The SMA Managing Board anticipates growth in newly installed PV power worldwide to approximately 257 GW to 265 GW in 2023 (2022: 211 GW). The growth is expected to be driven by all regions. The Managing Board estimates that global investments in system technology for traditional photovoltaic applications will increase by around 22%. Investments in system technology for storage applications (excluding investments in batteries) will rise by approximately €400 million to €500 million compared to the previous year. Overall, the SMA Managing Board therefore expects investments in PV system technology (including system technology for storage systems) of around €13.4 billion to €14.4 billion in 2023 (2022: €10.3 billion). Whether the expected market development can actually be implemented that way is heavily dependent on the further development of supply bottlenecks of electronic components as well as additional challenges in global supply chains.

## Considerable increase in demand in the EMEA region

The SMA Managing Board expects a significant increase in newly installed PV power to around 58 GW to 60 GW in the Europe, Middle East and Africa (EMEA) region in 2023 (2022: 51 GW). In addition to growth in the countries in the Middle East and Africa, this is due to the positive development in European markets, such as Germany and Italy, as well as in many east European countries. According to SMA estimates, investments in PV and storage system technology will grow to approximately €3.9 billion to €4.1 billion (2022: €3.3 billion). Battery-storage systems are gaining importance in European countries, especially in Germany, the UK and Italy. In addition to business involving new systems for consumption of self-generated energy, retrofitting of existing systems with new inverters and storage systems will yield high potential in the medium term. For more and more PV systems,



government subsidization will end in the years to come. Self-consumption of solar power is a particularly attractive option for the operators of these systems.

## Significant growth in the Americas region

For the Americas region, the SMA Managing Board anticipates an increase in newly installed PV power to approximately 41 GW to 43 GW (2022: 36 GW). Roughly between 27 GW and 29 GW of this amount is attributable to the North American markets. In the U.S. in particular, the market for PV system technology is currently characterized by strong momentum, driven by positive impetus such as the Inflation Reduction Act (IRA) and the long-term extension of the Investment Tax Credit (ITC) for PV systems. Although it has now eased temporarily, the situation regarding import duties on PV modules from certain Asian countries will remain a factor of uncertainty in the medium term. Inverter technology investments are expected to amount to around €3.4 billion to €3.6 billion in the Americas region (2022: €2.3 billion).

## Investments in the Asia-Pacific region increase

The most important markets in the APAC region include China, India, Japan and Australia. In Japan and Australia, the installation of PV systems combined with battery-storage systems to supply energy independently of fossil energy carriers offers additional growth potential. The SMA Managing Board estimates that new PV installations in China will increase to 119 GW to 121 GW in 2023 (2022: 87 GW). Investments in inverter technology are expected to rise to approximately €2.9 billion to €3.1 billion (2022: €2.1 billion). For the APAC region, excluding China, the SMA Managing Board expects newly installed PV power to grow to around 39 GW to 41 GW in 2023 (2022: 36 GW). This growth is in particular attributable to the positive development in India. The SMA Managing Board expects slightly increasing investments of approximately €1.8 billion to €2.0 billion in inverter technology for the region as a whole (2022: €1.7 billion).

## Growth markets: energy management, digital energy services and operational management

The trend to decentralize power supplies is progressing. More and more households, cities and companies are becoming less dependent on energy fuel imports and rising energy costs by having their own PV systems. This will lead to a rise in demand for energy storage solutions in the residential, commercial and industrial sectors. Furthermore, energy will be increasingly distributed via smart grids to manage electricity demand, avoid

consumption peaks and take the strain off utility grids. E-mobility is an essential pillar of these new energy supply structures. Integration of a prospectively large number of electric vehicles will help increase self-consumption of renewable energies and offset fluctuations in the utility grid. Using artificial intelligence, the behavior of decentralized energy consumers and storage systems can be adapted to the fluctuating production of electricity from renewable energies, thus enabling the overall system to be optimized.

In this context, the SMA Managing Board holds that innovative system technologies that temporarily store solar power and provide energy management to private households and commercial enterprises offer worthwhile business opportunities. Rising prices for conventional domestic and commercial power and many private households and companies wanting to drive forward the energy transition by making their contribution to a sustainable and decentralized energy supply lay the foundation for new business models. Demand for solutions that increase self-consumption of solar power is likely to continue to rise, particularly in European markets, the U.S., Australia and Japan. In these markets, renewable energies are already taking on a greater share in the electricity supply. In addition, power supply companies are increasingly using battery-storage systems to avoid expensive grid expansions, stabilize grid frequency and balance fluctuations in the power feed-in from renewable energy sources. The SMA Managing Board expects the still fairly new storage market to grow to approximately €1.4 billion to €1.6 billion in 2023 (excluding investments in batteries). Estimated demand is already included in the specified development projections for the entire inverter technology market.

In addition to storage technology, digital energy services aimed at optimizing household and commercial enterprises' energy costs and connecting them to the energy market are becoming increasingly significant. The SMA Managing Board expects this area to represent an addressable market of approximately €2.0 billion in 2023. The market will record strong growth in the medium and long term.

Technical management of commercial PV systems and large-scale PV power plants is another segment. This includes a range of services, such as repairs and device replacements as well as visual inspections and maintenance of entire systems. The market in these segments had an accumulated installed capacity of over 960 GW at the end of 2022 and will have an expected capacity of more than 1,100 GW by the end of 2023.

## Overall statement from the Managing Board on expected development of the SMA Group

### Increase in sales and earnings in first half of year due to improved delivery capacity at suppliers

On March 9, 2023, the Managing Board of SMA Solar Technology AG published the preliminary figures for the 2022 fiscal year and issued its first sales and earnings guidance for the 2023 fiscal year with sales of €1,350 million to €1,500 million and earnings before interest, taxes, depreciation and amortization (EBITDA) of €100 million to €140 million. The guidance for the year as a whole was revised upward in an ad hoc notification on March 29, 2023, and forecasted annual sales of €1,450 million to €1,600 million and EBITDA of €135 million to €175 million. This increase was attributable to a stronger than expected first quarter of 2023 as a result of improved delivery capacity, increased production capacity utilization, a good product mix and lower costs due to seasonal factors. On June 23, 2023, the Managing Board raised its guidance for the year as a whole again with the publication of an ad hoc notification. This was because after a positive first quarter already, the second quarter also exceeded the planning as a result of a further significant increase in delivery capacity due to a faster improvement in the material supply at suppliers and an improved earnings contribution by all segments due to a further increase in production capacity utilization and a good product mix. For 2023 as a whole, the Managing Board now anticipates sales of €1,700 million to €1,850 million (ACTUAL 2022: €1,065.9 million) and EBITDA of €230 million to €270 million (ACTUAL 2022: €70.0 million).

