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DRIVING THE ENERGY FUTURE

Half-Yearly Financial Report January to June 2019
SMA Solar Technology AG

SMA SOLAR TECHNOLOGY AG AT A GLANCE

SMA Group		H1 2019	H1 2018	Change	Full Year 2018
Sales	€ million	362.7	394.6	–8.1%	760.9
Export ratio	%	71.6	81.4		80.6
Inverter output sold	MW	3,973	4,305	–7.7%	8,449
Capital expenditure	€ million	12.8	17.8	–28.1%	40.3
Depreciation and amortization	€ million	22.9	26.2	–12.6%	82.6
EBITDA	€ million	8.5	40.9	–79.2%	–69.1
EBITDA margin	%	2.3	10.4	–77.9%	–9.1
Net income	€ million	–14.2	11.2	–226.8%	–175.5
Earnings per share [1]	€	–0.41	0.32		–5.06
Employees [2]		3,052	3,408	–10.4%	3,353
in Germany		2,143	2,190	–2.1%	2,212
abroad		909	1,218	–25.4%	1,141

SMA Group		2019/06/30	2018/12/31	Change
Total assets	€ million	970.6	989.3	–2%
Equity	€ million	406.7	424.5	–4%
Equity ratio	%	41.9	42.9	
Net working capital [3]	€ million	184.1	177.4	4%
Net working capital ratio [4]	%	25.3	23.3	
Net cash [5]	€ million	268.2	305.5	–12%

1 Converted to 34,700,000 shares
2 Reporting date; without temporary employees
3 Inventories and trade receivables minus trade payables and liabilities from advanced payments received for orders
4 Relating to the last twelve months (LTM)
5 Total cash minus interest-bearing financial liabilities to banks

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BASIC INFORMATION ABOUT THE GROUP

BUSINESS ACTIVITY AND ORGANIZATION

SMA Solar Technology AG (SMA) and its subsidiaries (SMA Group) develop, produce and distribute PV inverters, monitoring systems for solar power systems as well as transformers and chokes. Furthermore, the company offers intelligent energy management solutions and operations and maintenance services for photovoltaic power plants (O&M business) in addition to other services. Another area of business is digital services for future energy supplies.

Organizational Structure

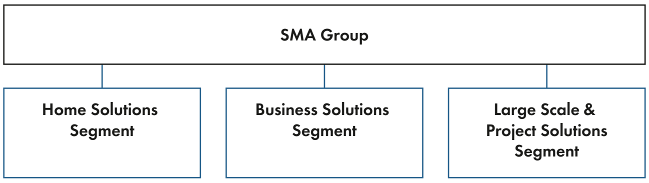
LEGAL STRUCTURE OF THE GROUP

As the parent company of the SMA Group, SMA, headquartered in Niestetal near Kassel, Germany, provides 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 Half-Yearly Financial Report includes information regarding the parent company and all 30 Group companies (H1 2018: 35), including eight domestic companies and 22 companies based abroad. In addition, SMA Solar Technology AG holds 28.27% interest in Tigo Energy, Inc. Tigo Energy, Inc. is recognized as an associate in the Consolidated Financial Statements according to the equity method.

ORGANIZATIONAL AND REPORTING STRUCTURE

The SMA Group operates under a functional organization. In this organization, the Home & Business Solutions business unit (formerly the Residential & Commercial business unit) as well as the Large Scale & Project Solutions business unit (formerly the Utility business unit) take on overall responsibility and manage development, operational service and sales, as well as production and procurement/logistics. The Home Solutions and Business Solutions segments are presented separately in the reporting structure. The Off-Grid & Storage business unit, SMA Sunbelt Energy GmbH, coneva GmbH and emerce GmbH were integrated into Home & Business Solutions and Large Scale & Project Solutions, resulting in there no longer being any separate reporting for the Storage and Digital Energy segments from 2019 onward.

REPORTING STRUCTURE



MANAGEMENT AND CONTROL

In accordance with the German Stock Corporation Act (Aktiengesetz), 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.

COMPOSITION OF THE MANAGING BOARD

Since October 15, 2018, the Managing Board of SMA Solar Technology AG has comprised the following members: Dr.-Ing. Jürgen Reinert (chief executive officer, board member for strategy, sales and service, operations and technology) and Ulrich Hadding (board member for finance, human resources and legal).

COMPOSITION OF THE SUPERVISORY BOARD

The SMA Supervisory Board, which represents shareholders and employees in equal measure, consists of Roland Bent, Peter Drews, Dr. Erik Ehrentraut (chairman), Kim Fausing (deputy chairman), Alexa Hergenröther and Reiner Wettlaufer as shareholder representatives. The employees are represented on the Supervisory Board by Oliver Dietzel, Johannes Häde, Heike Haigis, Yvonne Siebert, Dr. Matthias Victor and Hans-Dieter Werner.

RESEARCH AND DEVELOPMENT

In the last five years alone, SMA has invested nearly €500 million in the development of new products and solutions. We use our systems expertise to develop holistic solutions for different photovoltaic applications and 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 efficient 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 and decrease the complexity in the new, decentralized and digital energy world, thus making a significant contribution to a successful global energy transition.

Forward-Looking Development Approach

Thorough understanding of different market requirements and close proximity to our customers enable us to anticipate future system technology demands. Customers used to be concerned primarily with energy yield, service life and design flexibility. Now, however, consumer costs of PV electricity, system integration as well as connectivity are the key factors in making a purchasing decision. With the increasing integration of PV systems into comprehensive systems, cyber security is also playing an ever more important role. In this context, the PV inverter is classified as a system-critical component, so customers place higher demands on the transparency of companies. [1]

In product development, we are pursuing a platform strategy aimed at systematically reducing product costs and being able to react quickly to market changes. By standardizing the core inverter, we are capable of increasing the proportion of identical components across the entire portfolio. Customization in line with different markets and customer needs is implemented through the connection area and software.

SMA had been granted 1,391 patents and utility models worldwide by the end of the reporting period. In addition, more than 500 other patent applications were still pending as of June 30, 2019. Furthermore, SMA holds the rights to 1,094 trademarks.

[1] This paragraph is not a subject of the financial audit.

Complete Solutions to Lower Energy Costs [2]

PRIVATE SYSTEMS: MORE SELF-CONSUMPTION AND COMPLETE SYSTEM PACKAGES

In the reporting period, SMA expanded its solution portfolio for reducing household energy costs and increasing the appeal of photovoltaics in the Home Solutions segment. The focus here was on solutions with equally high benefits for installers and for PV system operators.

With intelligent solar technology and the SMA Smart Connected service function integrated directly in the inverter, SMA facilitates maximum energy yields and the greatest possible convenience for PV system operators and installers. Customers can choose between different inverters in the Sunny Boy and Sunny Tripower product families depending on the size and individual requirements of their residential PV system. In addition to the proven inverter models, SMA has also been offering the new Sunny Boy with 2 kW output for smaller private PV systems since the first quarter of 2019. In the reporting period, SMA launched the new Sunny Tripower 8.0–10.0 for larger private applications and small commercial applications. Both devices meet the new European connection conditions. Thanks to their low weight and compact design, they can be installed particularly easily without requiring much space. Via the integrated web interface, they can quickly and easily be put into operation using a smartphone or tablet.

In the reporting period, SMA also presented its first complete system package for an independent and cost-effective household electricity supply in the form of SMA Energy System Home. In addition to PV and battery inverters, SMA Energy System Home includes battery storage, energy management and design software, and customized service components. The system can be expanded quickly and easily with additional functions at any time and gives installers the opportunity for additional business in the areas of storage, energy management and e-mobility.

To make the generation and use of solar power even more attractive, SMA has also developed a solution for easy integration of PV systems into the SolarCoin ecosystem. Since the start of February 2019, operators of PV systems registered on the world's biggest solar monitoring platform Sunny Portal have had access in just a few clicks to the cryptocurrency issued by the SolarCoin Foundation to reward the generation of solar power.

[2] This section is not a subject of the financial audit.

COMMERCIAL APPLICATIONS: COMPREHENSIVE ENERGY MANAGEMENT AND CONVENIENT DIRECT SELLING

In the Business Solutions segment, the ennexOS IoT platform for energy management that was launched at the start of 2018 was developed further in the reporting period. ennexOS effectively reduces energy costs across all sectors (power generators, electrical appliances, storage systems, heating, ventilation and air-conditioning, e-mobility). The modular functionality of the platform can be adjusted to the user's individual requirements at any time. This ranges from monitoring energy flows and automatically optimizing total energy costs to involving households and companies in the energy market of the future. As a central interface, the SMA Data Manager M allows for perfect communication and monitoring and can also be used to manage all future energy flows.

ennexOS is a key component of the new, flexible SMA system solution for commercial applications, the SMA Energy System Business. In addition to PV and battery inverters, a battery-storage system and the SMA Data Manager M, the system includes all the tools and services that commercial enterprises can use to generate and market solar power themselves and to organize energy flows at the company in a transparent and cost-efficient way.

In the first quarter of 2019, SMA and the Mannheim-based energy company MVV Energie AG expanded the direct selling solution SMA SPOT with a new price model for PV systems without self-consumption. This makes direct selling even more cost-effective for operators of PV systems with an output of 100 kWp or more that feed all of the solar power they generate into the grid. There are also plans to offer the SMA SPOT service to PV system operators that use other manufacturers' hardware in the future. In addition, the solution is to be offered in other regions beyond Germany.

PV POWER PLANTS: HIGH-PERFORMANCE AND COST-EFFECTIVE SOLUTIONS FOR CENTRAL AND DECENTRALIZED ARCHITECTURES

In the Large Scale & Project Solutions segment, development in the reporting period focused on further increasing power density to reduce PV power plant costs with central and decentralized designs, and on secure system integration. In addition, SMA enhanced its service offer, especially with regard to the modernization of large PV systems (repowering).

The new Sunny Highpower PEAK3 is the first SMA string inverter for 1,500-volt DC voltage. The inverter with an output of 150 kW allows for flexible planning, rapid project implementation and easy service in PV power plants with a decentralized architecture and provides maximum power even under extreme conditions. Delivery started in the first quarter of 2019.

