

ENERGY THAT CHANGES



ANNUAL REPORT 2012

SMA SOLAR TECHNOLOGY AG

SMART



THE ENERGY SUPPLY OF THE FUTURE IS DECENTRALIZED AND RENEWABLE.
HERE, ECONOMICALLY VIABLE UTILIZATION OF PHOTOVOLTAICS
IS SIGNIFICANT WORLDWIDE. FROM RESIDENTIAL SYSTEMS TO
PV POWER PLANTS IN THE MEGAWATT RANGE.

THE KEY: INTELLIGENT ENERGY MANAGEMENT.
WITH SMART SOLUTIONS FROM SMA. WORLDWIDE FOR ALL APPLICATIONS.

SMA SOLAR TECHNOLOGY AG

SMA AT A GLANCE

SMA Group		2012	2011	2010	2009	2008
Sales	€ million	1,463.4	1,676.3	1,920.1	934.3	681.6
Export ratio	%	56.3	53.6	44.9	38.4	42.3
Inverter output sold	MW	7,188	7,591	7,750	3,381	2,180
Capital expenditure ¹	€ million	100.2	160.2	158.3	82.1	63.9
Depreciations	€ million	69.9	50.4	31.3	16.3	8.9
Operating profit (EBIT)	€ million	102.0	240.3	516.8	228.4	167.4
EBIT margin	%	7.0	14.3	26.9	24.4	24.6
Consolidated net profit	€ million	75.1	166.1	365.0	161.1	119.5
Earnings per share ²	€	2.16	4.79	10.52	4.64	3.44
Employees ³		5,663	5,050	3,783	2,566	1,895
in Germany		4,725	4,426	3,443	2,390	1,784
abroad		938	624	340	176	111
SMA Group		12/31/2012	12/31/2011	12/31/2010	12/31/2009	12/31/2008
Total assets	€ million	1,328.7	1,374.3	1,251.5	718.6	469.6
Equity	€ million	820.7	789.3	728.4	407.6	280.8
Equity ratio	%	61.8	57.4	58.2	56.7	59.8
Net working capital ⁴	€ million	268.0	281.7	284.6	98.6	78.0
Net working capital ratio	%	18.3	16.8	14.8	10.6	11.4
Net Cash	€ million	446.3	473.3	523.4	344.8	239.4

¹ excl. finance leases

² converted to 34,700,000 shares

³ average during the period; without temporary employees

⁴ inventories and trade receivables minus trade payables

SMA worldwide



● Headquarters

● Foreign companies

SMARTER. MORE FORWARD-LOOKING. MORE INNOVATIVE. WE BREAK NEW GROUND. THIS IS HOW WE USE PHOTOVOLTAICS IN ECONOMICALLY Viable APPLICATIONS. THE SYSTEM TECHNOLOGY FROM SMA IS THE KEY TO SUCCESS FOR DECENTRALIZED RENEWABLE ENERGY SUPPLIES – EVERYWHERE IN THE WORLD.



SMA SOLAR TECHNOLOGY AG





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SMART

A large, bold, white sans-serif font word "SMART" is positioned at the top center of the image. The background is a clear blue sky with a bright sun partially visible behind the letters, creating a lens flare effect with rays of light. There are a few wispy white clouds scattered across the sky.

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ENERGY THAT CHANGES

SMART SYSTEM TECHNOLOGY FOR THE ENERGY SUPPLY OF THE FUTURE

Dear Reader,

Even just a few years ago, the vision of supplying 100 percent of mankind's energy needs from renewable energy sources was ridiculed – but today we are on our way to making this vision reality. Renewable energies are on the rise, and the transformation of our energy supply is gathering momentum – all around the world. The process of transforming from central, large-scale power plants to decentralized power generation based on renewable energies offers the opportunity to evaluate our approach and to drive the way energy is supplied into a brand new direction. Here, there is an increasing awareness of fossil fuels as a key factor in climate change and as an energy source that is becoming steadily more expensive due to its limited availability. In contrast to this, not only are there unlimited supplies of renewable energies but the costs associated with harnessing them are also continually falling. The use of photovoltaics, for example, has already become, in many areas, the more economically viable and sustainable alternative to the production of electricity using conventional methods.

In industrialized countries, self-consumption of solar electricity is becoming increasingly important. More and more people in Europe and America are using photovoltaic systems that allow them to use their "own" electricity and become independent from rising electricity prices. Intelligent energy management systems with integrated decentralized storage systems enable them to consume the majority of the solar electricity they produce directly at the point of generation. This also takes the strain off utility grids and helps to ensure that they can be expanded in an appropriate manner.

In sun-rich regions of the world, large PV power plants are now already in direct competition with conventional power plants. In developing and threshold countries where the grid supply is either weak or non-existent and industrial users use diesel generator sets to safeguard their power supply, supplementary use of photovoltaics is also a commercially attractive proposition. The use of photovoltaic-diesel hybrid systems (i.e., a combination of diesel fuel and solar electricity) significantly reduces the fuel consumption of industrial consumers in areas with high levels of solar irradiation – thereby also reducing electricity supply costs.

The key to economically viable usage of photovoltaics and to increasing people's independence from fossil energy carriers lies in technical development and system intelligence. This is the only way to ensure that the vision indeed becomes a reality. For us, this vision has always been the driving force behind the development of innovative system technology, which today is already helping to ensure that photovoltaics can be used all around the world in an attainable way. The fact that this is already happening across the globe and not just a pipe dream is illustrated by the numerous active PV systems and reference projects featuring system technology from SMA. These serve as flagship projects for future energy supply structures, and all have their own unique story to tell.

On the following pages you will find out about the importance PV power plant investors place on excellent service. Or why a mine operator in South Africa swears by system technology from Germany and the power of the sun. The element that links both of these stories is the overall system intelligence and experience – and the fact that each one of these projects takes us a big step closer to meeting all of mankind's energy demands with 100 percent renewable energy.

Acceptance among the general population is vital if the energy transition is to succeed. In addition, a reliable regulatory framework and innovations that employ smart technology are essential to ensuring that photovoltaics becomes one of the main pillars of future energy supplies.