For the second half of 2023, the Managing Board anticipates a stabilization of sales and earnings in the Home Solutions segment at a high level and a rising share of sales and earnings from the C&I and Large Scale & Project Solutions segments.

Depreciation and amortization are expected to come to approximately €40 million in 2023. On this basis, the Managing Board expects an EBIT of €190 million to €230 million (ACTUAL 2022: €32 million). In 2023, capital expenditure of approximately €85 million (including capitalized development costs and lease investments) will be approximately above the previous year (ACTUAL 2022: €56.4 million). The SMA Group is investing in the future to benefit from the significant potential arising from the megatrends of decentralization, decarbonization and digitalization of the energy supply worldwide, and is developing highly integrated and digitalized solutions for the resulting requirements. In the current 2023 fiscal year, the company is therefore making particular investments in new products, land and buildings, technical equipment and machinery, and the capitalization of research and development costs.

Due to the improved supply situation, the Managing Board anticipates net working capital between 19% and 23% of sales as of the end of the year. Net cash is expected to be approximately €275 million.

For details regarding risks, please refer to the “Risks and Opportunities Report” section in the present Consolidated Interim Management Report and the Risks and Opportunities Report in the SMA Annual Report 2022.

### SMA Group guidance for 2023 at a glance

Key figure	Guidance 2023	Actual 2022
Sales in € million	1,700 to 1,850	1,065.9
Inverter output sold in GW	17 to 19	12.2
EBITDA in € million	230 to 270	70
Capital expenditure in € million	approx. 85	65.8
Net working capital in % of sales	19 to 23	22.4
Net cash in € million	approx. 275	220.1
EBIT in € million	190 to 230	31.9

The SMA Group’s sales and earnings depend on global market growth, market share, price dynamics and the supply of electronic components. Our global presence and our comprehensive portfolio of products and solutions for all segments (Home Solutions, Commercial & Industrial Solutions and Large Scale & Project Solutions) enable us to respond quickly to changing market conditions, offset fluctuations in demand and take advantage of developments in global photovoltaic and storage markets. Its broad product and solution portfolio in all market segments is a major distinguishing feature for the SMA Group. The Managing Board of SMA Solar Technology AG forecasts the following performance for individual SMA segments in the 2023 fiscal year compared to the 2022 fiscal year:

### Segment guidance for 2023 at a glance

Segment	Sales	EBIT
Home Solutions	Up significantly	Up significantly
Commercial & Industrial Solutions	Up significantly	Up significantly
Large Scale & Project Solutions	Up significantly	Up significantly

## Strategic areas of action strengthen long-term competitiveness

After delivery capacity on the supplier side recovered much faster than expected in the first half of 2023, the Managing Board sees excellent growth prospects for the SMA Group. Significant impetus will be generated by the anticipated growth of the global PV market and of major future fields, such as storage systems, e-mobility, digital energy services and green hydrogen. With its Strategy 2025, its global presence with experts in 20 countries on six continents and products and solutions, the SMA Group is well positioned to benefit from the positive developments and consolidate its market position. The ongoing development of the portfolio into a system landscape for decentralized energy supply is progressing steadily.

With the SMA Strategy 2025, the SMA Group is systematically pressing ahead with its development into an innovative and sustainable “energy transition company” so that it can offer appropriate solutions for all essential areas of future energy supply. We are leveraging our systems expertise to develop complete, future-proof solutions of significant customer benefit in close collaboration with our strong partners and to tap into new business areas.

Since 2021, the SMA Group has been successfully implementing its Strategy 2025. Strategic areas of action were developed that will strengthen the competitiveness of the SMA Group in the long term. They will be pressed ahead by corresponding business initiatives and address key trends and growth segments with high future potential. These include PV and storage solutions, energy market integration, e-mobility and future business fields. They bundle the business initiatives that are essential for achieving the strategic objectives. They are implemented with a clear segment focus. Achievement of the objectives within the areas of action is tracked actively in quarterly strategy reviews. Management derives appropriate courses of action from the results.

## The SMA Group will benefit from the increased change in energy supply <sup>1</sup>

The expansion of renewable energies and storage systems and the electrification of other sectors, such as mobility, heating and air-conditioning, will be further accelerated by the increased fight against climate change and the striving for an energy supply that is largely independent from imports of raw materials and rising prices.

The SMA Group is well positioned to benefit from these trends in all market segments and regions. With our products and solutions, we actively contribute to combating the global climate crisis. In addition, we have an international sales and service organization and decades of experience and technological expertise in all PV and storage applications as well as key future fields for energy supply. Our total installed inverter output of more than 125 GW worldwide is a particularly good foundation for data-based business models, as valuable energy data can be compiled by the inverter. Our extensive knowledge of managing complex battery-storage systems and linking solar power systems to other energy sectors, such as heating, ventilation and cooling technology as well as e-mobility, is an excellent basis for developing future growth potential for digital energy solutions. The SMA Group has also already positioned itself in the high-margin business field of green hydrogen production, which is expected to see strong growth in the future. We will continuously expand our range of solutions for optimized hydrogen production. Furthermore, we will almost double our production capacities for inverter technology at our headquarters in Niestetal/Kassel, Germany, from 21 GW to around 40 GW as of the beginning of 2025 and create more than 200 additional high-quality jobs here. This will increase the company’s flexibility in a dynamic market environment and will minimize risks, dependencies and costs.