With the Sunny Central UP, SMA has once again successfully increased the output of its largest central inverter by more than 50%. Its output of up to 4.6 MW enables a considerable reduction in the number of inverters in large 1,500-volt PV power plants and thus significantly lowers operating costs. Delivery will start in the third quarter of 2019. The Sunny Central UP has also been available as a fully integrated turnkey container solution in combination with perfectly matched medium-voltage technology. In the reporting period, SMA signed a contract for the delivery of 595 of the medium-voltage solutions to one of the biggest project developers in the U.S.

In addition, all SMA central inverters now have a fully integrated hardware and software solution for simple connection of DC-coupled battery-storage systems. This inverter option has been delivered since the end of the first quarter of 2019.

ECONOMIC REPORT

GENERAL ECONOMIC CONDITIONS AND ECONOMIC CONDITIONS IN THE SECTOR

General Economic Conditions

Global economic growth remained modest in the first half of 2019. In May, the U.S. and China further increased their customs duties on imports from each other. Further escalation was prevented after the G20 summit in June. According to experts from the International Monetary Fund (IMF), the uncertainty with regard to Brexit also continued. In addition, growing geopolitical tensions with a focus on the Gulf region had a negative impact on energy prices. In this context, both industrialized countries and developing and newly industrialized countries recorded weak demand for capital goods.

Among the industrialized countries, there were a few positive surprises. The IMF emphasizes in particular higher-than-anticipated growth in the U.S. and Japan. However, it also notes that the U.S. gross domestic product included high inventories of unsold goods, while in Japan domestic production was driven by low imports. In the eurozone, one-time items that had negatively impacted the economy in 2018 had less of an influence.

The experts expressed disappointment at economic activity in the developing and newly industrialized countries in Asia and Latin America. Although China's gross domestic product in the first quarter of 2019 was higher than expected, indicators point to a slowdown in the second quarter.

Economic Conditions in the Sector

Photovoltaics have proven to be increasingly competitive in recent years. In a growing number of regions around the world, solar power is now more cost-efficient than conventionally generated electricity. For example, large-scale solar projects in the Middle East are already generating solar power at less than $0.03 per kWh in some cases. This points the way to an environment in which the industry will grow in the medium and long term even without subsidization. In the wake of the transformation of global energy supply structures, current and future objectives include intelligently linking different technologies and providing intermediate storage solutions for generated energy, thereby ensuring a reliable and cost-effective electricity supply based on renewable energies.

GLOBAL PV MARKET: NEW INSTALLATIONS AND SALES DECLINE IN FIRST HALF OF YEAR

Based on newly installed power of approximately 48 GW (H1 2018: approx. 53 GW), the global photovoltaic market was significantly below the previous year's level in the first half of 2019, according to SMA's estimates (these installation figures do not include retrofitting of existing PV systems with new inverters or battery inverter technology). SMA estimates that global PV inverter technology sales, including inverter retrofitting and battery inverter technology, fell by around 16% to €2.3 billion in the reporting period (H1 2018: €2.7 billion).

The regional distribution of demand changed slightly in the reporting period as a result of the decline in China. In the photovoltaic markets in Europe, the Middle East and Africa (EMEA), inverter technology sales were down slightly on the previous year at just under €700 million (H1 2018: €700 million). The share of the EMEA region in global sales rose to around 29% (H1 2018: 26%). System technology for storage applications and the retrofitting of existing PV systems accounted for a significant portion of sales in the EMEA region at around 22%. Sales in North and South America (Americas) likewise remained stable at almost €500 million. Here, the decline in sales in the biggest market, the U.S., was offset by growth in the Latin American markets and in storage applications. The region thus accounted for around 21% of global sales (H1 2018: €500 million; 18%). The Chinese market recorded a decrease again. With an investment volume of approximately €400 million, China accounted for around 18% of global sales in the reporting period (H1 2018: €700 million; 25%). The Asia-Pacific photovoltaic markets (excluding China) were down year-on-year with sales of around €700 million, accounting for around 32% of the global market (H1 2018: €800 million; 31%).

EMEA: GERMANY IS MOST IMPORTANT MARKET AGAIN

In the Europe, Middle East and Africa (EMEA) region, newly installed PV power increased significantly to 10.2 GW in the first half of the year (H1 2018: 8.1 GW). At 2.2 GW (H1 2018: 1.3 GW), Germany was the most significant market in Europe in terms of newly registered PV power in the reporting period. The number of commercial systems in particular grew significantly year-on-year.

Development in other European countries was mixed. The United Kingdom's market significance has declined as a result of the radical subsidy cuts made in the past years. By contrast, installations in the Benelux countries, East Europe and Spain posted positive development year-on-year.

AMERICAS: INVESTMENTS IN U.S. MARKET DECREASE

The U.S. market was still dominated by large-scale solar projects in the reporting period. The SMA Managing Board estimates PV installation in the first half of 2019 at around 5.2 GW (H1 2018: 4.8 GW). As a result of the sharp decrease in selling prices, the investment volume for inverter technology fell by around 14% to approximately €300 million (H1 2018: approx. €350 million).

APAC: REGION FALLS SHORT OF PREVIOUS YEAR

According to SMA estimates, around 15 GW of new PV power was installed in China in the first half of 2019. The installation volume was down by around 37% on the previous year's level. The decline is still attributable to the drastic cut in subsidies announced by the Chinese National Energy Agency (NEA) in May 2018.

In Japan, around 3.4 GW of new PV power was installed in the first half of 2019 (H1 2018: 3.9 GW). According to estimates, inverter technology investments amounted to approximately €300 million in the reporting period (H1 2018: €400 million). The driving segments here were commercial systems and large-scale PV power plants, as well as retrofitting of existing PV systems.

In India, there are various incentive programs and a fundamental effort on the part of the government to supply the entire country with renewable power. By 2022, 100 GW of PV power is to be installed – three times the total power installed to date. PV systems with a total capacity of approximately 4.5 GW were installed in India in the reporting period, around 25% less than in the same period of the previous year (H1 2018: 6 GW). The price level in India is still extremely low. For this reason, inverter technology sales were significantly below the previous year's level at only €109 million (H1 2018: €200 million). Around 90% of the new installations were large-scale projects. Medium-sized commercial and small private systems are still not highly relevant in India.

RESULTS OF OPERATIONS

Sales and Earnings

SMA POSTS DECLINE IN EARNINGS AND STARTS SECOND HALF OF YEAR WITH LARGE ORDER BACKLOG

From January to June 2019, the SMA Group sold PV inverters with accumulated power of 3,973 MW (H1 2018: 4,305 MW). In the reporting period, sales decreased by 8.1% to €362.7 million (H1 2018: €394.6 million). The decline in sales is attributable primarily to weaker project business in Australia so far as well as to weak demand in the trading business in the U.S.

In the reporting period, the company generated 57.6% of external sales in European countries, the Middle East and Africa (EMEA), 26.3% in the Asia-Pacific (APAC) region, and 16.1% in the North and South American (Americas) region calculated before sales deductions (H1 2018: 44.1% EMEA, 38.6% APAC, 17.3% Americas).

The Business Solutions segment made the largest contribution to sales in the first half of 2019, accounting for 37.2% (H1 2018: 38.8%). The Large Scale & Project Solutions segment generated 34.6% of the SMA Group's sales, while the Home Solutions segment contributed 28.2% in the reporting period (H1 2018: 39.8% Large Scale & Project Solutions, 21.4% Home Solutions).

As of June 30, 2019, SMA had a very large order backlog of €818.7 million (June 30, 2018: €579.7 million). Of this amount, €453.1 million is attributable to product business (June 30, 2018: €186.5 million). The product-related order backlog has thus risen significantly by 158% compared to December 31, 2018 (€175.4 million). This is due to the very good level of incoming orders in the past few months. €365.5 million of the order backlog is attributable to Service business. Most of this share will be implemented over the next five to ten years.

In the reporting period, earnings before interest, taxes, depreciation and amortization (EBITDA) fell to €8.5 million (EBITDA margin: 2.3%; H1 2018: €40.9 million; 10.4%). The previous year's earnings included positive one-time items overall. EBIT was –€14.4 million (H1 2018: €14.7 million). This equates to an EBIT margin of –4.0% (H1 2018: 3.7%). Net income amounted to –€14.2 million (H1 2018: €11.2 million). Earnings per share thus amounted to –€0.41 (H1 2018: €0.32).

Sales and Earnings per Segment

As of January 1, 2019, the Storage and Digital Energy segments were reclassified to the Home Solutions (formerly Residential), Business Solutions (formerly Commercial) and Large Scale & Project Solutions (formerly Utility) segments, with the effect that there is no longer any separate reporting for the Storage and Digital Energy segments in the fiscal year 2019. The figures for the previous year for the Home Solutions, Business Solutions, and Large Scale & Project Solutions segments were adjusted accordingly.

HOME SOLUTIONS SEGMENT GENERATES SALES GROWTH

In the Home Solutions segment, SMA caters to global markets for small PV systems with and without connection to a smart home solution. The portfolio comprises smart module technology, single- and three-phase string inverters of the Sunny Boy and Sunny Tripower product families in the lower output range of up to 12 kW, integrated services, energy management solutions, storage systems of Sunny Island and Sunny Boy Storage product families, communication products and accessories. SMA's Home Solutions segment also offers services, such as extended warranties, spare parts and modernization of PV systems (Repowering), to enhance performance as well as digital energy services.

External sales in the Home Solutions segment rose by 20.9% to €102.2 million in the first half of 2019 (H1 2018: €84.5 million). Its share of the SMA Group's total sales was 28.2% (H1 2018: 21.4%). The EMEA region made up 75.8% (H1 2018: 61.1%) of gross sales, the Americas region 13.3% (H1 2018: 17.1%) and the APAC region 10.9% (H1 2018: 21.8%). The decline in the APAC region's share is particularly due to a considerably lower level of business in China following the reduction of the PV expansion targets by the Chinese government.