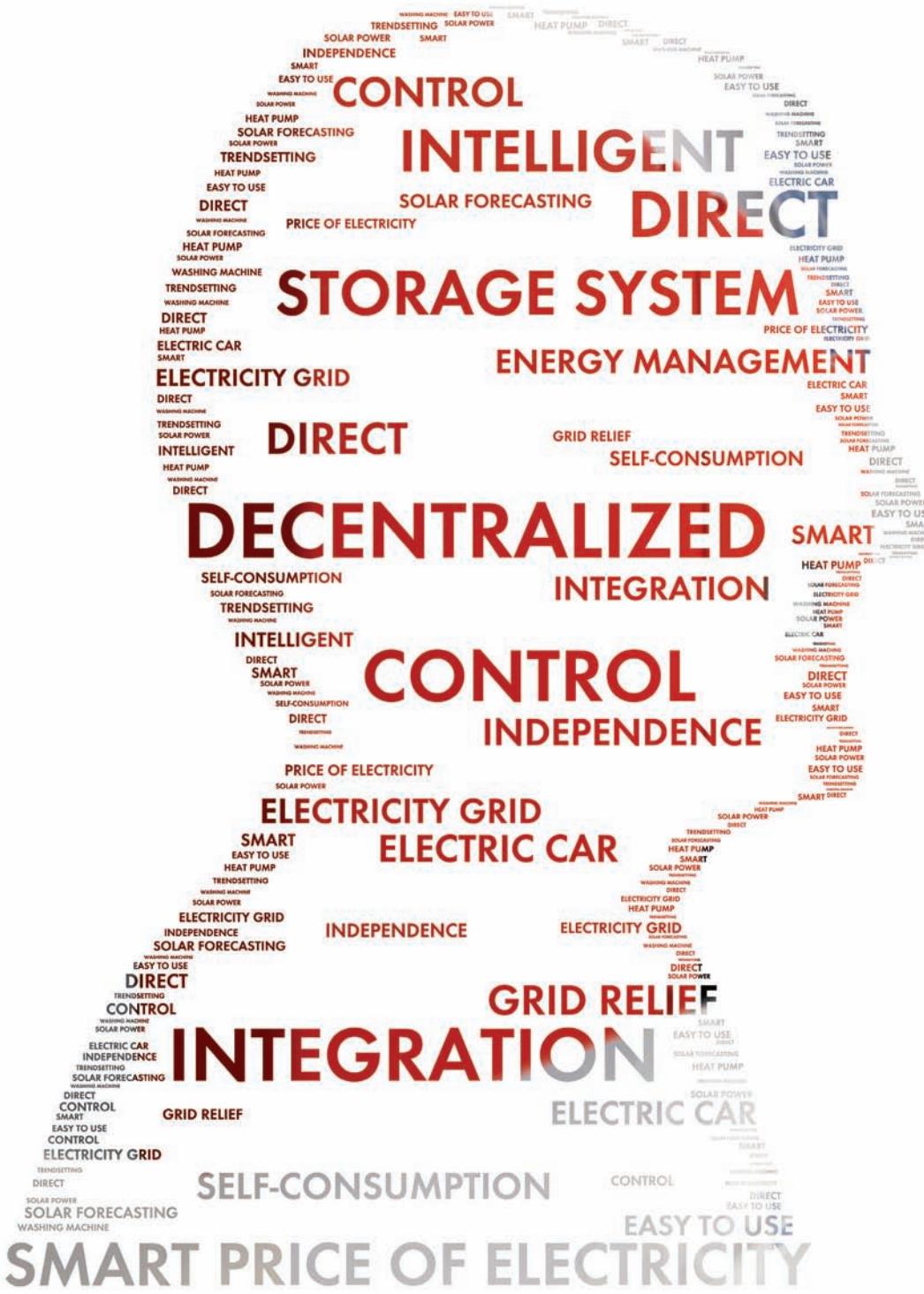
The innovations will come from SMA. That much is certain.

I hope you enjoy a stimulating read and that you find our "smart" stories entertaining. We value your support as we work together to ensure that our part in the global energy transition is a success.

Pierre-Pascal Urbon



Speaker of the Managing Board
SMA Solar Technology AG



**"AGAINST THE BACKGROUND OF RISING ELECTRICITY PRICES,
ENERGY MANAGEMENT IS A VERY TOPICAL ISSUE, ..."**

PROF. CLEMENS HOFFMANN,
HEAD OF THE FRAUNHOFER INSTITUTE FOR WIND ENERGY AND ENERGY SYSTEM TECHNOLOGY (IWES)



**... AND ONE FOR WHICH SMA SMART HOME TODAY ALREADY
OFFERS A UNIQUE AND INTELLIGENT
SYSTEM CONCEPT THAT IS UNRIValed ON THE MARKET."**

CHRISTIAN HÖHLE,
DEVELOPMENT ENGINEER FOR SMA COMMUNICATION TECHNOLOGIES

SMART HOME





WHAT MAY HAVE SOUNDED LIKE NOTHING MORE THAN UTOPIA JUST TWO YEARS AGO HAS NOW BECOME A REALITY.

PV SYSTEM OPERATORS ARE HELPING TO SHAPE THE ENERGY TRANSITION. THEY USE THE ELECTRICITY THEY GENERATE THEMSELVES, THEREBY FREEING THEMSELVES FROM A DEPENDENCY ON RISING ELECTRICITY PRICES – WITH NO LOSS OF CONVENIENCE AND IN A FULLY AUTOMATIC WAY. THIS REQUIRES INTELLIGENT TECHNOLOGY TO MAKE SURE THAT THE INVESTMENT PAYS OFF IN THE LONG TERM.

Free yourself from rising electricity prices:
Christian Höhle, Petra Nawratil and Clemens Hoffmann
in front of the SMA Smart Home.

It is 10 a.m. and the sun is shining – the PV system on the rooftop is already running at full power. For the energy manager inside the house, this is a clear signal to start up the washing machine and recharge the storage system with solar energy. After all, the weather forecast for the afternoon is overcast. The standby devices, refrigerator and freezer are then automatically powered with electricity from the storage system. As for the dishwasher, which needs to run and be finished in time for dinner, the energy manager simply switches over to purchased electricity, at least until the sun comes back out again. This happens at 6 p.m. when there is enough solar energy to recharge the electric car. During the evening, the energy manager calculates that almost 60 percent of the day's energy demand was met today with solar electricity. And what is the forecast for tomorrow? Even slightly better, as there will not be any cloud cover at all in the afternoon.

This – or something similar – is what a working day in the life of the Sunny Home Manager looks like. The Sunny Home Manager is the central control unit in the SMA Smart Home. It ensures that as much cheap and clear solar electricity from the roof as possible is consumed directly in the home. Even if its tasks are complex, it offers independence and maximum convenience to its users. How? By using its intelligence.

Free yourself from rising electricity prices

"Against the background of rising electricity prices, energy management in private households is a very topical issue," explains Clemens Hoffmann, head of the Fraunhofer Institute for Wind Energy and Energy System Technology (IWES) in Kassel. When it comes to decentralized energy supply systems, Hoffmann is something of an expert: Among other things, his institute researches the integration of renewable energies in utility grids. One of their main areas of focus is information and communication technology for energy management in electricity supply systems.

Christian Höhle, an engineer responsible for communication development at SMA, also knows that more and more people want to use solar electricity generated on their own roof in order to become more independent. "Until recently, most people installed PV systems on their roof in order to profit from the feed-in compensation," says Höhle whose house has already been converted into a Smart Home. "However, the costs associated with photovoltaic systems have now dropped to the point where electricity from the roof is a lot cheaper than electricity from the electrical outlet. Of course, now it pays to consume the solar electricity yourself." The trend toward self-consumption was identified early on by SMA. "With the SMA Smart Home, we offer an intelligent system concept that is unique in the marketplace and significantly increases self-consumption of solar electricity," explains a very enthusiastic Höhle. "From my own experience, all I can say is that it is a great feeling to hardly need any electricity from an outside provider and to generate enough to meet your own needs many days a year."