## The SMA Group will take advantage of the opportunities posed by digitalization <sup>2</sup>

Thanks to its extensive knowledge and experience in PV system technology, the ability to quickly implement changes, alignment of the subsidiaries toward future business areas and its numerous strategic partnerships, the SMA Group is well prepared for the digitalization of the energy industry and will take advantage of the opportunities that it yields. As a specialist in holistic solutions in the energy sector, we will help shape the energy supply of the future, launch a number of innovations and establish further strategic partnerships as part of our centralized and focused partner management. In the process, we will build on our strengths to design additional system solutions for the conversion to a cost-effective, reliable and sustainable energy supply that is based on decentralized renewable energy.

Niestetal, August 1, 2023

SMA Solar Technology AG  
The Managing Board

Dr.-Ing. Jürgen Reinert

Barbara Gregor

<sup>1</sup> This section is not a subject of the financial audit.

<sup>2</sup> This section is not a subject of the financial audit.

# HALF-YEAR CONSOLIDATED FINANCIAL STATEMENTS

## Income statement SMA Group <sup>1</sup>

in €'000	Note	April – June (Q2) 2023	April – June (Q2) 2022	Jan. – June (H1) 2023	Jan. – June (H1) 2022
<b>Sales</b>	5	<b>411,732</b>	<b>251,264</b>	<b>778,910</b>	<b>471,826</b>
Cost of sales		290,882	200,873	543,788	375,849
<b>Gross profit</b>		<b>120,851</b>	<b>50,391</b>	<b>235,123</b>	<b>95,977</b>
Selling expenses		29,787	26,200	59,171	47,764
Research and development expenses		18,631	12,376	31,358	22,589
General administrative expenses		19,169	14,322	36,272	29,319
Other operating income		12,913	14,905	20,830	33,146
Other operating expenses		10,520	20,690	23,089	32,205
<b>Operating profit (EBIT)</b>		<b>55,656</b>	<b>-8,292</b>	<b>106,062</b>	<b>-2,754</b>
Income from at-equity-accounted investments		539	560	539	560
Financial income		-194	79	2,037	155
Financial expenses		909	1,632	2,146	3,193
<b>Financial result</b>	8	<b>-565</b>	<b>-993</b>	<b>429</b>	<b>-2,478</b>
<b>Profit before income taxes</b>		<b>55,092</b>	<b>-9,285</b>	<b>106,492</b>	<b>-5,232</b>
Income taxes		3,295	4,270	3,009	5,368
<b>Net income</b>		<b>51,797</b>	<b>-13,555</b>	<b>103,483</b>	<b>-10,600</b>
of which attributable to shareholders of SMA AG		51,797	-13,555	103,483	-10,600
Earnings per share, basic (in €)		1.49	-0.39	2.98	-0.31
Earnings per share, diluted (in €)		1.49	-0.39	2.98	-0.31
Number of ordinary shares (in thousands)		34,700	34,700	34,700	34,700

## Statement of comprehensive income SMA Group <sup>1</sup>

in €'000	April – June (Q2) 2023	April – June (Q2) 2022	Jan. – June (H1) 2023	Jan. – June (H1) 2022
<b>Net income</b>	<b>51,797</b>	<b>-13,555</b>	<b>103,483</b>	<b>-10,600</b>
Unrealized gains (+)/losses (-) from currency translation of foreign subsidiaries	114	109	-1,274	1,509
All items of other comprehensive income may be reclassified to profit or loss in subsequent periods	114	109	-1,274	1,509
<b>Overall result</b>	<b>51,912</b>	<b>-13,446</b>	<b>102,209</b>	<b>-9,091</b>
of which attributable to shareholders of SMA AG	51,912	-13,446	102,209	-9,091

<sup>1</sup> The financial information for the second quarter (April to June 2022 and 2023) included in the Q2 columns is not subject to the review of the Half-Yearly Financial Report.

## Balance sheet SMA Group

in €'000	Note	2023/06/30	2022/12/31
<b>ASSETS</b>			
Intangible assets	9	105,062	88,932
Property, plant and equipment	10	195,003	191,845
Investment property		11,527	14,274
Other financial assets, non-current		2,126	6,170
Deferred tax assets		101,134	85,427
<b>Non-current assets</b>		<b>414,852</b>	<b>386,648</b>
Inventories	11	468,485	308,668
Trade receivables		188,428	153,528
Other financial assets, current (total)	12	66,640	57,688
Cash equivalents with a duration of more than 3 months and asset management		38,818	38,290
Rent deposits and cash on hand pledged as collaterals		16,888	16,436
Remaining other financial assets, current		10,935	2,962
Income tax assets		5,906	11,096
Value added tax receivables		17,650	18,548
Other non-financial assets, current		15,521	8,493
Cash and cash equivalents	13	248,884	165,355
Assets held for sale	12, 22	4,360	0
<b>Current assets</b>		<b>1,015,874</b>	<b>723,376</b>
<b>Total assets</b>		<b>1,430,726</b>	<b>1,110,024</b>
<b>LIABILITIES</b>			
Share capital		34,700	34,700
Capital reserves		119,200	119,200
Retained earnings		411,832	309,623
<b>SMA Solar Technology AG shareholders' equity</b>	14	<b>565,732</b>	<b>463,523</b>
Provisions, non-current	15	95,056	92,692
Financial liabilities, non-current	16	20,573	16,356
Contract liabilities, non-current	18	147,843	152,926
Other non-financial liabilities, non-current	19	1,730	1,845
Deferred tax liabilities		618	442
<b>Non-current liabilities</b>		<b>265,820</b>	<b>264,261</b>
Provisions, current	15	75,977	66,454
Financial liabilities, current	16	9,048	7,307
Trade payables		226,737	133,449
Income tax liabilities		20,484	4,162
Contract liabilities (advances)	18	179,777	90,219
Other contract liabilities, current	18	52,124	42,160
Other financial liabilities, current	17	1,078	568
Other non-financial liabilities, current	19	33,948	37,921
<b>Current liabilities</b>		<b>599,174</b>	<b>382,240</b>
<b>Total equity and liabilities</b>		<b>1,430,726</b>	<b>1,110,024</b>