The Home Solutions segment's EBIT fell to –€3.5 million (H1 2018: €13.4 million). In addition to continuing price pressure, this decline is particularly due to a positive one-time item from the change in estimates and recalculation of general warranty obligations amounting to €17 million that was included in the previous year's earnings. In relation to external sales, the EBIT margin was –3.4% (H1 2018: 15.9%).

BUSINESS SOLUTIONS SEGMENT POSTS POSITIVE EARNINGS

In the Business Solutions segment, the focus is on global markets for medium-sized PV systems with and without an energy management solution. Here SMA offers solutions based on the three-phase Sunny Tripower inverters with outputs of more than 12 kW as well as on inverters from the Sunny Highpower and Solid-Q product families. The Sunny Tripower inverters are compatible with the smart module technology from Tigo Energy, Inc. Storage systems and holistic energy management solutions for medium-sized PV systems based on the ennexOS platform, medium-voltage technology and other accessories, services up to and including system modernization and operational management of commercial PV systems (O&M business) as well as digital energy services round off SMA's offering.

External sales in the Business Solutions segment decreased to €135.0 million in the first half of 2019 (H1 2018: €153.2 million). Its share of the SMA Group's total sales was 37.2% (H1 2018: 38.8%). 61.9% of gross sales were attributable to the EMEA region, 27.7% to the APAC region, and 10.4% to the Americas region (H1 2018: 53.3% EMEA, 33.9% APAC, 12.8% Americas).

In the first half of the year, the Business Solutions segment's EBIT amounted to €0.7 million (H1 2018: €23.9 million). The previous year's earnings included a positive one-time item from the change in estimates and recalculation of general warranty obligations amounting to €24 million. In relation to external sales, the EBIT margin was 0.5% (H1 2018: 15.6%).

SALES IN LARGE SCALE & PROJECT SOLUTIONS SEGMENT STILL DECREASING

The Large Scale & Project Solutions segment focuses on international PV power plant markets with its powerful string inverters in the Sunny Highpower product family, the central inverters in the Sunny Central product family as well as the battery inverters in the Sunny Central Storage product family. The outputs of inverters in this segment range from 150 kW to the megawatts. In addition, the SMA portfolio of this segment includes complete solutions comprising central inverters with their grid service and monitoring functions as well as all medium- and high-voltage technology and accessories. The portfolio is supplemented by services, such as for the modernization and functional enhancement of PV power plants (Repowering), and operation and maintenance services (O&M business).

Primarily due to weak demand in Australia and postponed projects on the U.S. market, external sales in the Large Scale & Project Solutions segment decreased by 20.0% to €125.5 million in the first half of 2019 (H1 2018: €156.9 million). By contrast, SMA has recorded a very good level of incoming orders in recent months, particularly in U.S. project business. The order backlog for the Large Scale & Project Solutions segment amounted to €277.7 million as of June 30, 2019. The implementation of projects in this segment generally takes four to ten months. The share of the SMA Group's total sales attributable to the Large Scale & Project Solutions segment came to 34.6% in the reporting period (H1 2018: 39.8%). The EMEA region accounted for 38.1% (H1 2018: 25.9%) of the segment's gross sales, the APAC region for 37.3% (H1 2018: 52.3%) and the Americas region for 24.6% (H1 2018: 21.8%).

EBIT in the Large Scale & Project Solutions segment amounted to –€11.1 million (H1 2018: –€19.3 million). This included a reversal of deferred revenue from prior periods of €3.5 million due to the cancellation of a service and maintenance contract in the U.S. In the same period of 2018, earnings were negatively impacted by individual warranty-related items in the upper single-digit millions and by a negative one-time item from the change in estimates and recalculation of general warranty obligations. In relation to external sales, the EBIT margin was –8.8% (H1 2018: –12.3%).

Development of Significant Income Statement Items

Since January 1, 2019, the business units' costs have been shown under selling expenses, as they are increasingly focused on customers and markets. In previous years, they were included in research and development expenses. The previous year's figures have been adjusted accordingly.

GROSS MARGIN DOWN YEAR-ON-YEAR

Cost of sales decreased by 2.4% year-on-year to €290.6 million (H1 2018: €297.8 million). Due to the decline in sales, the gross margin amounted to 19.9% (H1 2018: 24.5%). In the same period of 2018, this figure included a positive one-time item from the recalculation of general warranty risks, which more than compensated for the individual warranty-related items and impairment on inventories that were also included.

Personnel expenses included in cost of sales decreased by 10.1% to €52.8 million (H1 2018: €58.7 million). In addition to the lower number of temporary employees, this features a pro-rata portion of the effects of the cost-reduction measures being implemented.

Material costs, including changes in inventories, amounted to €208.2 million (H1 2018: €220.6 million). SMA is continuously working on its product portfolio in all segments to tackle price pressure by optimizing the cost of existing products and introducing new and less expensive products.

From January to June 2019, depreciation and amortization included in the cost of sales amounted to €20.4 million (H1 2018: €23.2 million). This covers scheduled depreciation on capitalized development costs of €5.3 million (H1 2018: €11.5 million). Other costs amounted to €9.2 million (H1 2018: –€4.7 million). The comparative figure for the previous year included a positive one-time item from the change in estimates and recalculation of general warranty obligations.

Selling expenses slightly rose to €36.5 million (H1 2018: €34.6 million). This increase was mainly due to internal relocation of sales-related departments. The cost of sales ratio was 10.1% in the reporting period (H1 2018: 8.8%).

Research and development expenses, excluding capitalized development projects, amounted to €26.0 million in the first half of 2019 (H1 2018: €22.4 million). This put the research and development cost ratio at 7.2% (H1 2018: 5.7%). Total research and development expenses, including capitalized development projects, amounted to €31.5 million (H1 2018: €32.5 million). The slight decrease was mainly attributable to the implementation of consolidation measures in the second quarter. Development projects were capitalized in the amount of €5.5 million (H1 2018: €10.1 million).

General administrative expenses in the first half of 2019 fell to €24.3 million (H1 2018: €25.5 million). This reflected the implementation of the first restructuring measures in the second quarter. The ratio of administrative expenses amounted to 6.7% in the reporting period (H1 2018: 6.5%).

The balance of other operating income and expenses resulted in a positive effect on earnings of €0.3 million in the reporting period (H1 2018: €0.4 million). This includes foreign currency valuation effects and expenses for assets measured at fair value through profit or loss.

EMPLOYEE HEADCOUNT DOWN DUE TO DOWNSIZING MEASURES

SMA had 3,052 employees [1] worldwide as of June 30, 2019, representing a year-on-year decrease of 356 (June 30, 2018: 3,408 employees). The decrease is attributable to the sale of the Chinese subsidiaries and the successfully implemented voluntary severance program at the headquarters in Niestetal/Kassel. As of the reporting date, SMA had 2,143 employees in Germany (June 30, 2018: 2,190 employees) and 909 employees abroad (June 30, 2018: 1,218 employees).

SMA still uses temporary employees to absorb order fluctuations. Their hourly rate of pay is in line with that of SMA employees. In addition, temporary employees working at SMA also participate financially in the company's success. As of the reporting date, SMA had 399 temporary employees worldwide, 198 fewer than in the previous year (June 30, 2018: 597 temporary employees) and 109 more than at the end of 2018 (December 31, 2018: 290 temporary employees).

Employees

Reporting date	2019/ 06/30	2018/ 06/30	2017/ 06/30	2016/ 06/30	2015/ 06/30
Employees (excl. temporary employees)	3,052	3,408	3,130	3,339	4,134
of which domestic	2,143	2,190	2,049	2,077	2,823
of which abroad	909	1,218	1,081	1,262	1,311
Temporary employees	399	597	613	660	597
Total employees (incl. temporary employees)	3,451	4,005	3,743	3,999	4,731

Full-Time Equivalents

Reporting date	2019/ 06/30	2018/ 06/30	2017/ 06/30	2016/ 06/30	2015/ 06/30
Full-time equivalents (excl. trainees and temporary employees)	2,897	3,238	2,946	3,126	3,880
of which domestic	2,004	2,039	1,878	1,883	2,583
of which abroad	893	1,199	1,068	1,243	1,297

[1] All the employee figures in this paragraph do not include temporary employees.

FINANCIAL POSITION

SMA Has a Sound Liquidity Buffer

Gross cash flows reflect operating income prior to commitment of funds. This item amounted to €4.8 million in the first half of the 2019 fiscal year (H1 2018: €2.8 million).

In the first six months of the reporting year, net cash flow from operating activities amounted to −€54.5 million (H1 2018: −€27.3 million). It was impacted significantly by a substantial rise in inventories and by the depositing of cash as collateral.

Inventories were increased by 22.6% to €237.6 million compared with the end of the previous year (December 31, 2018: €193.8 million) in order to support delivery capacity in the Large Scale & Project Solutions segment, where SMA has a particularly large order backlog. Combined with the changes in trade payables and trade receivables, this resulted in a slight increase in net working capital to €184.1 million (December 31, 2018: €177.4 million). The net working capital ratio in relation to sales over the past 12 months climbed to 25.3% (December 31, 2018: 23.3%). The net working capital ratio therefore was above the range of 19% to 24% targeted by management.

In the first half of 2018, net cash flow from investing activities amounted to €53.3 million after −€23.4 million in the previous year. The balance of cash inflows and outflows from financial investments was €66.0 million (H1 2018: −€6.4 million). The outflow of funds for investments in fixed assets and intangible assets amounted to €12.8 million in the period under review (H1 2018: €17.8 million). With €5.5 million (H1 2018: €10.1 million), an essential part of the investments was attributable to capitalized development projects.

As of June 30, 2019, cash and cash equivalents amounting to €136.8 million (December 31, 2018: €142.6 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 thresulted in net cash of €268.2 million (December 31, 2018: €305.5 million).