An energy manager that is "capable of learning" – that is real convenience

But how does the SMA Smart Home actually work? The basic principle is very simple. The inverter converts the direct current produced by the PV modules on the roof into standard alternating current for domestic use. The Sunny Home Manager monitors the entire system and decides what happens next with the electricity: Should it be used immediately in the house to power the washing machine, dryer or similar appliance, will it be temporarily stored for later use or will it be fed into the utility grid? The energy manager looks at many sources of information before making this decision. For example, when will solar electricity be available and how much? When and for how long do larger loads need power? How full is the storage system? Last but not



**“IT IS NOT JUST ABOUT LOWERING ELECTRICITY COSTS,
BUT ALSO ABOUT TAKING THE STRAIN OFF THE ELECTRICITY GRID.”**

CHRISTIAN HÖHLE,
SMA

**“ENERGY MANAGEMENT FOR PRIVATE HOUSEHOLDS –
AGAINST THE BACKGROUND OF RISING ELECTRICITY PRICES,
THIS IS A HIGHLY TOPICAL SUBJECT.”**

CLEMENS HOFFMANN,
FRAUNHOFER IWES

least, how much power is being generated, consumed and supplied to or drawn from the utility grid at any given time? The Sunny Home Manager receives a large proportion of this information from the Sunny Portal, which creates site and system-specific PV generation forecasts. It also takes information from its users, who, for example, define when the laundry needs to be ready. After all, nobody wants a washing machine that is in the bathroom to be in the middle of the spin cycle when they are trying to relax in the bath. "A particularly valuable feature of the Sunny Home Manager is its ability to recognize and learn the consumption patterns of the household and adapts itself accordingly," explains Höhle. "This is what we mean when we talk about convenience."

Using storage systems to increase self-consumption ...

However, the experts at SMA are not taking time off or putting their feet up – instead, they keep working to refine the SMA Smart Home system. "Our top priority is integration of storage systems into our Smart Home," explains Product Manager Petra Nawratil. "We are going to launch the Sunny Boy 5000 Smart Energy later this year. This is the first large-scale inverter that can be wall-mounted and has an integrated storage system." The battery in the new Sunny Boy can store around 2 kWh of electricity. This energy is enough, for example, to run a hairdryer for around an

hour, wash two loads of laundry or leave an energy saver-lamp switched on for nearly 200 hours. "We have already been asked many times whether it is worth bothering with such a small storage system," says Höhle. "Our response is quite clear: Yes, of course it is worthwhile. Actually, it is much more economically viable than a larger storage system. After all, this is enough energy to supply electricity for around three hours to a family of four during the evening." The advantages of the small battery are clear: It is inexpensive and perfectly suited to increasing the level of self-consumption throughout the year. A large storage system can only be fully utilized on high-yield days, whereas a small storage system can be recharged relatively quickly. This means a smaller battery can be chosen to achieve the highest possible degree of utilization.

... and take the strain off the utility grids

"With a storage system, not only can you significantly increase self-consumption levels, but it is also possible to reduce the strain on the utility grid," explains Höhle. Speaking from experience, with the Sunny Home Manager and a storage system, his home nearly meets its entire demand during the summer months with self-generated solar electricity that does not need to be transported via the utility grid. "In addition, the SMA Smart Home opens up completely new options for handling energy in the home

Total convenience for users:

The Sunny Home Manager learns the consumption patterns of "its" household.



environment," stresses the engineer. "It creates transparency and highlights areas where we can save even more. At the beginning I was really surprised to see which devices really consume a lot of energy."

Using electricity when it is at its cheapest

Grid relief – a topic that is also close to the heart of Clemens Hoffmann. "In order to create a further incentive for electricity customers, it must become possible to react flexibly to the demands of the energy market and grid operation," says Hoffmann. "A next step would be therefore to create a regulatory framework for the wide-scale use of intelligent energy meters." Petra Nawratil adds: "Another important incentive for electricity customers is the principle of variable rates." This would mean that different prices are applicable per kWh depending on the day or time of day. In accordance with the demand. "This is something we are definitely prepared for: The Sunny Home Manager is already capable of taking time-variable rates into account," says Nawratil. "And, with the Sunny Portal, we have created the technical framework that enables an exchange with the energy market – via which variable rates could be communicated."

Everything is integrated – from heat pumps to electric cars

Clemens Hoffmann believes that trends in applications for the Smart Home continue to evolve. "The integration of heat pumps and electric vehicles is set to become particularly important in the future," says Clemens. "Both can take up large amounts of energy at differing times and are therefore excellent ways to increase self-consumption even further."

SMA's development team is already working hard in this area. "In terms of integrating heat pumps and electric vehicles, we are already collaborating very closely with experts in the associated areas," explains Höhle. "With our experience from the domestic appliances industry, air conditioning technology and the automotive industry, we are able to develop solutions that really are economically viable and fit for everyday applications – applications that also offer the highest level of convenience and user-friendliness to people living in a Smart Home."

SMA developers have been focusing on the integration of electric vehicles for quite some time. "We already offer support for many electric vehicles through the SMA radio-controlled socket, which means that they can be integrated into our energy management," explains Nawratil. "In addition, we are also involved in various research projects on

this topic." These include efforts to find out whether electric vehicles with rechargeable batteries can be used as energy storage systems. Whether they can be charged and discharged – depending on requirements. "The whole system would then basically work like this: The rechargeable battery in an electric car is recharged when the electricity is cheap. This could be during the night or when the sun is shining and the PV system is supplying electricity. The energy stored in the battery could then be made available again when it is needed – for example to run the washing machine," explains Nawratil. "And this would not only reduce electricity costs, but it would also take the strain off the utility grid."

Great user-friendliness and convenience with central controls

"We also expect that it will also be possible to use the new energy management devices for further services – for example heating controls or security," Hoffmann says of an additional vision for the future. In this way, it would be possible to centrally control the temperatures in different rooms, leaving it pleasantly cool in the bedroom and nice and warm in the living room – without any need for manual adjustment of the heating. "A good idea," thinks Höhle. "With the Sunny Home Manager, we have a platform that not only enables us to implement this type of service, but also to go beyond the scope of energy management to make the Smart Home even more convenient for users."

The concept of the future is called "Smart Grid" – renewable, decentralized and convenient

With SMA Smart Home, everybody now has the chance to be free from increasing electricity prices and to start their own personal energy transition. This is an important step for the energy supply of the future, as decentralized power plants using renewable energy sources will democratize the electricity supply. "The smart grid is becoming increasingly more important, which intelligently links power generation, consumers and storage systems, thereby ensuring the customary high level of security of energy supply," adds Höhle. He also believes that virtual power plants, which are made up of multiple decentralized units, are set to gain more importance. Linked together with the aid of intelligent system technology, these units are combined into a network that behaves in the same way as a single power plant. As a result, PV plants, wind turbine systems and other renewable energy sources can deliver power on a demand-driven basis – thereby perfectly supplementing the existing energy supply system structure.

"WITH THE SOLAR LEASING MODEL, WE MAKE OUR CUSTOMERS A VERY LONG-TERM PROMISE: AN ALL-IN ONE SERVICE PACKAGE FOR A CLEAN AND COST-EFFECTIVE ENERGY SUPPLY, ..."

**EDWARD FENSTER,
GENERAL MANAGER SUNRUN INC.**



... AND WE BUILD RELIABLE PV INVERTERS
SO THAT OUR PARTNERS ARE ALSO ABLE TO
KEEP THIS PROMISE."

BATES MARSHALL,
VICE PRESIDENT MEDIUM POWER SOLUTIONS SMA AMERICA

SMART LEASING



ON THIS DECEMBER DAY THE SUN IS SHINING IN SAN JOSÉ, CALIFORNIA, REFLECTING OFF OF THE PV CELLS ON THE ROOFS OF DOZENS OF SINGLE-FAMILY HOMES.