## Statement of cash flows SMA Group

in €'000	Note	Jan. – June (H1) 2023	Jan. – June (H1) 2022
Net income		103,483	-10,600
Income taxes		3,009	5,368
Financial result		-429	2,478
Depreciation and amortization of property, plant and equipment and intangible assets		19,281	18,719
Change in provisions		11,887	-13,757
Result from the disposal of assets		388	128
Change in non-cash expenses/revenue		3,837	-2,261
Interest received		392	623
Interest paid		-499	-515
Income tax paid		1,818	-3,333
<b>Gross cash flow</b>		<b>143,167</b>	<b>-3,150</b>
Change in inventories		-162,448	-17,674
Change in trade receivables		-36,968	-4,499
Change in trade payables		93,288	-5,875
Change in other net assets/other non-cash transaction		75,840	17,098
<b>Cash flow from operating activities</b>		<b>112,880</b>	<b>-14,100</b>
Payments for investments in property, plant and equipment		-11,667	-9,092
Proceeds from the disposal of property, plant and equipment		42	72
Payments for investments in intangible assets		-20,625	-19,180
Proceeds from the disposal of securities and other financial assets		3,911	66,650
Payments for the acquisition of securities and other financial assets		-3,845	0
<b>Cash flow from investing activities</b>		<b>-32,183</b>	<b>38,450</b>
Proceeds from borrowing of financial liabilities		6,170	0
Redemption of financial liabilities		-4	-8,342
Payments for lease liabilities		-4,347	-3,536
<b>Cash flow from financing activities</b>		<b>1,819</b>	<b>-11,878</b>
Net increase/decrease in cash and cash equivalents		82,516	12,472
Changes due to exchange rate effects		1,013	-1,740
Cash and cash equivalents as of January 1		165,355	113,978
<b>Cash and cash equivalents as of June 30</b>	27	<b>248,884</b>	<b>124,710</b>

## Statement of changes in equity SMA Group

in €'000	Share capital	Capital reserves	Difference from currency translation	Other retained earnings	Consolidated shareholders' equity
<b>Shareholders' equity as of January 1, 2022</b>	<b>34,700</b>	<b>119,200</b>	<b>4,150</b>	<b>252,359</b>	<b>410,409</b>
Net income				-10,600	-10,600
Other comprehensive income after tax			1,509		1,509
Overall result					-9,091
<b>Shareholders' equity as of June 30, 2022</b>	<b>34,700</b>	<b>119,200</b>	<b>5,659</b>	<b>241,759</b>	<b>401,318</b>
<b>Shareholders' equity as of January 1, 2023</b>	<b>34,700</b>	<b>119,200</b>	<b>3,836</b>	<b>305,787</b>	<b>463,523</b>
Net income				103,483	103,483
Other comprehensive income after tax			-1,274		-1,274
Overall result					102,209
<b>Shareholders' equity as of June 30, 2023</b>	<b>34,700</b>	<b>119,200</b>	<b>2,562</b>	<b>409,270</b>	<b>565,732</b>

# CONDENSED NOTES AS OF JUNE 30, 2023

## General information

### 1. Basics

The Condensed Half-Year Consolidated Financial Statements of SMA Solar Technology AG as of June 30, 2023, were prepared in compliance with the International Financial Reporting Standards (IFRS) as adopted by the EU. In the 2023 fiscal year, the Half-Year Financial Statements of SMA Solar Technology AG are therefore prepared in accordance with IAS 34, "Interim Financial Reporting." Pursuant to the provisions of IAS 34, a condensed scope of reporting was chosen in comparison with the Consolidated Financial Statements as of December 31, 2022. The Condensed Financial Statements do not include all the information and disclosures required for Consolidated Financial Statements and have therefore to be read in conjunction with the Consolidated Financial Statements as at December 31, 2022.

The Condensed Half-Year Consolidated Financial Statements were prepared in euro. Unless indicated otherwise, all amounts are stated in euro and rounded to whole thousands (€'000) or millions (€ million) to improve clarity. In individual cases, rounding may result in values in this report not adding up exactly to the totals given and percentages not being derived from the values presented.

The Half-Year Consolidated Financial Statements are prepared using the amortized acquisition cost principle. Exceptions to this are in particular derivative financial instruments and securities (in the form of shares in institutional mutual funds).

The income statement is classified according to the cost of sales method.

The Managing Board of SMA Solar Technology AG authorized the Half-Year Consolidated Financial Statements on August 1, 2023, for submission to the Supervisory Board.

The registered office of the company is Sonnenallee 1, 34266 Niestetal, Germany. Shares of SMA Solar Technology AG are traded publicly. They are listed in the Prime Standard of the Frankfurt Stock Exchange. The company has been listed in the TecDAX since June 20, 2022, and was also listed in the MDAX on May 9, 2023.

SMA Solar Technology AG and its subsidiaries (SMA Group) develop, produce and sell systems and solutions for the efficient and sustainable generation, storage and use of energy. These include PV and battery inverters, monitoring systems for PV systems, charging solutions for electric vehicles as well as intelligent energy management systems and digital services for the future energy supply. Extensive services up to and including operation and maintenance services for photovoltaic power plants (O&M business) as well as medium-voltage technology and power supplies for hydrogen production round off the product range. With its products and services, the SMA Group actively contributes to combating the global climate crisis by using renewable energy. More detailed information on the segments is provided in section 5.

### 2. Scope of consolidation and consolidation principles

With the exception of elexon GmbH, all companies within the scope of consolidation are fully consolidated. elexon GmbH is recognized as a joint venture in the Consolidated Financial Statements according to the equity method. The UNIKIMS GmbH entitled to investments in the list of shareholdings as specified in the Consolidated Financial Statements as of December 31, 2022, is not consolidated due to its subordinate importance.

The Half-Year Consolidated Financial Statements are based on the Financial Statements of SMA Solar Technology AG and the subsidiaries included in the scope of consolidation, which were prepared using uniform accounting policies throughout the SMA Group.

Further details can be found in the Notes to the Consolidated Financial Statements as of December 31, 2022.

The scope of consolidation as of June 30, 2023, has changed compared to the scope as of December 31, 2022, to reflect the official deregistration and deconsolidation of the Australian subsidiary Australia Zerversolar. The scope of consolidation has been expanded to include the official registration of the Dutch company SMA Nederland B.V. and the establishment of SMA Solar Technology Middle East DMCC in Dubai.