NET ASSETS

Sound Balance-Sheet Structure

Total assets went down by 1.9% to €970.6 million as of June 30, 2019 (December 31, 2018: €989.3 million). At €299.1 million, non-current assets were above the level observed at the end of 2018 (December 31, 2018: €283.4 million) due to the implementation of the new lease standard. They included the rights of use of leases to be recognized under IFRS 16 for the first time in the 2019 fiscal year in the amount of €19.4 million.

Net working capital went up significantly to €184.1 million (December 31, 2018: €177.4 million) mainly as a result of increased inventories. This put the net working capital ratio in relation to sales over the past 12 months at 25.3%. Trade receivables decreased by 10.8% compared to December 31, 2018, to €96.7 million as of the end of the first half of 2019 (December 31, 2018: €108.4 million). Days sales outstanding came to 51.3 days and were lower than at the end of the previous year (December 31, 2018: 64.4 days). Inventories increased by 22.6% to €237,6 million (December 31, 2018: €193.8 million). Trade payables amounted to €129.2 million and were above the level reported at the end of 2018 (December 31, 2018: €110.9 million). The share of trade credit in total assets increased slightly to 13.3% as against the end of the previous year (December 31, 2018: 11.2%).

Due to the development of earnings, the Group's equity capital base decreased slightly to €406.7 million (December 31, 2018: €424.5 million). With an equity ratio of 41.9%, SMA has a solid equity capital base and therefore a solid balance sheet structure.

Investment Analysis

In the first half of 2019, investments in fixed assets and intangible assets amounted to €12.8 million and were thus below the previous year's figure of €17.8 million. This equates to an investment ratio in relation to sales of 3.5% compared with 4.5% in the first half of 2018.

€6.9 million was invested in fixed assets (H1 2018: €7.4 million), predominantly for conversions and extensions of existing buildings and for machinery and equipment. The investment ratio for fixed assets was 1.9% in the first half of 2019 (H1 2018: 1.9%). Scheduled depreciation of fixed assets decreased to €13.7 million (H1 2018: €14.7 million).

Investments in intangible assets amounted to €5.9 million (H1 2018: €10.4 million). These largely related to capitalized development projects. Amortization of intangible assets amounted to €5.3 million and was thus significantly below the previous year's figure of €11.5 million.

RISKS AND OPPORTUNITIES REPORT

RISK AND OPPORTUNITY MANAGEMENT SYSTEM

The 2018 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. Our key opportunities are also outlined. Using our Risk Management System, we assess the overall risk situation to be manageable. The statements made in the 2018 Annual Report generally continue to apply. In the first six months of the 2019 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. Not only general market indicators, but also industry- and company-specific circumstances are factored into the forecasts. All assessments cover a period of one year.

THE GENERAL ECONOMIC SITUATION

Downturn in Global Growth

In its most recent update to the World Economic Outlook (WEO) from July, the International Monetary Fund (IMF) once again slightly lowered its guidance for global economic growth in the current year, which had already been revised downward in April. The experts now anticipate global growth of 3.2% for 2019 (2018: 3.6%). After a modest development in the first half of the year already, the experts do not see any signs of an improvement in the second half. They cite economic sentiment and purchasing manager surveys as showing a weak outlook for industry and trade, with incoming orders being rated particularly pessimistically. Only in the service sector is sentiment still positive. Due to low demand in industrialized countries, inflation is below the target level. It is also lower than the historical average in many developing and newly industrialized countries. In addition to the continuing trade tensions, the experts at the IMF also cite growing risk aversion and increasing disinflationary pressure as risks for future development.

For the industrialized countries, the IMF experts anticipate economic growth of 1.9% for 2019 as a whole. The prospects for developing and newly industrialized countries have deteriorated according to the IMF. It now anticipates growth of 4.1% here. The IMF's growth projection for the U.S. was raised to 2.6% as against the April forecast of 2.3%. For the eurozone, the IMF still anticipates growth of 1.3%. For China, the experts expect weaker growth of 6.2% year on year in 2019. They estimate that the Indian economy will grow by 7.0%. For 2020, the IMF expects global economic growth slightly above the current year's level. However, it states that the risks described above still pose a threat to the guidance.

FUTURE GENERAL ECONOMIC CONDITIONS IN THE PHOTOVOLTAICS SECTOR

Renewable Energy Will Supersede Conventional Energy Carriers

Renewable energy is quickly becoming the preferred energy source worldwide. This is the statement made by Deloitte experts in their Global Renewable Energy Trends Report, which was published in September 2018. Solar and wind power are already among the world's most cost-effective energy sources, and their potential is far from exhausted given the continuing decline in production costs, ever better system integration and development of additional new technologies.

Experts at Bloomberg New Energy Finance (BNEF) emphasize good prospects for renewable energy and photovoltaics in the medium term. In their New Energy Outlook 2019, they forecast that by 2050, photovoltaic and wind turbine systems will account for around 50% of global power generation. The share of photovoltaics will increase from 2% now to 22%. According to the BNEF experts, wind and photovoltaics are already the most cost-effective energy source in more than two-thirds of all countries and will also beat the production costs of existing coal and gas power stations almost everywhere by 2030.

In addition to the low production costs of solar power, the climate change goals resolved by a large community of countries at the 2015 UN Climate Change Conference in Paris and growing demand for electricity, for example due to the ongoing electrification of the transport sector, are growth drivers. This will lead to an accelerated expansion of renewable energies. Photovoltaics will benefit the most from this trend as solar power is generated in the vicinity of the consumer. In its World Energy Outlook 2018, the International Energy Agency (IEA) forecasted that installed PV capacity will exceed that of wind power by 2025 and that more photovoltaic capacity than coal capacity will be installed worldwide by 2040.

Thanks to technological advancements, the consumer cost of electricity from PV systems will decrease further, and their appeal will grow as a result. The increasingly affordable storage systems and modern communication technologies combined with services for cross-sector energy management will harmonize energy production and demand. The SMA Managing Board is therefore convinced of the market appeal and has thus positioned SMA to ensure it benefits from future developments.

Global New PV Installations Increase to 109 GW

The SMA Managing Board anticipates a growth in newly installed PV power worldwide of around 7% to approximately 109 GW in 2019. The growth is being driven by all regions outside China. The Managing Board foresees a market decline in China. Despite increased installation, global investments in system technology for traditional photovoltaic applications will stagnate due to a decline in price development. In contrast, investments in system technology for storage applications (excluding investments in batteries) will increase by approximately €50 million compared to the previous year. Overall, the SMA Managing Board therefore expects investment in PV system technology (including system technology for storage systems) of around €4.9 billion in 2019 (2018: €4.9 billion). The Managing Board rates the medium-term prospects for the PV industry as positive. This is due to the lower costs of photovoltaics and the accelerating transformation of the energy sector toward decentralized, digital and connected energy generation.

Growth Markets in Africa and in the Middle East Drive Demand in EMEA

The SMA Managing Board anticipates an increase in newly installed PV power of approximately 27% to around 21 GW in the Europe, Middle East and Africa (EMEA) region in 2019. In addition to growth in Middle Eastern and African countries, this is also due to the positive development in European markets such as Germany, the Netherlands and Spain. According to SMA estimates, investments in PV and storage system technology will be on a par with the previous year at an expected €1.3 billion as a result of price development. 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 also yield high potential in the medium term. For many 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.

South American Markets Gain Importance in the Americas Region

For the Americas region, the SMA Managing Board anticipates growth in newly installed PV power of around 18% to 20 GW. Roughly 15 GW of this amount is attributable to the North American markets. Inverter technology investments are expected to increase slightly to almost €1.0 billion in the Americas region (2018: €900 million). While the Managing Board forecasts growth in South American markets, it expects marginal downturns in the investments in North American markets as a result of high price pressure. Here the residential and commercial segments are currently influenced by strict regulations set forth in the National Electrical Code (NEC). Medium-term prospects are positive for manufacturers such as SMA that can offer products that comply with the new standard.

Investments in the APAC Region Roughly at Previous Year’s Level

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 decline by around 9% and reach 40 GW in 2019 (2018: 44 GW). Investments in inverter technology are expected to fall to €1.1 billion (2018: €1.2 billion). For the APAC region, excluding China, the SMA Managing Board expects newly installed PV power to increase by approximately 16% to around 28 GW in 2019 (2018: 24 GW). The growth will be driven, in particular, by the Indian and Australian markets. However, high price pressure will largely erode volume growth. The SMA Managing Board therefore expects investments of approximately €1.5 billion in inverter technology for this region, as in the previous year (2018: €1.5 billion).

Growth Markets: Energy Management, Digital Energy Services and Operational Management

The trend to regionalize power supplies is gaining momentum. 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. In addition, 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 also expected to become an important pillar of these new energy supply structures a few years from now. Integration 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, SMA's 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 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 are the basis for new business models. Demand for solutions that increase self-consumption of solar power is likely 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 volume of the still fairly new storage market to grow by approximately €50 million to around €600 million in 2019 (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 their connection to the energy market are becoming increasingly significant. The SMA Managing Board expects this area to represent an addressable market of approximately €300 million in 2019. The market will then grow exponentially in subsequent years.

Technical management of commercial systems and large-scale PV plants is another growth segment. This includes a range of services, such as repairs, device replacements as well as visual inspections and maintenance of entire systems. The market in these segments had an accumulated installed capacity of over 440 GW at the end of 2018 and will have an expected 540 GW by the end of 2019. The SMA Managing Board estimates the addressable market share, which is not yet or no longer under contract, at 140 GW in 2019, which corresponds to a potential of at least €1.1 billion. Prices are calculated yearly per MW and vary significantly depending on the regions and services included.

OVERALL STATEMENT FROM THE MANAGING BOARD ON EXPECTED DEVELOPMENT OF THE SMA GROUP

Managing Board Anticipates Sales and Earnings Growth

The SMA Managing Board is confirming the sales and earnings guidance for the current fiscal year, which was published for the first time on January 24, 2019. It predicts a sales increase to between €800 million and €880 million (2018: €760.9 million). For the second half of the year, the Managing Board anticipates a significant increase in sales. This is based on the very good level of incoming orders in the past few months, particularly in the Large Scale & Project Solutions segment. At the same time, the SMA Managing Board continues to implement further cost reduction measures and thus expects a significant increase in earnings. The Managing Board estimates that operating earnings before interest, taxes, depreciation and amortization (EBITDA) will amount to between €20 million and €50 million (2018: –€69.1 million). Depreciation and amortization are expected to amount to approximately €50 million. On this basis, the Managing Board expects to break even in terms of EBIT at best.