JUST AS THIS IMAGE DEPICTS, MORE AND MORE AMERICANS ARE USING PHOTOVOLTAICS TO BECOME INDEPENDENT FROM RISING ELECTRICITY PRICES. HOWEVER, MOST OF THEM ARE NO LONGER PURCHASING THEIR PV SYSTEMS; INSTEAD, THEY ARE CHOOSING A COMPLETE SOLAR SERVICE PACKAGE, AN OPTION THAT IS ALSO REFERRED TO AS SOLAR LEASING. LEASING INSTEAD OF BUYING – A BUSINESS MODEL, WHICH ESTABLISHED ITSELF IN THE AUTOMOBILE INDUSTRY YEARS AGO, COULD ALSO BECOME A WORLDWIDE MODEL FOR SUCCESS IN THE SOLAR SECTOR. AN INTERVIEW WITH EDWARD FENSTER, ONE OF THE FOUNDERS AND CEOS OF SUNRUN, AND BATES MARSHALL, VICE PRESIDENT OF THE MEDIUM POWER SOLUTIONS BUSINESS AREA AT SMA AMERICA.





Mr. Fenster, it is common to lease cars in Germany, however, the model is still very new for PV systems. How has it developed in the U.S.?

Edward Fenster: Very successfully. We introduced the model in the U.S. in 2007 – and since then third-party ownership of PV systems has far surpassed purchasing and private ownership. Industry experts estimate that last year up to 70 to 80 percent of all newly installed residential PV systems in the U.S. were financed this way.

Why should homeowners lease a PV system instead of buying one?

Edward Fenster: The answer is simple. Because we take care of everything. Many homeowners want to become more independent from rising energy costs in the long term and would like to produce clean, affordable solar power themselves. However, a lot of the time homeowners are scared off by perceived complications such as the costs of a PV system, the bureaucracy of dealing with regulating authorities and power companies, or uncertainty about what to do in the event of a system failure. If they lease a PV system, they don't have to worry about any of these things.

How does solar leasing work on a day-to-day basis?

Edward Fenster: When potential customers call us up, we first make sure that their roof is appropriate for cost-efficient PV system operation. We can assess this within a couple of minutes. If the result is positive, an installer from one of our partner companies will plan the installation for the customer on location. We review the plans to make sure that everything is drawn up correctly and then commission construction. We subsequently make sure, along with our partners, that the installation delivers the guaranteed yields for the entire period of the leasing contract of 20 years. That means that we organize the ongoing monitoring and maintenance of PV system for our customers. In return, customers pay us a fixed monthly rate – which, as opposed to energy bills from conventional suppliers, is fixed from the outset and remains the same for the entire length of the contract. Customers can also check up on their PV system yields at any time online.

Bates Marshall: Nothing actually changes in the everyday lives of our customers – apart from the fact that they now have clean electricity from their own roof at a long-term attractive price. This is not only good for their conscience, but also for their wallets. With this model, homeowners can save on electricity costs for years.

Twenty years of guaranteed minimum yields, with the possibility of even higher yields – that's a long time. Which partners do you work with to complete such ambitious projects?

Edward Fenster: Yes, it is true that solar leasing is a long-term business. Customer and investor satisfaction for the duration of the project is of course a very high priority for us. We promise homeowners that we will offer them a reliable, long-term supply of electricity at a fixed price. And the investors who finance the installations are also expecting commensurate yields with the lowest possible risk over the same period of time. To ensure this, we have to place especially high demands on the partners we work with in the construction and operation of our installations. In fact, we only work with a handful of carefully selected companies. Before entering into a partnership, we not only test the quality of the products or services offered, but we also check the company's financial stability. Ultimately, we have to be sure that, for example, an inverter manufacturer will be able to keep their promise of a 20-year guarantee. At SMA, both product quality and its finances are sound, and installation partners enjoy working with them. Their inverters are thoroughly reliable, the company has years of experience and is financially well positioned. This is exactly why we get the majority of the inverters for installation from SMA.

Bates Marshall: We are happy to hear that installers enjoy using our inverters. However, we also invest quite a bit in the research and development of new technologies, and we develop our inverters so that they are easy and quick to mount without special tools. Apart from that, our devices are known for their efficiency and reliability, and we are also renowned for our fast and reliable service. Currently, many banks and rating agencies give projects that use SMA products a lower than average risk rating. This means lower investment costs for project developers and leasing companies who choose to work with SMA products.

That sounds like a successful partnership. Are you planning on working together to develop further leasing offers for homeowners and investors?

Edward Fenster: I can imagine integrating battery banks into our offer in the long term once costs have gone down and the technology has matured.

Bates Marshall: I would take it one step further and integrate the entire SMA Smart Home System with the Sunny Home Manager and storage system solution into the offer.



Bates Marshall and Edward Fenster agree:

"In Europe and the emerging markets in Asia and Latin America there is also plenty of potential for the successful solar leasing model."

"SIMILARLY TO MOST BANKS AND RATING AGENCIES, OUR TEAM ALSO SHARES THE OPINION THAT SMA PRODUCTS OFFER THE LOWEST FAILURE AND CREDIT RISKS. THIS IS WHY WE IMPLEMENT MOST PROJECTS WITH SMA PRODUCTS."

EDWARD FENSTER,
SUNRUN

This way homeowners would be able to use their self-produced solar energy more efficiently at only a slightly higher leasing rate – without any loss of convenience.

Edward Fenster: Yes, we should consider that. In the past, even just the idea of energy efficiency has been a hard one to get across in the U.S. We have, however, been able to prove to our customers that we can find ways for them to save money without affecting their quality of life. The key aim here is to offer failure-free protection against ever more frequent power outages without any compromises in terms of convenience, as well as further reductions in electricity costs. I can well imagine that there is an appropriate level of interest for this type of technology.

The solar leasing model has established itself successfully in the U.S. in only a few years, and you are planning on developing it further. How does the situation look in other countries? Will solar leasing also be successful in other places?

Edward Fenster: We certainly have the impression that in markets where feed-in compensation is sinking more and more radically, there is a trend towards the third-party own-

ership model. For example, we have already received calls from Germany.

Bates Marshall: What is clear is that the price of conventionally produced electricity is going up globally while the cost of photovoltaics continues to go down. It is thus becoming more and more attractive to produce and consume solar electricity yourself. Against this backdrop, I can see great potential for the solar leasing model in Europe. But also in the emerging markets in Asia and Latin America, where there is still no reliable power supply but where there are high rates of solar irradiation and a growing energy demand, solar leasing will surely become an increasingly appealing option.

Mr. Fenster, Mr. Marshall, thank you very much for the interview.