### 3. Accounting and valuation policies and adoption of new accounting standards

#### ACCOUNTING AND VALUATION POLICIES

There were no changes to the accounting and valuation policies in the present Half-Year Consolidated Financial Statements as at June 30, 2023, compared with the Consolidated Financial Statements of SMA Solar Technology AG as at December 31, 2022.

#### ADOPTION OF NEW ACCOUNTING STANDARDS

The SMA Group has not yet applied the new standards, interpretations or changes to the standards published that were not yet mandatory as of the balance sheet date. The standards that have to be applied in the future can be found in the Notes to the Consolidated Financial Statements for the 2022 fiscal year under Section 2, New IASB Accounting Standards.

The following amendments to the IFRS Standards became effective at the beginning of the current fiscal year: IFRS 17 Insurance Contracts, Amendments to IFRS 17 Initial Application of IFRS 17 and IFRS 9 – Comparative Information, Amendments to IAS 1 Presentation of Financial Statements, including amendments to the Practice Statements, Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors, and Amendments to IAS 12 Income Taxes. For further details, please refer to the 2022 Annual Report.

Since December 31, 2022, the IFRS Interpretations Committee also made an agenda decision regarding substitution rights in connection with the definition of a lease (IFRS 16). The amendments have no material effect on the Group's accounting.

### 4. Significant judgments, estimates and assumptions

Regarding the measurement parameters for the warranty provisions, new findings (particularly a reduction in the expected development of defects based on updated quality data) have had a reducing effect on the amount of the warranty provisions. This has been counteracted by the volume effect of the increase in sales and new findings regarding the assumptions for cost increases in the Large Scale & Project Solutions segment.

Updates were also made to the other significant discretionary decisions, estimates and assumptions mentioned in the Consolidated Financial Statements of SMA Solar Technology AG as of December 31, 2022 (in particular also in the area of inventory valuation, development expenses and deferred tax assets). In view of the business development, there were no indications of impairment of non-financial assets.

For the measurement parameters relating to the provision for anticipated losses from the settlement of a long-term contract for operations management and maintenance services for PV power plants (O&M), new findings have emerged over time regarding the amount of compensation payments for liquidated damages and an adjusted discount rate. Overall, these adjustments have resulted in a reversal of provisions in a low single-digit million amount.

The withdrawal from the onerous O&M contract prompted management to undertake a full review of the O&M business. This led in the second quarter 2023 to the conclusion that the targeted profit margins in the North American O&M business could not be achieved without significant scaling effects, as a consequence SMA management has decided to withdraw completely from the North American O&M business. As the costs of fulfilling the contract exceed the agreed revenues, SMA's management decided to withdraw completely from the North American O&M business. As a result, provisions for anticipated losses in a low single-digit million amount have been recognized for the remaining North American O&M portfolio.

In the first half of 2023, a power purchase agreement was concluded for the purchase of electricity from a solar park. This has a fixed purchase price over the term until 2037. Discretionary decisions were made with regard to the accounting treatment of the power purchase agreement. As a result, SMA is not contractually entitled to determine the use of the solar park during the term. The existence of a leasing relationship in accordance with IFRS 16 was therefore ruled out. Since the electricity is purchased to cover SMA's own electricity requirements, SMA applies the own use exemption in accordance with IFRS 9, so that the power purchase agreement was not qualified as a financial instrument but as a pending transaction. As of the reporting date June 30, 2023, there is no onerous contract in accordance with IAS 37.

In the second quarter of 2023, the SMA Group started negotiations on the sale of the shares in elaxon GmbH. In the opinion of the management, the requirements of IFRS 5 to recognize the shares and the related loan receivable in the balance sheet as of June 30, 2023, under „Assets held for sale“ have been met.

## 5. Segment reporting

The segments of the SMA Group are described in the organizational and reporting structure in the Consolidated Interim Management Report and individually in the “Results of operations” section in the Consolidated Interim Management Report. SMA’s segment structure has not changed in comparison with the previous year.

### Financial ratios by segments and regions

The segment information in accordance with IFRS 8 for the second quarter of 2023 and 2022 is as follows:

in € million <sup>1</sup>	External product sales		External service sales		Total sales	
	Q2 2023	Q2 2022	Q2 2023	Q2 2022	Q2 2023	Q2 2022
<b>Segments</b>						
Home Solutions	161.5	70.6	2.5	2.3	164.0	72.9
C&I Solutions	112.1	60.2	1.9	1.7	114.0	61.9
Large Scale & Project Solutions	124.2	99.3	9.5	17.1	133.7	116.4
<b>Total segments</b>	<b>397.8</b>	<b>230.1</b>	<b>13.9</b>	<b>21.1</b>	<b>411.7</b>	<b>251.2</b>
Reconciliation	0.0	0.0	0.0	0.0	0.0	0.0
<b>Continuing operations</b>	<b>397.8</b>	<b>230.1</b>	<b>13.9</b>	<b>21.1</b>	<b>411.7</b>	<b>251.2</b>

<sup>1</sup> The above table is not part of the review of the Half-Yearly Financial Report.

in € million <sup>1</sup>	Depreciation and amortization		Operating profit (EBIT)	
	Q2 2023	Q2 2022	Q2 2023	Q2 2022
<b>Segments</b>				
Home Solutions	0.4	0.4	43.1	8.7
C&I Solutions	1.8	1.2	7.9	-6.7
Large Scale & Project Solutions	0.8	1.0	6.5	-7.2
<b>Total segments</b>	<b>3.0</b>	<b>2.6</b>	<b>57.5</b>	<b>-5.2</b>
Reconciliation	6.7	6.8	-1.8	-3.1
<b>Continuing operations</b>	<b>9.7</b>	<b>9.4</b>	<b>55.7</b>	<b>-8.3</b>

<sup>1</sup> The above table is not part of the review of the Half-Yearly Financial Report.

#### Sales by regions (target market of the product)

in € million <sup>1</sup>	Q2 2023	Q2 2022
EMEA	336.2	154.9
Americas	74.2	74.3
APAC	23.8	31.0
Sales deductions	-22.5	-9.0
<b>External sales</b>	<b>411.7</b>	<b>251.2</b>
thereof Germany	173.7	78.1

<sup>1</sup> The above table is not part of the review of the Half-Yearly Financial Report.