SMA's business model is not capital-intensive. Capital expenditure (including capitalized development costs) will increase to up to €60 million in 2019 (2018: €40.3 million), of which roughly €10 million will be attributable to capitalized development costs. The increase in capital expenditure is mainly attributable to the rights of use under leases to be applied for the first time from the fiscal year 2019 in accordance with IFRS 16. SMA is investing in testing and production facilities for new product generations and building maintenance again in 2019. The SMA Group's net working capital is expected to amount to between 19% and 24% of sales (2018: 23.3% of sales). Net cash is expected to be approximately €300 million (December 31, 2018: €305.5 million).

For details regarding risks, please refer to the Risks and Opportunities Report on pages 58 et seq. in the SMA Annual Report 2018.

SMA Group Guidance for 2019 at a Glance

Key Figure	Guidance 2019	2018
Sales in € million	800 to 880	760.9
EBITDA in € million	20 to 50	–69.1
Capital expenditure in € million	approx. 60	40.3
Net working capital in % of sales	19 to 24	23.3
Net cash in € million	approx. 300	305.5
EBIT in € million	Break-even at best	–151.7

SMA's sales and earnings depend on global market growth, market share and price dynamics. Our global presence and our comprehensive portfolio of products and solutions for all segments enable us to respond quickly to changing market conditions, offset fluctuations in demand and take advantage of developments in global photovoltaic markets. Its broad product and solution portfolio in all market segments is a major distinguishing feature for SMA. The SMA Managing Board forecasts the following performance for individual SMA segments in fiscal year 2019:

Segment Guidance for 2019 at a Glance [1]

Segment	Sales	EBIT
Home Solutions	Up slightly	Up
Business Solutions	Up slightly	Up significantly
Large Scale & Project Solutions	Up significantly	Up significantly

[1] The overview is based on the reporting structure applicable from 2019. The comparison includes future sales and earnings growth in the Home Solutions, Business Solutions and Large Scale & Project Solutions segments from the transfer of sales and earnings from the former Storage and Digital Energy segments.

Extensive Measures to Reduce Costs and Increase Sales Implemented

The SMA Managing Board still expects increased price pressure in 2019. In this context, the Managing Board decided at an early stage on measures to reduce costs and increase sales and started implementing these at the beginning of the year. We were able to execute the unfortunate but necessary reduction of approximately 100 full-time positions at our headquarters in Niestetal/Kassel, Germany, in a socially responsible manner with a voluntary severance program. We have concluded the sale of the Chinese subsidiaries to the local management there. This measure will significantly reduce fixed costs and increase capacity utilization at the Niestetal/Kassel headquarters. Other cost-cutting measures include outsourcing activities that are not part of SMA's core competencies, increasing automation and reducing product platforms to shorten development cycles and increase the proportion of components used across the portfolio. Another focus will continue to be on further reducing the sales costs of existing products and introducing new products to markets at significantly lower costs. The implementation of the measures is going according to plan.

As a result of an even closer collaboration between Development, Sales and Service, SMA will focus more closely on meeting customers' needs in the future. We will provide the important customer group of installers with optimal support in their end customer business by means of targeted partner programs and the delivery of complete system packages, which, in addition to solar and battery inverters, include battery storage, energy management and design software as well as customized service components. In the first quarter of 2019, the first packages for private residential PV systems and commercial applications were already introduced in the target markets of Germany and Italy, where they have met with a positive response. We will continue to expand our range in this area and further develop SMA into a provider of systems and solutions.

SMA Positions Itself in Key Future Fields [1]

SMA will also continue to drive forward its position as a leading provider in other important future fields, such as energy management, storage integration, PV system repowering and digital business models. As a result of the megatrends of climate change, decentralization and digitalization, these areas will become increasingly important in the years to come.

SMA is well positioned to benefit from these trends in all market segments and regions. In addition, our total installed inverter output of around 75 GW worldwide is a particularly good foundation for data-based business models, as inverters are the most suitable sensors for compiling valuable energy data. Our extensive knowledge of managing complex battery-storage systems and linking solar power systems with other energy sectors, such as heating, ventilation and cooling technology, and e-mobility, is an excellent basis for developing future growth potential for digital energy solutions.

Our subsidiary coneva develops white label solutions for public utility companies, which integrate both prosumers and traditional energy customers of utility companies into the world of digital energy and enable them to use energy simply and cost-effectively. The individual solutions for commercial customers range from monitoring energy flows and optimizing energy costs across all sectors to matching supply and demand on the energy management platform ennexOS developed by SMA. In both segments, coneva has already launched and implemented its first successful projects, such as a cooperation with Stadtwerke München for jointly developing an integrated energy management system and equipping supermarkets with cross-sector energy management.

The range of services offered by SMA Energy Data Services was presented at the E-world trade fair in February 2019. Based on real-time data from more than 1.5 million devices registered on the SMA energy data platform, SMA offers customized solutions in the areas of grid operation and planning, marketing of solar power and energy management for grid operators, energy traders, direct sellers and forecasting service providers.

We Will Take Advantage of the Opportunities Posed by Digitalization [1]

Thanks to our extensive experience in PV system technology, our ability to quickly implement changes and our numerous strategic partnerships, SMA is well prepared for the digitalization of the energy industry. As a specialist in complete solutions in the energy sector, we will launch a number of innovations and establish new strategic partnerships to take advantage of opportunities that arise from business models as part of the digitalization of the energy industry. With the ennexOS energy management platform, we can master the complexity of the energy system of the future and create considerable added value for our customers. We will build on our unique strengths and design additional system solutions for decentralized energy supplies based on renewable energy. We will be helped in this endeavor by SMA's extraordinary corporate culture and our motivated employees who make a decisive contribution to the company's long-term success and are therefore also given a share in SMA's financial success.

Niestetal, July 30, 2019

SMA Solar Technology AG
The Managing Board

[1] This section is not a subject of the financial audit.

HALF-YEAR CONSOLIDATED FINANCIAL STATEMENTS

INCOME STATEMENT SMA GROUP

in €'000	Note	April – June (Q2) 2019	April – June (Q2) 2018	Jan. – June (H1) 2019	Jan. – June (H1) 2018
Sales	5	**194,834**	**212,193**	**362,653**	**394,647**
Cost of sales		154,823	154,166	290,605	297,779
Gross profit		**40,011**	**58,027**	**72,048**	**96,868**
Selling expenses [1]		19,138	21,981	36,501	34,640
Research and development expenses [1]		12,656	6,324	25,992	22,401
General administrative expenses		11,679	13,407	24,336	25,541
Other operating income		3,681	8,632	16,036	20,775
Other operating expenses		3,891	14,539	15,665	20,369
Operating profit (EBIT)		**–3,672**	**10,408**	**–14,410**	**14,692**
Result from at equity-accounted investments		0	–511	0	–977
Financial income		589	867	1,507	1,663
Financial expenses		282	507	602	818
Financial result	8	**307**	**–151**	**905**	**–132**
Profit before income taxes		**–3,365**	**10,257**	**–13,505**	**14,560**
Income taxes		263	1,849	699	3,314
Net income		**–3,628**	**8,408**	**–14,204**	**11,246**
of which attributable to shareholders of SMA AG		–3,628	8,408	–14,204	11,246
Earnings per share, basic/diluted (in €)	9	–0.10	0.24	–0.41	0.32
thereof from continuing operations (in €)		–0.10	0.24	–0.41	0.32
Number of ordinary shares (in thousands)		34,700	34,700	34,700	34,700

[1] Since January 1, 2019, the business units' costs are shown under selling expenses. In previous years, they were included in research and development expenses. The previous year's figures have been adjusted accordingly.

STATEMENT OF COMPREHENSIVE INCOME SMA GROUP

in €'000	April – June (Q2) 2019	April – June (Q2) 2018	Jan. – June (H1) 2019	Jan. – June (H1) 2018
Net income	**–3,628**	**8,408**	**–14,204**	**11,246**
Unrealized gains (+)/losses (–) from currency translation of foreign subsidiaries	–678	1,154	585	182
Changes recognized outside profit or loss (currency translation differences)	**–678**	**1,154**	**585**	**182**
Overall comprehensive result [1]	**–4,306**	**9,562**	**–13,619**	**11,428**
of which attributable to shareholders of SMA AG	–4,306	9,562	–13,619	11,428

[1] All items of other comprehensive income may be reclassified to profit or loss.