**"PREDICTABLE YIELDS ARE VITAL FOR THE LONG-TERM
FINANCING OF LARGE-SCALE SOLAR PROJECTS, ..."**

MARKUS WESSEL-ELLERMANN,
DIRECTOR OF PROJECT FINANCING RENEWABLE ENERGIES, COMMERZBANK AG



**... AND BECAUSE WE UNDERSTAND THIS, SMA OFFERS
FIRST-CLASS PRODUCTS, COMPREHENSIVE SYSTEM SOLUTIONS AND
EXCELLENT PROJECT SUPPORT ALL AROUND THE WORLD."**

DR. JÜRGEN REINERT,
EXECUTIVE VICE PRESIDENT TECHNOLOGY SMA POWER PLANT SOLUTIONS

SMART POWER





**SCORCHING HEAT. SALTY SEA AIR.
SAND STORMS. TROPICAL HURRICANES. SNOW AND ICE. NOT A PROBLEM.**

EVEN AT AN EARLY STAGE IN OUR OWN TEST CENTER, SMA CENTRAL INVERTERS PROVE THAT THEY ARE CAPABLE OF MEETING EVERY DEMAND THEY MIGHT FACE AND ENSURING THAT LARGE-SCALE PHOTOVOLTAIC PROJECTS ALL AROUND THE WORLD BECOME INCREASINGLY ATTRACTIVE TO INVESTORS. QUALITY IS KEY, AND THIS ALSO HOLDS TRUE FOR PROJECT FINANCING ACCORDING TO MARKUS WESSEL-ELLERMANN FROM COMMERZBANK AG. JÜRGEN REINERT, HEAD OF THE POWER PLANT SOLUTIONS BUSINESS AREA AT SMA AND RESPONSIBLE FOR TECHNOLOGY DEVELOPMENT, AGREES. THIS IS HARDLY SURPRISING, AS BOTH SET HIGH STANDARDS AND TAKE A LONG-TERM APPROACH.



The central component of every PV power plant:
Markus Wessel-Ellermann and Jürgen Reinert in SMA's central inverter production facilities.

Those we collaborate with on projects must offer above-average services and products," says Markus Wessel-Ellermann with conviction. Together with his team, the director of Project Financing for Renewable Energies at Commerzbank plans on financing for PV power plants around the world. "Before we finance a project, we look closely and choose our partners strategically and carefully," says Wessel-Ellermann. This is understandable when considering the timeline of large-scale projects. For reliable financing, experts from Commerzbank have to make accurate yield forecasts not only over a five-year period but more typically for a period of 15 to 17 years. "The quality of the system components, and in particular the inverters, must be high" Wessel-Ellermann drives the point home. "Their many functions make them responsible for the yield of the installation – and therefore for the success of the entire investment."

"WE TAKE A VERY CLOSE LOOK AT WHO WE ARE DEALING WITH."

MARKUS WESSEL-ELLMANN,
COMMERZBANK

Jürgen Reinert, who as the division speaker is also responsible for SMA's PV power plant technology development, understands this very well. Accordingly, at SMA, central inverters are put through their paces before delivery, and the reason is obvious. "These tests are extremely important, especially for large-scale installations over 100 megawatts," explains Reinert, who holds a PhD in engineering. "It makes a significant difference whether someone wants to connect an installation to the grid with four inverters and operate it efficiently over many years, or a power plant with 500 inverters. These are incredibly high requirements for which to guarantee stable system operation of high availability."

Two years ago, Reinert moved back to Germany to SMA from Sweden. What interested him was the remarkable commercial potential of PV power plants and the challenge of finding solutions to meet the differing system requirements and extreme ambient conditions encountered around the world. "Our inverters have to work equally well during a sandstorm that lasts for days and in monsoon rains," says Reinert. But how do you guarantee that an inverter functions under almost all imaginable climate and ambient conditions? The answer can be found in the in-house SMA Test

Center. "We subject our inverters to the most extreme heat and cold here for up to 1,000 hours under full-load conditions," says Reinert of the Development department's stress tests. "In the climate chamber, we can simulate both the dry heat of the Californian desert and the hot and humid tropical climate of India. The temperature range extends from -40°C to +90°C. That is an enormous range. We also blast the inverters with sand and continually soak them with simulated rain. And because the devices also have to work flawlessly in the Andes, we simulate operation at altitudes of up to 4,000 m in a low-pressure chamber. Finally, we test mechanical stability on a giant vibrating platform. We do this because inverters must be able to survive serious jolts in earthquake-prone regions and during transportation in impassable regions."

But that is still not everything. When inverters move from the development phase to series production, every completed device spends up to 25 hours in the Test Center before being delivered to customers around the world.

As a rule, PV power plants feed directly into the medium-voltage grid, so inverters have to take on a number of challenging tasks – key word: grid management. Can that also be simulated? Reinert nods: "Yes, we can do that, too." To construct a real test scenario, the SMA Test Center is connected to the medium-voltage grid through its own transformer station. "Our Test Center is unique in the world," Reinert continues. "There is definitely no other inverter manufacturer with anywhere near as much experience with multi-megawatt global projects as SMA."

"NO INVERTER MANUFACTURER HAS AS MUCH EXPERIENCE AS SMA."

MARKUS WESSEL-ELLMANN,
COMMERZBANK

SMA experts know how an installation will behave once it is connected to the grid long before the project is implemented. They methodically simulate every installation and examine all of the electrical components of the system, from the PV array to the grid. "We can not only calculate precisely how the installation should be designed to generate the highest possible yield, but also how we can support the utility grid and actively contribute to grid stability," explains Reinert. "This makes it possible to integrate larger amounts of photovoltaics into existing grids. And naturally,

the simulations ensure that the installation satisfies the grid connection conditions in the relevant country."

Important for finance expert Wessel-Ellermann are knowledge and communication. "Our project partners must be well-versed in the individual connection conditions in various countries," Wessel-Ellermann explains. "Because at the end of the day, we must ensure that systems meet all regulatory requirements and that there are no delays in connecting to the grid. Otherwise, we would be sacrificing yield right at the beginning of system operation." The solution is simple. "In young markets that want to develop a reliable electricity supply based on renewable energy, SMA experts often sit on the committees which define the connection conditions," Reinert asserts. That means we are involved long before the first project is implemented."

"IN YOUNG MARKETS WE ARE INVOLVED LONG BEFORE THE FIRST PROJECT IS IMPLEMENTED."

JÜRGEN REINERT,
SMA

At our headquarters in Niestetal, developers work to further reduce the costs for PV power plants and to increase their competitiveness with other types of energy production. "To achieve this, we concentrate our development efforts on reducing component costs, and therefore of the original costs of the inverters," explains Reinert. "But it is equally important for long-term economic viability that during development we consider the complete system over the entire service life."

The result: Inverters that can easily be transported to remote locations where they can be efficiently installed. Including the integration of many functions that would otherwise need to be covered with additional plant components. As a result, the devices can be harmoniously integrated into any overall system.

"During development, we also ensure that devices are easy to maintain," Reinert continues. "It must be possible to replace those parts subject to normal wear and tear, quickly and easily. We also calculate how long individual wearing parts last under specific conditions so we can plan the replacement intervals accordingly with our Service from the start. This reduces maintenance costs and prevents disruptions in operation that could lead to yield losses."

"High yield stability is enormously important," says Markus Wessel-Ellermann. "If a long period of unexpected downtime occurs in an installation in summer during good weather, it's really painful." That's why seamless PV power plant monitoring is such a high priority for him: "We must be able to count on a professional partner who understands the complete system and not only recognizes faults immediately, but can also interpret and quickly remedy them. This requires not only a great deal of technical knowledge, but also a comprehensive service infrastructure," stresses Reinert as he points to a world map on the wall. "With our global service network, we install seamless monitoring for every power plant and ensure that even faults in really remote locations are quickly remedied. And not only for inverters, but also for all medium-voltage components," emphasizes the engineer.