The segment information in accordance with IFRS 8 for the first half year of 2023 and 2022 is as follows:

in € million	External product sales		External service sales		Total sales	
	H1 2023	H1 2022	H1 2023	H1 2022	H1 2023	H1 2022
<b>Segments</b>						
Home Solutions	322.6	132.3	4.7	3.2	327.3	135.5
C&I Solutions	190.8	114.2	3.4	4.2	194.2	118.4
Large Scale & Project Solutions	225.3	184.9	32.1	33.0	257.4	217.9
<b>Total segments</b>	<b>738.7</b>	<b>431.4</b>	<b>40.2</b>	<b>40.4</b>	<b>778.9</b>	<b>471.8</b>
Reconciliation	0.0	0.0	0.0	0.0	0.0	0.0
<b>Continuing operations</b>	<b>738.7</b>	<b>431.4</b>	<b>40.2</b>	<b>40.4</b>	<b>778.9</b>	<b>471.8</b>

in € million	Depreciation and amortization		Operating profit (EBIT)	
	H1 2023	H1 2022	H1 2023	H1 2022
<b>Segments</b>				
Home Solutions	0.7	0.5	93.4	17.0
C&I Solutions	3.6	2.3	6.7	-11.1
Large Scale & Project Solutions	1.6	2.0	8.8	-6.3
<b>Total segments</b>	<b>5.9</b>	<b>4.8</b>	<b>108.9</b>	<b>-0.4</b>
Reconciliation	13.4	13.9	-2.8	-2.4
<b>Continuing operations</b>	<b>19.3</b>	<b>18.7</b>	<b>106.1</b>	<b>-2.8</b>

#### Sales by regions (target market of the product)

in € million	H1 2023	H1 2022
EMEA	612.8	277.6
Americas	159.2	130.4
APAC	41.6	79.0
Sales deductions	-34.7	-15.2
<b>External sales</b>	<b>778.9</b>	<b>471.8</b>
thereof Germany	329.2	140.8

**Reconciliation** of the segment figures to the correlating figures in the Financial Statements is as follows:

in € million <sup>1</sup>	Q2 2023	Q2 2022	H1 2023	H1 2022
Total segment earnings (EBIT)	57.5	-5.2	108.9	-0.4
Elimination	-1.8	-3.1	-2.8	-2.4
Consolidated EBIT	55.7	-8.3	106.1	-2.8
Financial result	-0.6	-1.0	0.4	-2.5
<b>Earnings before income taxes</b>	<b>55.1</b>	<b>-9.3</b>	<b>106.5</b>	<b>-5.2</b>

<sup>1</sup> The financial information for the second quarter (April to June 2023 and 2022) included in the Q2 columns is not subject to the review of the Half-Yearly Financial Report.

Circumstances are shown in the reconciliation, which by definition are not part of the segments. In particular, this comprises unallocated parts of Group head offices, including centrally managed cash and cash equivalents, financial instruments, and buildings, the expenses of which are allocated to the segments.

## Selected notes to the SMA Group income statement

### 6. Notes to the income statement

The notes to the income statement, including explanations of significant events and transactions, are provided in the presentation of the results of operations in the Consolidated Interim Management Report.

### 7. Employee and temporary employee benefits

in €'000	H1 2023	H1 2022
Wages and salaries	137,286	109,150
Expenses for temporary employees	10,123	3,575
Social security contribution and welfare payments	19,517	17,191
	<b>166,926</b>	<b>129,916</b>

### 8. Financial result

in €'000	H1 2023	H1 2022
<b>Result from at-equity-accounted investments</b>	<b>539</b>	<b>560</b>
Interest income	1,493	155
Other financial income	544	0
<b>Financial income</b>	<b>2,037</b>	<b>155</b>
Interest expenses	1,974	954
Other financial expenses	172	2,239
<b>Financial expenses</b>	<b>2,146</b>	<b>3,193</b>
<b>Financial result</b>	<b>430</b>	<b>-2,478</b>

The changes in interest income and interest expenses are mainly attributable to the changed interest rate environment in the measurement of provisions. The decrease in other financial expenses is attributable mainly to the fair value measurement of shares in institutional mutual funds.

## Selected notes to the SMA Group balance sheet

### 9. Intangible assets

in €'000	2023/06/30	2022/12/31
Goodwill	482	482
Software	2,064	1,588
Patents/licenses/other rights	2,182	2,357
Development projects	29,321	27,264
Intangible assets in progress	71,013	57,241
	<b>105,062</b>	<b>88,932</b>

The intangible assets in progress reflect development activities undertaken by the SMA Group.

### 10. Property, plant and equipment

in €'000	2023/06/30	2022/12/31
Land and buildings, incl. buildings on third party property	109,884	110,186
Rights of use for buildings	18,089	19,518
Technical equipment and machinery	24,386	22,794
Rights of use for technical equipment/machinery	464	224
Other equipment, plant and office equipment	19,302	19,831
Rights of use for vehicle fleet	3,122	3,069
Prepayments and assets under construction	19,756	16,223
	<b>195,003</b>	<b>191,845</b>

### 11. Inventories

in €'000	2023/06/30	2022/12/31
Raw materials, consumables and supplies	179,332	144,149
Unfinished goods, work in progress	12,010	12,718
Finished goods, and goods for resale	249,663	135,289
Prepayments	27,480	16,512
	<b>468,485</b>	<b>308,668</b>

Inventories are measured at the lower value of the cost of acquisition or sales and net realizable value. In total, impairment as of June 30, 2023, amounted to €26.2 million (December 31, 2022: €27.3 million). The addition to impairment on inventories, included under expenses as cost of sales, amounted to €2.8 million (H1 2022: €0.8 million).

## 12. Other financial assets and value added tax receivables

In the previous year, the other non-current financial assets included shares in joint ventures and loan receivables. The SMA Group entered into negotiations to sell these shares in the second quarter of 2023. The shares and the associated loan receivable are therefore recognized in the balance sheet under "Assets held for sale" as of June 30, 2023. The SMA Group expects a potential sale to make a positive contribution to earnings, which is why these items are accounted for at book values.

As at June 30, 2023, 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 €38.8 million (December 31, 2022: €38.3 million) as well as receivables from tax authorities from sales tax refund claims of €17.7 million (December 31, 2022: €18.5 million). They also include claims arising from overpayments to suppliers and from settlements of claims by suppliers.