BALANCE SHEET SMA GROUP

in €'000	Note	2019/06/30	2018/12/31
ASSETS			
Intangible assets	10	37,002	36,351
Fixed assets	11	211,661	198,884
Investment property		15,806	16,212
Other financial investments		2	2
Deferred taxes		34,634	31,928
Non-current assets		**299,105**	**283,377**
Inventories	12	237,579	193,795
Trade receivables		96,663	108,375
Other financial assets (total)	13	153,984	185,379
Cash equivalents with a duration of more than 3 months and asset management		115,836	177,509
Rent deposits and cash on hand pledged as collaterals		31,884	3,364
Remaining other financial assets		6,264	4,506
Receivables from tax authorities (total)		36,082	36,285
Claims for income tax refunds		21,133	20,637
Claims for VAT refunds		14,949	15,648
Other receivables		9,796	7,469
Cash and cash equivalents	15	136,849	142,637
		670,953	**673,940**
Assets classified as held for sale	14	500	31,952
Current assets		**671,453**	**705,892**
Total assets		**970,558**	**989,269**

in €'000	Note	2019/06/30	2018/12/31
LIABILITIES			
Share capital		34,700	34,700
Capital reserves		119,200	119,200
Retained earnings		252,817	270,582
SMA Solar Technology AG shareholders' equity	16	**406,717**	**424,482**
Provisions [1]	17	67,891	65,657
Financial liabilities [2]	18	27,508	15,013
Other liabilities [1] (total)		159,249	163,835
Contract liabilities	20	157,337	161,769
Remaining other liabilities	20	1,912	2,066
Deferred taxes		609	10
Non-current liabilities		**255,257**	**244,515**
Provisions [1]	17	78,174	91,368
Financial liabilities [2]	18	10,962	5,402
Trade payables		129,189	110,851
Income tax liabilities		4,219	4,106
Other liabilities [1] (total)		86,040	77,220
Human Resources department	20	16,633	15,289
Contract liabilities (prepayments received)	20	21,023	13,928
Contract liabilities (other)		37,419	38,322
Other financial liabilities (current)	19	813	741
Remaining other liabilities (current)	20	10,152	8,940
		308,584	**288,947**
Liabilities directly associated with assets classified as held for sale		0	31,325
Current liabilities		**308,584**	**320,272**
Total equity and liabilities		**970,558**	**989,269**
Total cash (in € million)			
Cash and cash equivalents with a duration of more than 3 months and asset management + rent deposits and cash on hand pledged as collaterals		285	324
Net cash (in € million)			
Total cash – current and non-current financial liabilities		268	305

1 Not interest-bearing
2 Includes not-interest-bearing current and non-current derivatives amounting to €2.6 million (2018: €2.4 million)

STATEMENT OF CASH FLOWS SMA GROUP

in €'000	Jan. – June (H1) 2019	Jan. – June (H1) 2018
Consolidated net result	–14,204	11,246
Income taxes	699	3,314
Financial result	–905	132
Depreciation and amortization of fixed assets and intangible assets	22,935	26,191
Change in provisions	–10,960	–31,659
Result from the disposal of assets	716	46
Change in non-cash expenses/revenue	4,883	13,582
Interest received	5	372
Interest paid	–429	–554
Income tax paid	2,017	–19,911
Gross cash flow	**4,757**	**2,759**
Change in inventories	–52,147	–54,551
Change in trade receivables	11,301	29,333
Change in trade payables	18,339	–168
Change in other net assets/other non-cash transaction	–36,796	–4,625
Net cash flow from operating activities	**–54,546**	**–27,252**
Payments for investments in fixed assets	–6,883	–7,428
Proceeds from the disposal of fixed assets	69	769
Payments for investments in intangible assets	–5,928	–10,362
Proceeds from the disposal of available for sale assets net of cash	127	0
Proceeds from the disposal of securities and other financial assets	128,968	60,930
Payments for the acquisition of securities and other financial assets	–63,047	–67,295
Net cash flow from investing activities	**53,306**	**–23,386**
Redemption of financial liabilities	–1,559	–1,267
Payments for finance lease liabilities	–3,725	0
Dividends paid by SMA Solar Technology AG	0	–12,145
Net cash flow from financing activities	**–5,284**	**–13,412**
Net increase/decrease in cash and cash equivalents	–6,524	–64,050
Changes due to exchange rate effects	736	–437
Cash and cash equivalents as of January 1	142,637	234,853
Cash and cash equivalents as of June 30	**136,849**	**170,366**

STATEMENT OF CHANGES IN EQUITY SMA GROUP

in €'000	Share capital	Capital reserves	Difference from currency translation	Other retained earnings	Consolidated shareholders' equity
Shareholders' equity as of January 1, 2018	**34,700**	**119,200**	**3,680**	**453,936**	**611,516**
Consolidated net result				11,246	11,246
Other comprehensive income after tax			182		182
Overall result					11,428
Dividend payments of SMA Solar Technology AG				–12,145	–12,145
Shareholders' equity as of June 30, 2018	**34,700**	**119,200**	**3,862**	**453,037**	**610,799**
Shareholders' equity as of January 1, 2019	**34,700**	**119,200**	**4,277**	**266,304**	**424,481**
Consolidated net result				–14,204	–14,204
Other comprehensive income after tax			585		585
Overall result					–13,619
Change in the scope of consolidation				–4,145	–4,145
Shareholders' equity as of June 30, 2019	**34,700**	**119,200**	**4,862**	**247,955**	**406,717**

CONDENSED NOTES AS OF JUNE 30, 2019

GENERAL INFORMATION

1. Basics

The Condensed Half-Year Consolidated Financial Statements of SMA Solar Technology AG as of June 30, 2019, were prepared in compliance with the International Financial Reporting Standards (IFRS) as adopted by the EU. In fiscal year 2019, 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, 2018. The Condensed Financial Statements do not include all the information and disclosures required for consolidated financial statements and should therefore be read in conjunction with the Consolidated Financial Statements as of December 31, 2018.

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.

The Consolidated Financial Statements are prepared using the amortized acquisition cost principle. Exceptions to this are provisions, deferred taxes, leases and derivative financial instruments.

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 July 30, 2019, 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. Since September 24, 2018, the Company has been listed in the SDAX.

SMA Solar Technology AG (SMA) and its subsidiaries (SMA Group) develop, produce and sell PV inverters, transformers, chokes and monitoring systems for solar power systems. In addition, the Company offers intelligent energy management solutions and services, including the acquisition of operations and maintenance services for photovoltaic power plants (O&M business). Another business segment is digital services for the future energy supply. More detailed information on the segments is provided in section 5.

2. Scope of Consolidation and Consolidation Principles

With the exception of Tigo Energy, Inc., all companies within the scope of consolidation are fully consolidated. Tigo Energy, Inc. is recognized as an associate in the Consolidated Financial Statements according to the equity method. Those companies entitled to investments in the list of shareholdings are not consolidated due to their 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, 2018.

The scope of consolidation as of June 30, 2019, changed in comparison with December 31, 2018, as a result of the liquidation of the companies SMA Technology Korea Co., Ltd. and SMA Technology Hellas AE and the establishment of SMA Solar Technology (Shanghai) Co. Ltd. The companies SMA New Energy Technology (Jiangsu) Co., Ltd., SMA New Energy Technology (Yangzhong) Co., Ltd. and SMA New Energy Technology (Shanghai) Co., Ltd. left the scope of consolidation by way of disposal. The SMA Sub-Sahara Production Pty. Ltd. company was renamed emerce Africa Pty. Ltd.

3. Accounting and Valuation Policies and Adoption of New Accounting Standards

ACCOUNTING AND VALUATION POLICIES

In the present Half-Year Consolidated Financial Statements as of June 30, 2019, there were changes in the accounting and valuation principles compared to the Consolidated Financial Statements of SMA Solar Technology AG as of December 31, 2018, due to the first-time application of IFRS 16.

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 in 2019. The standards that have to be applied in the future can be found in the 2018 Annual Report, section 2, Accounting Principles and Amendments to Accounting Standards.

In compiling the Half-Year Consolidated Financial Statements, the following accounting standard, which became mandatory from the financial year 2019, was complied with in comparison as of December 31, 2018.

Adoption of IFRS 16 "Leases"

IFRS 16 replaces the existing IAS 17 and accompanying interpretations. IFRS 16 applies to reporting periods beginning on or after January 1, 2019. For lessees, the new standard provides an accounting model that does not differentiate between operating and finance leases. In the future, most leases will thus have to be recognized on the balance sheet. For lessors, the regulations of IAS 17 Leases are largely unchanged, so the distinction between finance and operating leases has to be retained, resulting in different consequences for accounting. The Group is mainly affected as a lessee. At present, the Group has around 580 rental and lease contracts. The "right-of-use method" entails capitalizing rights of use and corresponding recognition of lease liabilities. The equity ratio and gearing will be affected accordingly. Within the income statement, IFRS 16 will lead to adjustment between other operating expenses, depreciation and amortization as well as financial expenses, and have a positive effect on EBIT and EBITDA. See section 22 for more information.

4. Significant Judgements, Estimates and Assumptions

In connection with the general warranty provision, the estimate for necessary future costs was improved and thus substantiated due to the implementation of a quality management project in the previous year. Calculation of the warranty provision based on this updated information produced a positive effect of €33.5 million in the previous year compared with the calculation based on the previous estimate. The effect is reflected in the amount of the provision and cost of sales with the same amount on the reporting date.

5. Segment Reporting

The segments of the SMA Group are described in the organizational and reporting structure on page 4, as well as individually explained in the Results of Operations in the Economic Report on page 9 et seq. SMA's segment structure has changed in comparison to fiscal year 2018.

The Residential, Commercial and Utility segments have been renamed as Home Solutions, Business Solutions and Large Scale & Project Solutions.

The Storage and Digital Energy segments are no longer managed separately, but instead are incorporated into the three segments.

Allocation took place on the basis of the product portfolio.

The previous year's figures were adjusted.