**"WE NEED A
PROFESSIONAL PARTNER WHO UNDERSTANDS THE SYSTEM."**

MARKUS WESSEL-ELLERMANN,
COMMERZBANK

From technical consulting and plant planning to system technology and comprehensive service options, the complete SMA package is valued by investors and project financiers on all continents. "Project business is global, and the actors are globally networked," says Reinert. "It is not rare, for example, that a German project developer builds a PV power plant in South Africa with a British investor before selling it to an Indian owner. SMA is part of this global network. We bring different stakeholders together and offer them dedicated contacts around the world and short decision-making processes to structure their business as simply as possible. For profitable PV power plants. Worldwide. Even under the most extreme conditions."



U.S.

The Adelanto Solar Power Plant is located approximately 100 kilometers north of Los Angeles in the California desert. In the 10.4 MW plant, 13 Sunny Central 800CP inverters meet the challenge of blistering heat and sandstorms.



THAILAND

With a power output of 44 MW, Bangchak is one of the largest PV power plants in Southeast Asia. Sixty-one SMA Sunny Central 630 HE inverters provide a reliable power supply in Thailand's tropical climate.



"CONSUMERS IN OFF-GRID AREAS NEED A COST-EFFICIENT AND ABSOLUTELY RELIABLE ELECTRICITY SUPPLY, ..."

**JOHN BLOWES,
PRINCIPAL DIESEL CONSULT LTD.**



**... WHICH IS WHY PHOTOVOLTAIC-DIESEL HYBRID PLANTS
WITH SMA SYSTEM TECHNOLOGY ALSO DELIVER CLEAN ELECTRICITY
EFFICIENTLY AND RELIABLY TO REMOTE REGIONS."**

VOLKER WACHENFELD,
EXECUTIVE VICE PRESIDENT SMA HYBRID ENERGY SOLUTIONS

SMART HYBRID

DUST AND DEBRIS LIE AS FAR AS THE EYE CAN SEE. NO MAN'S LAND.

AND RIGHT IN THE MIDDLE OF IT ALL: A CHROME ORE MINE. IS THE UTILITY GRID STABLE? NO. ENERGY TO POWER THE MINE IS PROVIDED BY DIESEL GENERATORS AND, SINCE NOVEMBER 2012, BY THE SUN AS WELL. WELCOME TO THABAZIMBI, LOCATION OF THE FIRST OFF-GRID PHOTOVOLTAIC-DIESEL HYBRID SYSTEM IN THE MEGAWATT RANGE IN SOUTH AFRICA. 4,200 PV MODULES, 63 SUNNY TRIPower INVERTERS AND INTELLIGENT SYSTEM TECHNOLOGY FROM SMA HAVE REDUCED THE OPERATION OF DIESEL GENERATORS TO A MINIMUM SINCE NOVEMBER 2012, CUTTING FUEL COSTS AND CO2 EMISSIONS AS A RESULT.



The plant in Thabazimbi, South Africa is our flagship project in the industrial hybrid sector. And there are many more to come," assures Jon Ivar Ekker, responsible for market development for industrial photovoltaic-diesel hybrid applications at SMA. And with good reason too. The integration of photovoltaics makes the supply of electricity to energy suppliers, industrial companies, water desalination systems, mines, tourism facilities and farms in sunny regions more effective, environmentally friendly and, most importantly, more cost-effective.

"Where there is enough space and where the generation and consumption profiles are well matched, it makes extremely good sense to supplement diesel electricity generators with solar energy," confirms John Blowes. "Fuel costs and toxic emissions can thus be significantly reduced." The Briton really knows his stuff when it comes to cost-efficient energy supply for large-scale consumers. His company Diesel Consult Ltd. has been designing, building and running power plant projects for industrial consumers in developed markets and newly industrialized countries for decades.

Photovoltaics makes electricity supplies more environmentally friendly and cost-efficient

Businesses such as the mine in Thabazimbi are often located far away from public utility grids. However, even the utility grids that do exist in developing and newly industrialized countries are typically unstable. Outages lasting several hours at a time are commonplace, and, as a result, diesel generators are particularly popular in these regions. In addition, the initial investment required for a diesel energy supply system is relatively low and operation can commence relatively quickly.

However, fuel and thus related system operating costs have soared in recent years. "Effective fuel costs, meaning the price including transportation costs to the consumer, are now often over one U.S. dollar per liter for system operators in remote regions," says Jon Ivar Ekker. "The prices for PV electricity in sun-rich regions are not only lower than this, they are dropping at a rapid rate."

This has already made photovoltaics the cheaper alternative to conventional energy carriers in many sunny regions. If system operators in regions with a high level of solar irradiation compliment a diesel energy supply with solar energy, the investment will pay itself off in only two to four years. If system operators in regions with a high level of solar irradiation complement a diesel energy supply with solar energy, the investment will pay for itself in less than four years.

Maximizing investment security through technological progress

The requirements that need to be met in the process are huge. "Low costs, fast readiness for operation, the highest degree of reliability and availability 24 hours a day, seven days a week are the most important factors for industrial consumers," Blowes explains. Each system is unique, as operation load profiles and external conditions vary greatly from location to location. These are challenges that Volker Wachenfeld readily takes on. "We have had the technology for operating large-scale, well-functioning photovoltaic-diesel hybrid systems for more than 20 years. Today, we are in a position to offer considerably more intelligent, more efficient and more cost-effective systems. Our experience with large-scale PV plants secures us the benefit of an enormous technological advantage – and maximum investment security for our customers," emphasizes the engineer, who heads up the SMA Hybrid Energy Solutions division along with Jon Ivar Ekker, among others.

Intelligent system technology for effective synchronization of energy producers

"The two systems need to work together in harmony to guarantee stable and reliable system operation at any time and the highest degree of component durability with minimal fuel consumption," Blowes points out. "This is not an issue if the system is managed intelligently," Wachenfeld adds. "We handle this using the SMA Fuel Save Controller." At first glance, the Fuel Save Controller looks like a simple metal box – but it carries out an important task. It is the core component of the SMA solution for hybrid systems and acts as the interface between the solar and diesel generators. Working with the SMA inverters, the Fuel Save Controller manages solar feed-in to ensure that sufficient energy is always available to match demand while at the same time keeping diesel usage to a minimum. "The intelligent system memorizes the system's production and load characteristics and uses them to control the system," explains Wachenfeld.

Only by using this intelligent management is it possible to create the optimum balance between the installed PV power and the power from the simultaneously operated diesel generators, and thus providing safe and efficient system operation. "Without using intelligent management, a maximum level of only 20 percent of photovoltaics can be integrated into such a system. Anything above that will compromise grid stability," says Ekker. "With the SMA Fuel Save Controller, however, we can increase the contribution of photovoltaics up to 60 percent without any compromise in terms of grid stability."

**"TO ENSURE SYSTEM AVAILABILITY,
SYSTEM OPERATORS MUST BE ABLE TO RELY ON
COMPETENT SERVICE AT ALL TIMES."**

JOHN BLOWES,
DIESEL CONSULT

**"NO MATTER WHETHER IN EUROPE, AMERICA OR SOUTH AFRICA –
OUR EMPLOYEES ARE ALWAYS ON HAND WITH HELP QUICKLY."**

VOLKER WACHENFELD,
SMA



To make this possible, only one Fuel Save Controller is required per system. "If we also integrate additional batteries to store surplus solar energy temporarily, we can increase the level of photovoltaics and thus plant efficiency by an even greater degree," adds Wachenfeld. "We are currently working on this type of solution. And of course we have been developing our system technology from the very outset to facilitate easy integration of such enhancements into existing systems at any time."