## 13. Cash and cash equivalents

Cash and cash equivalents of €248.9 million (December 31, 2022: €165.4 million) comprise cash in hand as well as bank balances, checks, payments in transit of €247.7 million (December 31, 2022: €164.2 million) and deposits with an original term to maturity of less than three months amounting to €1.2 million (December 31, 2022: €1.2 million). Bank balances bear interest at variable interest rates applicable to deposits subject to call.

## 14. Equity

The change in equity, including effects not recognized in profit or loss, is shown in the statement of changes in equity.

On May 24, 2023, the Annual General Meeting of SMA Solar Technology AG waived the distribution of a dividend for the 2022 fiscal year (2022: no dividend payment).

## 15. Provisions

in €'000	2023/06/30	2022/12/31
Warranties	118,599	119,200
Personnel	18,401	5,965
Other	34,033	33,981
	<b>171,033</b>	<b>159,146</b>

Warranty provisions consist of 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 that are mainly used in the following year. Warranty provisions for individual cases amount to €1.9 million (December 31, 2022: €2.4 million). Provisions for expected equipment failures during the warranty period amount to €116.7 million (December 31, 2022: €116.8 million). For the short-term portion of €39.0 million, an outflow of funds is expected within one year; for the long-term portion, an outflow of funds is expected within a period of five to ten years.

Personnel provisions mainly include obligations for performance-based bonuses, long-service anniversaries, death benefits and partial retirement benefits. Personnel provisions affect cash in relation to contractual commitments made. The increase is mainly attributable to performance-related variable compensation.

Other provisions include provisions for onerous contracts in the low single-digit million range, which were recognized in connection with the decision to withdraw from the North American O&M business.

## 16. Financial liabilities

in €'000	2023/06/30	2022/12/31
Liabilities due to credit institutions	10	15
Derivative financial liabilities	948	0
Lease liabilities	22,493	23,648
Other financial liabilities	6,170	0
	<b>29,621</b>	<b>23,663</b>

Changes in liabilities to banks and from leases are reflected in the net cash flow from financing activities. Financial liabilities from derivative financial instruments relate to currency futures and options with negative fair values as of the reporting date.

The other non-current financial liabilities reported in the consolidated statement of financial position as of June 30, 2023, include obligations under a sale and leaseback agreement in connection with the sale of a property. There is a repurchase option for the land in question following termination of the future lease, which is expected to commence in the second half of 2024.

## 17. Other financial liabilities

The other current financial liabilities include costs for preparing the financial statements and other financial liabilities and are due within one year.

## 18. Contract liabilities

in €'000	2023/06/30	2022/12/31
Accrual item for extended warranties	159,843	165,996
Liabilities from prepayments received	179,777	90,220
Accruals for service and maintenance contracts	13,754	16,588
Other contract liabilities, current	26,371	12,501
<b>Total</b>	<b>379,745</b>	<b>285,305</b>

Liabilities from advance payments received for deliveries of goods increased significantly due to the completion of major projects. Other contract liabilities entail accrual items for extended warranties, service and maintenance contracts and bonus agreements. Non-current contractual obligations mainly include liabilities from chargeable extended warranties granted for products from the Home Solutions and Commercial & Industrial Solutions business units. The fulfillment of the non-current contractual obligations will extend over a period of 5 to 15 years from the start of the extended warranties.

Current contractual obligations mainly include prepayments received and relate to deliveries of goods, accruals for service and maintenance contracts as well as bonus agreements. They will mostly be fulfilled within the next 12 months.

## 19. Other non-financial liabilities

Other non-financial liabilities mainly include liabilities in the Human Resources department. They contain obligations to employees regarding performance-based bonuses and positive vacation and flextime balances as well as variable salary components and contributions to the workers' compensation association and to social insurance systems totaling €29.5 million (December 31, 2022: €36.7 million). Liabilities to tax authorities, other remaining liabilities and subsidies received totaling €6.2 million are also recognized (December 31, 2022: €3.1 million).

## 20. Financial instruments

in €'000	Assessment category according to IFRS 9	2023/06/30	2022/12/31
		Book value	Book value
<b>Assets</b>			
Cash and cash equivalents	AC	248,884	165,355
Trade receivables	AC	188,428	153,528
<b>Other financial assets</b>		<b>68,767</b>	<b>63,857</b>
of which other financial assets	FVOCI	3	3
of which institutional mutual funds	FVPL	38,766	38,290
of which other	AC	29,998	25,564
<b>Liabilities</b>			
Trade payables	AC	226,737	133,449
<b>Financial liabilities</b>		<b>29,621</b>	<b>23,663</b>
of which liabilities due to credit institutions	AC	10	15
of which liabilities from leases	-	22,493	23,648
of which derivatives that do not qualify for hedge accounting	FVPL	948	0
of which other financial liabilities		6,170	0
<b>Other financial liabilities</b>	AC	<b>1,078</b>	<b>568</b>
<b>Of which aggregated according to valuation categories in accordance with IFRS 9</b>			
Financial Assets measured at Amortized Cost	AC	467,309	344,447
Financial Liabilities measured at Amortized Cost	AC	227,825	134,032
Financial Assets measured at Fair Value through Profit or Loss	FVPL	38,766	38,290
Financial Liabilities measured at Fair Value through Profit or Loss	FVPL	948	0
Financial Assets measured at Fair Value through Other Comprehensive Income	FVOCI	3	3

The book values represent reasonable approximations of the fair values of the assets and liabilities, which is why a separate indication of the fair amounts is omitted. The fair value of liabilities to credit institutions also differs only insignificantly from the book value.

Cash and cash equivalents, trade receivables and time deposits mainly have short terms to maturity. Accordingly, their book values on the reporting date were 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 in conditions and expectations (level 2).

Other financial investments relate to investments not included in the scope of consolidation.

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 are used (level 2).

For most borrowings, the fair values are not materially different from the book values, as interest payments on these borrowings are either close to current market rates or borrowing is short-term.

Derivative financial instruments are used to hedge against currency risks arising from operative business. These include currency futures and options inside and outside of hedge accounting. 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 to 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. The parameters that were used in the valuation models are in line with market data.