FINANCIAL RATIOS BY SEGMENTS AND REGIONS

The segment information in accordance with IFRS 8 for the second quarter of 2019 and 2018 is as follows:

	Product sales		Services sales		Total sales	
in € million	Q2 2019	Q2 2018	Q2 2019	Q2 2018	Q2 2019	Q2 2018
Segments						
Home Solutions	54.0	41.6	2.8	3.5	56.8	45.1
Business Solutions	68.5	79.3	1.6	2.8	70.1	82.1
Large Scale & Project Solutions	54.2	76.8	13.8	8.1	68.0	84.9
Total segments	176.7	197.7	18.2	14.4	194.9	212.1
Reconciliation	0.0	0.0	0.0	0.0	0.0	0.0
Continuing operations	**176.7**	**197.7**	**18.2**	**14.4**	**194.9**	**212.1**

	Depreciation and amortization		Operating profit (EBIT)	
in € million	Q2 2019	Q2 2018	Q2 2019	Q2 2018
Segments				
Home Solutions	0.9	1.1	1.7	12.8
Business Solutions	0.9	2.0	1.4	19.1
Large Scale & Project Solutions	1.4	2.8	–5.5	–12.8
Total segments	3.2	5.9	–2.4	19.1
Reconciliation	8.4	7.1	–1.3	–8.7
Continuing operations	**11.6**	**13.0**	**–3.7**	**10.4**

Sales by regions (target market of the product)

in € million	Q2 2019	Q2 2018
EMEA	118.4	103.5
Americas	37.2	34.4
APAC	43.1	78.6
Sales deductions	–3.8	–4.4
External sales	**194.9**	**212.1**
thereof Germany	57.9	43.4

The segment information in accordance with IFRS 8 for the first half year of 2019 and 2018 is as follows:

in € million	Product sales H1 2019	Product sales H1 2018	Services sales H1 2019	Services sales H1 2018	Total sales H1 2019	Total sales H1 2018
Segments						
Home Solutions	97.2	76.1	5.0	8.4	102.2	84.5
Business Solutions	132.1	149.6	2.9	3.6	135.0	153.2
Large Scale & Project Solutions	101.1	139.3	24.4	17.6	125.5	156.9
Total segments	330.4	365.0	32.3	29.6	362.7	394.6
Reconciliation	0.0	0.0	0.0	0.0	0.0	0.0
Continuing operations	**330.4**	**365.0**	**32.3**	**29.6**	**362.7**	**394.6**

in € million	Depreciation and amortization H1 2019	Depreciation and amortization H1 2018	Operating profit (EBIT) H1 2019	Operating profit (EBIT) H1 2018
Segments				
Home Solutions	1.8	2.3	–3.5	13.4
Business Solutions	1.7	3.9	0.7	23.9
Large Scale & Project Solutions	2.3	5.7	–11.1	–19.3
Total segments	5.8	11.9	–13.9	18.0
Reconciliation	17.1	14.3	–0.5	–3.3
Continuing operations	**22.9**	**26.2**	**–14.4**	**14.7**

Sales by regions (target market of the product)

in € million	H1 2019	H1 2018
EMEA	212.6	177.3
Americas	59.3	69.7
APAC	96.9	155.4
Sales deductions	–6.1	–7.8
External sales	**362.7**	**394.6**
thereof Germany	104.7	74.8

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

in € million	Q2 2019	Q2 2018	H1 2019	H1 2018
Total segment earnings (EBIT)	–2.4	19.1	–13.9	18.0
Elimination	–1.3	–8.7	–0.5	–3.3
Consolidated EBIT	–3.7	10.4	–14.4	14.7
Financial result	0.3	–0.1	0.9	–0.1
Earnings before income taxes	**–3.4**	**10.3**	**–13.5**	**14.6**

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, financial liabilities and buildings, the expenses of which are allocated to the segments. Business relationships between the segments are eliminated in the reconciliation.

The additions resulting from the first-time application of IFRS 16 are recognized in the central corporate functions, as they mainly relate to buildings.

NOTES TO THE INCOME STATEMENT SMA GROUP

6. Notes to the Income Statement

The notes to the Income Statement are made in the earnings situation of the Economic Report.

7. Employee and Temporary Employee Benefits

in €'000	H1 2019	H1 2018
Wages and salaries	86,746	93,859
Expenses for temporary employees	4,674	6,697
Social security contribution and welfare payments	14,503	15,304
	105,923	**115,860**

8. Financial Result

in €'000	H1 2019	H1 2018
Loss from at equity-accounted investments	**0**	**977**
Interest income	684	1,611
Other financial income	786	0
Income from interest derivatives	37	53
Financial income	**1,507**	**1,663**
Interest expenses	430	590
Other financial expenses	0	212
Interest portion from valuation of provisions	0	16
Interest expenses and lease liabilities	172	0
Financial expenses	**602**	**818**
Financial result	**905**	**–132**

The interest expenses from lease liabilities result from the first-time application of IFRS 16 in the reporting period; see also section 22.

9. Earnings per Share

Earnings per share are calculated by dividing the net income attributable to the shareholders by the weighted average of ordinary shares in circulation during the period. The number of shares in the first half of 2019 amounted to 34.7 million as in the previous year.

The net income attributable to the shareholders is the net income after tax. As there were no shares held by the Company on the reporting date or any other special cases, the number of ordinary shares issued equated to the number of shares in circulation.

The calculation of earnings in relation to the weighted average number of shares in accordance with IAS 33 resulted in earnings of –€0,41 per share for the period from January 1, 2019 to June 30, 2019, with an average weighted number of shares of 34.7 million and earnings of €0.32 per share for the period from January 1, 2018 to June 30, 2018, with an average weighted number of shares of 34.7 million.

There were no options or conversion options as of the reporting date. Therefore, there were no diluting effects and the diluted and basic earnings per share were the same.

SELECTED NOTES TO THE SMA GROUP BALANCE SHEET

10. Goodwill and Other Intangible Assets

in €'000	2019/06/30	2018/12/31
Goodwill	482	482
Software	2,616	2,198
Patents/licenses/other rights	3,554	3,673
Development projects	25,631	16,878
Intangible assets in progress	4,719	13,120
	37,002	**36,351**

The intangible assets in progress reflect development activities undertaken to ensure the SMA Group's position as a technology leader.

11. Fixed Assets

in €'000	2019/06/30	2018/12/31
Land and buildings	134,830	139,732
Rights of use for buildings	17,450	0
Technical equipment and machinery	24,811	27,003
Other equipment, plant and office equipment	26,190	26,467
Rights of use for vehicle fleet	1,935	0
Prepayments	6,444	5,681
	211,661	**198,883**

The new lease standard IFRS 16 was applied for the first time in the reporting period. This resulted in rights of use for buildings in the amount of €17.5 million and rights of use for the vehicle fleet in the amount of €1.9 million. The rights of use in accordance with IFRS 16 were amortized for the first time in the reporting period in the amount of €3.9 million; see also section 22.

12. Inventories

in €'000	2019/06/30	2018/12/31
Raw materials, consumables and supplies	86,565	71,191
Unfinished goods, work in progress	14,474	13,943
Finished goods and goods for resale	129,084	104,913
Prepayments	7,456	3,748
	237,579	**193,795**

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, 2019, amounted to €38.8 million (December 31, 2018: €45.2 million). The addition to impairment on inventories, included under expenses as cost of sales, amounted to €9.4 million (H1 2018: €13.9 million).

13. Other Financial Assets

As of June 30, 2019, other current financial assets in particular include financial assets, time deposits with a term to maturity of over three months and accrued interest totaling €115.8 million (December 31, 2018: €177.5 million). As of June 30, 2019, there was a reclassification between the item "cash equivalents with a duration of more than 3 months and asset management" and item "rent deposits and cash on hand pledged as collaterals " within the item "other financial assets" due to new guarantee agreements.

14. Assets and Asset Groups Held for Sale

The sale of the companies SMA New Energy Technology (Jiangsu) Co., Ltd., SMA New Energy Technology (Yangzhong) Co., Ltd. and SMA New Energy Technology (Shanghai) Co., Ltd. was resolved in the first quarter of the current fiscal year. The companies Australia Zeversolar New Energy Pty. Ltd. and Zeversolar GmbH from the Chinese subgroup remain part of the Group. The companies sold relate to Chinese locations for production, commissioned development work and purchasing activities. The products were allocated to the Home and Business Solutions segments. The sale took place for a purchase price of RMB 1.0 million (€0.1 million).

In the current fiscal year, land in the amount of €0.5 million was still held for sale.

in €'000	**2019/06/30**	**2018/12/31**
Land classified as held for sale	500	500
Assets attributable to the China disposal group	0	31,452
	500	**31,952**
Liabilities attributable to the China disposal group	0	31,325

15. Cash and Cash Equivalents

Cash and cash equivalents amounting to €136.8 million (June 30, 2018: €170.4 million) include cash on hand, bank balances and short-term deposits with an original term to maturity of less than three months.

Cash and cash equivalents, as presented in the Consolidated Statement of Cash Flows as at June 30, 2019, include cash in hand and bank balances of €131.3 million and short-term deposits with a maturity of less than three months of €5.5 million.

16. Shareholders' Equity

The change in equity, including effects not shown in the income statement, is presented in the Statement of Changes in Equity.

On May 28, 2019, the Annual General Meeting of SMA Solar Technology AG resolved not to distribute a dividend for the 2018 fiscal year (2017: €0.35 per qualifying bearer share).

17. Provisions

in €'000	**2019/06/30**	**2018/12/31**
Warranties	129,397	130,433
Personnel	6,223	13,032
Other	10,445	13,560
	146,065	**157,025**

Warranty provisions consist of general warranty obligations (periods of between five and ten years) for the various product areas within the Group. In addition, provisions are set aside for individual cases that are expected to be used in the following year.

Personnel provisions mainly include obligations for long-service anniversaries, death benefits and partial retirement benefits. Personnel provisions affect cash in relation to contractual commitments made.

Other provisions include, in particular, restoration obligations and purchase commitments.

18. Financial Liabilities

in €'000	2019/06/30	2018/12/31
Liabilities due to credit institutions	16,322	17,881
Derivative financial liabilities	2,585	2,382
of which liabilities from derivatives outside of hedge accounting	2,585	2,382
Lease liabilities	19,563	152
	38,470	**20,415**

Liabilities to credit institutions mainly include liabilities for the financing of SMA Immo properties and an SMA AG PV system. They have an average time to maturity of ten years.

Derivative financial liabilities consist of interest derivates and currency futures and options.

The first-time application of IFRS 16 in the reporting period resulted in an increase in lease liabilities from operating leases; see also section 22.

19. Other Financial Liabilities

As of June 30, 2019, other current financial liabilities particularly include liabilities for costs in connection with the financial statements and other financial liabilities totaling €0.8 million (December 31, 2018: €0.7 million).

20. Other Liabilities [1]

in €'000	2019/06/30	2018/12/31
Contractual liabilities	215,779	214,019
Accrual item for extended warranties	173,390	176,732
Liabilities from prepayments received	21,023	13,928
Accruals for service and maintenance contracts	11,648	11,867
Other contractual liabilities	9,717	11,492
Liabilities in the Human Resources department	16,633	15,289
Other	12,064	11,006
	244,476	**240,314**

1 Other liabilities do not include other financial liabilities

Contractual liabilities (prepayments received) include prepayments and deliveries of goods. Other contractual liabilities include 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 und Business Solutions business units. Current contractual obligations mainly include prepayments received, accruals for service and maintenance contracts and bonus agreements. The current contractual obligations will mostly be fulfilled within the next 12 months.