From cost-effectiveness to service – everything from a single source

In order to provide each customer with a system uniquely tailored to their needs, SMA experts offer on-site advice to system operators before the project even starts. The first step is an energy audit. To do this, SMA experts analyze the load flow of the customer's system and the stability of the existing diesel generator grid. They then draw up an efficiency analysis. The analysis shows, among other things, how long it will take before the system has paid for itself. "Short amortization periods are an important factor when

considering a photovoltaic-diesel hybrid system," Ekker explains. "In addition, the efficiency analysis acts as the basis from which users can negotiate the financing of their system expansion with banks."

If a project gets the green light, SMA not only delivers the inverters and control systems. "Thanks to our global reach, we can also recommend the best local partners for the construction of the system," continues Ekker. "Our sales team for new markets has the right contacts and knows who is in a position to implement the planned system successfully." "Together with the system construction company, we ensure that the additional components are optimally integrated into the generator system," adds Wachenfeld. "Only then can the entire system operate safely and reliably."

On-site service or remote monitoring – for reliable operation worldwide

After completion of the system, operators need to be able to rely on competent service at all times. "This is extremely important," Blowes emphasizes. "System availability is an absolute must, regardless of where the system is located." In response, SMA has established a worldwide service network. "In the event of a problem or defect, our employees are always on hand quickly with help – be it in the Middle East, in the Asia-Pacific region, or in South America or South Africa," explains Ekker. "But that's not the limit to what we are capable of. We can also monitor any system remotely. For example, our Service Center team in Niestetal is following the operations of the system in South Africa online at this very moment. This way they not only detect problems immediately but can also make recommendations for the further optimization of system operation."

Thabazimbi was just the beginning

"This is an excellent approach," remarks Blowes. "A well-documented economically viable and reliable performance of no less than one year should convince additional system owners and financial institutions of the photovoltaic-diesel hybrid model. I see good potential for the years to come." Volker Wachenfeld and Jon Ivar Ekker have no doubt that SMA will live up to this potential: "Thabazimbi was just the beginning. Our hybrid model will come out on top – because, simply put, it is the best alternative available."



Volker Wachenfeld, Jon Ivar Ekker and John Blowes are convinced: "Photovoltaic-diesel hybrid is a model for success."

"PV POWER PLANTS CAN ONLY BE OPERATED PROFITABLY IN THE LONG TERM IF THE SERVICE IS RIGHT, ...

PETER BRUMM,
GENERAL MANAGER RENEWABLE ENERGY CAPITAL PARTNERS GMBH



... AND THIS IS WHY WE OFFER OUR CUSTOMERS
THROUGH OUR GLOBAL NETWORK THE BEST POSSIBLE
INVESTMENT SECURITY."

FRANZ SISTEMICH,
EXECUTIVE VICE PRESIDENT DEVELOPMENT & SALES SMA SERVICE

SMART SERVICE



13,000 KILOMETERS AS THE CROW FLIES. THAT IS THE DISTANCE BETWEEN KASSEL IN HESSE/GERMANY AND THABAZIMBI IN SOUTH AFRICA.

HOWEVER, IT IS NO DISTANCE AT ALL FOR THE EMPLOYEES OF FRANZ SISTEMICH, WHO IS RESPONSIBLE FOR GLOBAL SERVICE AT SMA. THEY HAVE A CONSTANT OVERVIEW OF SOUTH AFRICA'S FIRST PHOTOVOLTAIC-DIESEL HYBRID SYSTEM AND CAN ACCESS THE SYSTEM QUICKLY IF NEEDED. THIS WORKS IN THABAZIMBI AND, ALMOST EVERYWHERE ELSE IN THE WORLD AS WELL. REMOTE MONITORING OF PV POWER PLANTS IS JUST ONE OF THE KEY SERVICES FOR INVESTORS AND PLANT OPERATORS WHEN IT COMES TO CHOOSING THE RIGHT PROJECT PARTNER. AFTER ALL, GOOD SERVICE HAS LONG BEEN MORE THAN JUST THE ABILITY TO REPAIR DAMAGED INVERTERS QUICKLY. FROM SUPPORT DURING THE COMMISSIONING OF PV POWER PLANTS TO DEALING WITH COMPLICATED CUSTOMS PAPERWORK – GOOD SERVICE CREATES INVESTMENT SECURITY AND IS TODAY A KEY CRITERION FOR THE ECONOMIC VIABILITY OF PV SYSTEMS.

Technical expertise, fast reaction times, individual solutions and a global presence," Peter Brumm does not need long to reply when asked to list the prerequisites for a good service partner for PV power plants. The General Manager of Renewable Energy Capital Partners GmbH is responsible for the acquisition and financing of renewable energy projects and has already helped to develop a number of solar projects himself.

These are high expectations that cannot be met by all providers. "Not everybody can offer the same level of service. Investors really need to take a careful look when comparing different bids with each other," says Franz Sistemich. "In many cases, what initially appears to be a cheaper bid soon turns out to be lacking a range of services. This is when it gets expensive further down the line." Sistemich and his team are constantly developing and refining the services offered by SMA. "Customers have often told me that our service package was an important factor in persuading them to choose SMA when planning PV projects," explains Sistemich.

Large-scale projects only represent a good investment if they deliver the required power in the long term.

The range is indeed comprehensive. The Service employees at SMA support their customers during the commissioning of their plants at any location, however remote, monitor and maintain systems all around the world, offer telephone support via the Service Line and replace defective components and entire devices. "The importance of a comprehensive and reliable service package should never be underestimated," confirms Brumm. "After all, a PV project only represents a good investment if it delivers the required power in the long term. Alongside the high quality of the system components, this is ensured through the quality of the service."

A fast response at any time and any location – and customized

But how do you create a global service network that delivers such a high level of quality? "A company needs to be a certain size before it can offer a complete service package at a global level," says Sistemich. "Without a comprehensive basis in place, it is not possible to establish a close-meshed service network with efficient structures." Together with his team, the economist has set up the business area as an independent service provider. "With over 25 gigawatts of installed inverter capacity, SMA is set up better than any other inverter manufacturer," Sistemich highlights SMA's unique selling points. "In particular, the global service struc-

ture that goes with this is unrivaled." Today, not only are the service technicians from SMA in a position to reach customers quickly – wherever and whenever – but they also come with customized solutions for every customer.

Service partners must be reliable for 20 years

"This is a key factor," says Brumm. "We have to know that we can depend on our service partners for 20 years to deliver exactly the services we need and to ensure that the systems keep running without any problems. This is the only way to run a PV power plant and make a profit." For SMA, this all goes without saying. Customers can extend their service warranties from 5 to 20 years. If required, the company will also take over the full operational management of a PV power plant. "This means that we, as the contract partner of the customer, take care of all the operational tasks that are needed for smooth operation of the plant," explains Sistemich. "We monitor the plant, perform regular maintenance, replace wearing parts and ensure that all components are always in perfect working order, so that the plant continues to deliver the required power throughout the entire life of the contract." A comprehensive service package that is particularly in demand among operators of large-scale PV plants in the U.S.

Remote monitoring from California to Australia: troubleshooting in real-time

Other customers in turn may select individual service modules that are individually tailored to their needs. For example, a maintenance contract or a replacement part guarantee that leaves them safe in the knowledge that they can still get hold of the required components for their system even after 20 years. The remote service is becoming steadily more popular.