As of the reporting date, there were no longer any currency derivatives to be measured at fair value.

The following table shows the allocation of our financial assets and liabilities measured at fair values in the balance sheet, using the three levels of the fair value hierarchy:

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 institutional mutual funds are valued based on observable market prices.

in €'000	Level 1	Level 2	Level 3	Total
<b>2023/06/30</b>				
Financial assets, measured at fair value				
Institutional mutual funds	38,766	0	0	38,766
Other securities	0	0	3	3
Financial liabilities, measured at fair value				
Derivative financial instruments	0	948	0	948
<b>2022/12/31</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Financial assets, measured at fair value				
Institutional mutual funds	38,290	0	0	38,290
Other securities	0	0	3	3
Financial liabilities, measured at fair value				
Derivative financial instruments	0	7,607	0	7,607

## Other disclosures

### 21. Events after the balance sheet date

There were no events after the balance sheet date.

### 22. Related party disclosures

On May 28, 2014, SMA concluded an agreement regarding a close strategic partnership with Danfoss A/S. As part of this partnership, Danfoss acquired a 20% stake in SMA and therefore belongs to the Group of related entities. SMA entered into a strategic partnership with Danfoss in the areas of purchasing, sales and research and development. SMA also performs services on behalf of Danfoss. In the first half of 2023, goods to the value of €0.4 million were sold to Danfoss. As of the reporting date June 30, 2023, trade receivables from Danfoss amounted to €0.3 million. All agreements were concluded under fair market conditions. There is no material collateralization nor are there guarantees. No impairment losses were recognized from transactions with Danfoss.

Furthermore, elexon GmbH is recognized as a joint venture. It is a joint venture in the field of charging infrastructure facilities, in which the SMA Group holds a 42.00% stake. Since 2019, SMA granted elexon GmbH loans totaling €2.0 million. The SMA Group began negotiations to sell these shares in the second quarter of 2023. The shares and the associated loan receivable are therefore recognized in the balance sheet under "Assets held for sale" as of June 30, 2023. The SMA Group expects the sale to make a positive contribution to earnings, which is why these items are accounted for at book values.

All agreements were concluded under fair market conditions. There is no material collateralization nor are there guarantees.



# RESPONSIBILITY STATEMENT

We assure to the best of our knowledge that, in accordance with the applicable accounting standards for half-year financial reporting, the Half-Year Consolidated Financial Statements give a fair view of the net assets, financial position and results of operations of the SMA Group and that the Consolidated Interim Management Report gives a fair view of the course of business, including the results of operations and the SMA Group's position, and describes the fundamental opportunities and risks associated with the expected development of the SMA Group for the remaining months of the fiscal year.

Niestetal, August 1, 2023

SMA Solar Technology AG  
The Managing Board

Dr.-Ing. Jürgen Reinert

Barbara Gregor

# REVIEW REPORT<sup>1</sup>

To SMA Solar Technology AG, Niestetal

We have reviewed the half year consolidated financial statements – comprising the income statement SMA Group, the statement of comprehensive income SMA Group, the balance sheet SMA Group, the statement of cash flows SMA Group, the statement of changes in equity SMA Group and condensed notes as of June 30, 2023 – except for quarterly disclosures for the periods April to June 2023 and April to June 2022 presented within the income statement SMA Group, the statement of comprehensive income SMA Group and in the segment report in the condensed notes as of June 30, 2023 and with the exception of other disclosed information indicated by footnotes in the interim group management report -, and the interim group management report of SMA Solar Technology AG, Niestetal, for the period from January 1, 2023 to June 30, 2023 that are part of the semi annual financial report pursuant to section 115 German Securities Trading Act (WpHG). The preparation of the half year consolidated financial statements in accordance with those IFRS applicable to interim financial reporting as adopted by the EU, and of the interim group management report in accordance with the requirements of the WpHG applicable to interim group management reports, is the responsibility of the company's management. Our responsibility is to issue a report on the half year consolidated financial statements and on the interim group management report based on our review.

We conducted our review of the half year consolidated financial statements and of the interim group management report in accordance with the German generally accepted standards for the review of financial statements promulgated by the Institute of Public Auditors in Germany (IDW). Those standards require that we plan and perform the review such that we can preclude through critical evaluation, with a certain level of assurance, that the half year consolidated financial statements have not been prepared, in material respects, in accordance with those IFRS applicable to interim financial reporting as adopted by the EU, and that the interim group management report has not been prepared, in material respects, in accordance with the requirements of the WpHG applicable to interim group management reports. A review is limited primarily to inquiries of company employees and analytical assessments and therefore does not provide the assurance attainable in a financial statement audit. Since, in accordance with our engagement, we have not performed a financial statement audit, we do not express an audit opinion.

Based on our review of the half year consolidated financial statements and the interim group management report no matters have come to our attention that cause us to presume that the half year consolidated financial statements have not been prepared, in material respects, in accordance with those IFRS applicable to interim financial reporting as adopted by the EU, or that the interim group management report has not been prepared, in material respects, in accordance with the requirements of the WpHG applicable to interim group management reports. Our audit opinion does not cover quarterly disclosures for the second quarter of the years 2023 and 2022 presented within the income statement SMA Group, the statement of comprehensive income SMA Group and in the segment report in the condensed notes and other disclosed information indicated by footnotes in the interim group management report that were not subject of our financial audit.

Frankfurt/Main, August 1, 2023

BDO AG  
Wirtschaftsprüfungsgesellschaft

Gebhardt  
Wirtschaftsprüfer  
(German Public Auditor)

Dr. Faßhauer  
Wirtschaftsprüfer  
(German Public Auditor)

<sup>1</sup> Convenience translation of the original independent review report issued in German language on the half-year financial statements as of June 30, 2023 and of the interim group management report prepared in German language by the management of SMA Solar Technology AG. Solely the original German review report is authoritative.

## FINANCIAL CALENDAR

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2023/11/9

Publication of Quarterly Statement: January to September 2023  
Analyst Conference Call: 13:30 p.m. (CET)

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### REGISTERED TRADEMARKS

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### DISCLAIMER

The Half-Yearly Financial 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 provisions 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 Half-Yearly Financial Report.



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