Liabilities in the Human Resources department 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. Other miscellaneous liabilities include liabilities to tax authorities.

21. Financial Instruments

in €'000	Assessment category according to IFRS 9	2019/06/30 Book value	2018/12/31 Book value
Assets			
Cash and cash equivalents	AC	136,849	142,637
Trade receivables	AC	96,663	108,375
Other financial investments	FVTOCI	2	2
Other financial assets		**153,984**	**185,379**
of which institutional mutual funds (et al.)	FVTPL	52,194	101,447
of which time deposits	AC	100,290	82,649
of which other securities	FVTPL	1,500	0
of which derivatives that do not qualify for hedge accounting	FVTPL	0	1,283
Liabilities			
Trade payables	AC	129,189	110,851
Financial liabilities		**38,470**	**20,415**
of which liabilities due to credit institutions	AC	16,322	17,881
of which liabilities from leases	AC	19,563	152
of which derivatives that do not qualify for hedge accounting	FVTPL	2,585	2,382
Other financial liabilities	AC	**813**	**741**
Of which aggregated according to valuation categories in accordance with IFRS 9:			
Financial assets measured at amortized cost	AC	333,802	333,661
Financial liabilities measured at amortized cost	AC	146,324	129,473
Financial assets measured at fair value through profit and loss	FVTPL	53,743	102,730
Financial liabilities measured at fair value through profit and loss	FVTPL	2,585	2,382
Fair value through other comprehensive income	FVTOCI	2	2

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.

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 assets 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.

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 were used (level 2).

Derivative financial instruments are used to hedge against currency risks arising from operative business. These include currency futures and options 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 for subsequent measurements. The fair value of traded derivative financial instruments is identical to the market value. This value may be positive or negative. The measurement of forward transactions is based on forward contract rates. Options are measured in line with the Black-Scholes and Heath-Jarrow-Morton option pricing models. The parameters that were used in the valuation models are in line with market data.

The 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:

in €'000	Level 1	Level 2	Level 3	Total
2019/06/30				
Financial assets, measured at fair value				
Institutional mutual funds	52,194	0	0	52,194
Other securities	0	0	1,500	1,500
Financial liabilities, measured at fair value				
Derivative financial instruments	0	2,585	0	2,585
2018/12/31				
Financial assets, measured at fair value				
Institutional mutual funds	101,447	0	0	101,447
Derivative financial instruments	0	1,283	0	1,283
Financial liabilities, measured at fair value				
Derivative financial instruments	0	2,382	0	2,382

Item "Other securities" contains a fair value of an additional purchase price of €1.5 million due to the granted earn-out arrangements in connection with the sale of the Chinese SMA New Energy companies or the Zeversolar companies.

A change in the fair value of the purchase price claim until the expiration of the earn-out arrangements in 2029 is recognized in profit or loss.

The present value of the additional purchase price receivable is calculated on the basis of a discounted cash flow method (level 3 of the fair value hierarchy) and in compliance with the adjusted contractual earn-out regulations. This provision stipulates that the additional purchase price receivable results from the sum of the contractually assured profit contributions between the actual sale in 2019 and the financial year 2029. The additional purchase price receivable essentially depends on the operating earnings of the Chinese subsidiaries as unobservable inputs and the underlying interest rate used to calculate the present value. These are derived from the company-internal planning of the respective companies. A sensitivity analysis shows that a 10 percent increase in earnings before tax of the companies would result in a change in the present value of the additional purchase price claim of +€100 k, as well as a 10 percent reduction in the result of –€100 k. A change in the interest rate +/– 100 basis points also results in a change in the present value of the purchase price receivable of €100 k.

22. Leases

SMA applied IFRS 16 for the first time to the fiscal year starting on January 1, 2019. The transition took place using the modified retrospective method. At the date of first-time application, SMA makes use of the option and waives an assessment as to whether or not a contract constitutes a lease as defined in IFRS 16. The definition of a lease in accordance with IAS 17 and IFRIC 4 therefore continues to apply to leases that were concluded or amended before January 1, 2019.

When calculating the book value of the right-of-use asset, there is an option between the amount that would result if the standard had always been applied and the amount of the lease liability at the date of first-time application. In accordance with IFRS 16.C8 (b), the modified retrospective approach for leases allows the option to recognize the right of use in an amount identical to the lease liability at the date of first-time application in the case of leases previously categorized as operating lease contracts in accordance with IAS 17 at the date of first-time application of IFRS 16. This option was exercised at SMA. The comparative figures from the same periods of the previous year have not been adjusted. In accordance with IFRS 16.C8 (a), the lease liability is recognized at the present value of the remaining lease payments, discounted at the incremental borrowing rate (IBR) at the date of first-time application. The discount rate is calculated using the following method in each case: First, the risk-free interest rate with matching maturities is calculated within a region (as an EU state, Poland initially has an identical interest rate to Germany, but this is adjusted by a country-specific risk premium). A rating result for SMA is then calculated based on credit quality. As of January 1, 2019, the following incremental borrowing rates are applied:

in %	3 years	5 years	10 years
Germany (and other countries)	0.7	1.2	2.2
Poland	2.0	2.2	2.8
U.S.	3.7	4.0	4.7

The incremental borrowing rate was calculated for three different term ranges with regard to standardized contract terms. To reflect the economic environment, different discount rates were calculated for three distinct major regions with existing contracts.

As part of the transition to IFRS 16 as of January 1, 2019, assets for rights of use for the leased items were recognized in the amount of €23.4 million and lease liabilities were recognized in an identical amount. Amortization of rights of use amounted to €3.9 million in the first half of the year. The new provisions are not applied to leases whose term will end within 12 months of the date of initial application, as SMA exercises the relevant option here. In this case, these leases are accounted for as short-term leases and recognized in expense. Expense for short-term leases amounted to €82 k as of June 30, 2019. Furthermore, the exemption allowing low-value leases to be recognized directly in expense is exercised (June 30, 2019: €94 k).

OTHER DISCLOSURES

23. Events After the Balance Sheet Date

There were no significant events on or after the balance sheet date other than those presented in or recognizable from the statements in the Notes to the Consolidated Financial Statements.

24. Related Party Disclosures

Since October 15, 2018, the Managing Board of SMA Solar Technology AG has comprised the following members: Dr.-Ing. Jürgen Reinert (Chief Executive Officer, Board Member for Strategy, Sales and Service, Operations and Technology) and Ulrich Hadding (Board Member for Finance, Human Resources and Legal).

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 now also belongs to the group of related entities. SMA entered into a strategic partnership with Danfoss in the areas of purchasing, sales as well as research and development. SMA also performs services on behalf of Danfoss. All agreements were concluded under fair market conditions.

In addition, SMA has a 28.27% stake in Tigo Energy, Inc.

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, July 30, 2019

SMA Solar Technology AG
Managing Board

Dr.-Ing. Jürgen Reinert Ulrich Hadding

AUDITOR'S REPORT

To SMA Solar Technology AG, Niestetal

We have reviewed the Condensed Interim Consolidated Financial Statements – comprising the Condensed Income Statement, Condensed Statement of Comprehensive Income, Condensed Balance Sheet, Condensed Statement of Cash Flows, Condensed Statement of Changes in Equity, and Selected Explanatory Notes – and the Interim Group Management Report of SMA Solar Technology AG, Niestetal, for the period from January 1 to June 30, 2019, which are part of the Half-Yearly Financial Report in accordance with Section 115 of the German Securities Trading Act (Wertpapierhandelsgesetz – WpHG). The preparation of the Condensed Interim Consolidated Financial Statements in accordance with the International Financial Reporting Standards (IFRS) applicable to interim financial reporting as adopted by the EU and of the Interim Group Management Report in accordance with the provisions of the German Securities Trading Act applicable to interim group management reports is the responsibility of the Company's Managing Board. Our responsibility is to issue a review report on the Condensed Interim Consolidated Financial Statements and on the Interim Group Management Report based on our review.

We have conducted our review of the Condensed Interim Consolidated Financial Statements and the Interim Group Management Report in accordance with the provisions set forth by the Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer – IDW) for the auditing of financial statements. Those standards require that we plan and perform the review so that we can preclude through critical evaluation, with limited assurance, that the Condensed Interim Consolidated Financial Statements have not been prepared, in all material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU, or that the Interim Group Management Report has not been prepared, in all material respects, in accordance with the provisions of the German Securities Trading Act (WpHG) applicable to interim group management reports. A review is limited primarily to inquiries of company personnel and analytical assessments and therefore does not provide the assurance attainable in a financial statements audit. Since, in accordance with our engagement, we have not performed a financial statement audit, we cannot express an audit opinion.

Based on our review, no matters have come to our attention that cause us to presume that the Condensed Interim Consolidated Financial Statements of SMA Solar Technology AG, Niestetal, have not been prepared, in all material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU or that the Interim Group Management Report has not been prepared, in all material respects, in accordance with the provisions of the German Securities Trading Act applicable to interim group management reports.

Hanover, July 30, 2019

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

(Thorsten Schwibinger)	(Elmar Meier)
German Public Auditor	German Public Auditor

FINANCIAL CALENDAR

2019/11/07	Publication of Quarterly Statement: January to September 2019 Analyst Conference Call: 09:00 a. m. (CET)
2020/03/26	Publication of Annual Report 2019 Analyst Conference Call: 09:00 a. m. (CET)
2020/05/14	Publication of Quarterly Statement: January to March 2020 Analyst Conference Call: 09:00 a. m. (CET)
2020/06/04	Annual General Meeting 2020
2020/08/13	Publication of Half-Yearly Financial Report: January to June 2020 Analyst Conference Call: 09:00 a. m. (CET)
2020/11/12	Publication of Quarterly Statement: January to September 2020 Analyst Conference Call: 09:00 a. m. (CET)

PUBLICATION INFORMATION

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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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