"Remote monitoring was a real milestone for us," explains Sistemich. "However, not only do we remotely monitor the inverters, but in the future we will extend this to customer's entire PV system. Whether from California to South Africa or Australia – from our Service Center in Niestetal we can track almost in real-time exactly what is happening at any system anywhere in the world. Often, this enables us to see when things are wrong long before the customer has any idea. In many cases we are able to fix problems remotely. If not, we provide the system operator with solutions."

Ninety customer service stations around the world and expert advice readily available

All this and in 13 languages, we owe to the experts of the SMA Service Line. "Thanks to our global customer service

900
CUSTOMER SERVICE EMPLOYEES



network, we are able to offer our customers professional telephone support in all time zones," Sistemich says of Service. We can help with questions during the installation of a system just as easily as with technical queries during operation of a system." And if a fault cannot be rectified remotely, a service technician can be on-site quickly. Ninety customer service stations around the world ensure closeness to the customer. In really remote areas, where SMA does not yet have a local representative, or in cases where SMA experts require additional help on-site, the Global Support Team is deployed – a team of technology experts that travels from the Australian outback to the Andes in Chile to keep PV system outages to a minimum.

The building blocks of service excellence: fast replacement and efficient logistics

Equally important is the replacement of individual components or entire inverters. "For this purpose, we keep a constant supply of spare parts and replacement devices in stock for up to 120 inverter types," says Sistemich. "If a string inverter fails, we will send out a replacement device in Germany within 24 hours, or within 48 hours for destinations abroad. That is a challenge in terms of logistics alone. This is why we opened a Logistics Center in addition to a state-of-the-art Repair Center last year. Within this infrastructure, we have established fast and streamlined

processes. This allows us to react flexibly at all times to the demands of our customers and enables us to prevent longer yield losses."

The logistics expansion for the SMA Service represents an investment – and Franz Sistemich has a clear vision. "In the next few years, the standard warranty period will run out on more and more inverters," Sistemich explains. "Of course, when this happens we still want to be able to support our customers as partners with individual service options – and we want to do this faster, more globally and more flexibly than any other provider." There is no doubt. The investment will definitely pay off.



"Not every provider is able to meet the high service requirements of the investors."

Franz Sistemich and Peter Brumm in the state-of-the-art SMA Inverter Repair Center.



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Annual report 2012

SMA
IS A DRIVING FORCE BEHIND THE ENERGY SUPPLY OF THE FUTURE,
ENABLING THE COMMERCIAL EXPLOITATION OF PHOTOVOLTAICS THROUGH INTELLIGENT SYSTEM SOLUTIONS ALL AROUND THE WORLD
AND IN ALL POWER CLASSES SMART

SMA SOLAR TECHNOLOGY AG

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TO OUR SHAREHOLDERS

FISCAL YEAR 2012 – FACTS TO OUR SHARE

€0.60

DIVIDEND PROPOSAL

27.7%

PAYOUT RATIO



€660 MILLION

MARKET CAPITALIZATION*

***as of December 28, 2012**



from left to right

Jürgen Dolle

Chief Human Resources and Operations Officer

Marko Werner

Chief Sales Officer

Pierre-Pascal Urbon

Chief Executive Officer

Lydia Sommer

Chief Financial, Legal and Compliance Officer

Roland Grebe

Chief Technology Officer



LETTER TO OUR SHAREHOLDERS

Dear shareholders,

the energy sector has changed rapidly and permanently around the world, demand has shifted to non-European markets, price and competitive pressure has increased, solar power has become competitive in sub-segments and China is emerging as the world's largest PV market: We are looking back at an eventful and challenging year for the solar sector, in which a new course was set for the future.

SMA performed well in this demanding market environment and, with sales of €1.5 billion and EBIT of €102 million, was in line with its forecast for the 2012 fiscal year. SMA again benefited from its solid financial structure and financed investments from cash flow. Moreover, with a global market share of nearly 25% and more than 400 global patent applications, SMA is the undisputed market and technology leader and the development world champion in the photovoltaics sector.

Strategic Focus on Global Growth Markets

We focused our corporate strategy on the future requirements of the energy sector at an early stage. Due to our development of innovative system technology and energy management solutions, Company-wide efforts to reduce costs and consistent internationalization, we believe we are extraordinarily well positioned to take the opportunities arising in the international photovoltaic markets. One thing is certain: The global transformation in the energy sector from central power plants to decentralized energy production is only possible with innovative system technology. We are focusing strategically on this worldwide growth market.

Ladies and Gentlemen, in the Annual Report 2011 you heard for the first time about our new attempts to actively shape the energy supply structures of the future with innovative system technology from SMA. In this Annual Report, we can already show you the first product innovations and successfully realized flagship projects.

Independence from Rising Energy Prices – Made Possible by Intelligent Energy Management from SMA

Because of the sharp fall in generation costs for operators, a PV system on their own residential or commercial roof is often a cheaper alternative to domestic energy generated by conventional means. In Europe, Japan and the USA in particular, interest in intelligent energy management to optimize self-consumption is therefore on the rise. Another decisive incentive for investment is the increasing independence from rising electricity prices and energy suppliers. SMA accordingly presented the SMA Smart Home, which is specifically tailored to this area of application, for the first time at Intersolar 2012. The integrated system concept – based on the Sunny Home Manager, an optional battery and other system components – automatically coordinates power consumption in the household with solar power generation without compromising on convenience for the occupants. This results in a significant rise in the self-consumption rate, savings in energy costs and less strain on the power distribution grids. SMA's most interesting new concept for the expert audience in this context was the Sunny Boy 5000 Smart Energy inverter, a wall-mountable PV inverter with an integrated battery, which stores solar power temporarily and enables it to be used later, for example, in the evening.

Fuel and Cost Reduction with Solar Diesel Hybrid Systems from SMA

Intelligent energy management solutions are becoming increasingly important in the industrial sector, too. In sunny regions, photovoltaics is already contributing to significantly reducing a generator's fuel consumption and therefore its operating costs. SMA recognized the enormous potential at an early stage and developed the first solar diesel hybrid system specifically for this area of application. Today, the first megawatt-class PV plant supplements the diesel energy supply of a chrome ore mine in South Africa with up to 1.8 gigawatt hours of solar energy every year. SMA supplied 63 Sunny Tripower 17000TLs for the lighthouse project and completed the intelligent control solution in November with the Fuel Save Controller.

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Turnkey System Technology for the Growth Market of Large-Scale Solar Projects

So that we can also service the growing market of large-scale PV power plants in an optimum fashion, we have concentrated on developing turnkey solutions to meet international demand. For example, SMA Transformer Compact Stations are the ideal link between SMA central inverters and the medium-voltage grid and enable highly flexible planning and even quicker connection of large-scale solar projects. In 2012, SMA presented an inverter of the megawatt class for the first time. In comparison to the preceding model, the Sunny Central 900CP XT lowers system costs with its higher performance and the possibility of outdoor installation. Moreover, with their wide-ranging technical functions, SMA's central inverters already comply with many countries' specific grid-connection requirements and regulations. As a frontrunner in grid integration, experts from SMA work in various bodies and working groups around the world to determine necessary connection conditions.

Excellent Service – Universal Services for Maximum Income Security

We continued to hone our unique selling propositions in 2012 by expanding our service activities. As well as high-quality and long-life system technology, our universal services secure high investment security and maximum economic efficiency for users in all segments and reduce risks of malfunctions in PV power stations to a minimum. We benefit from our broad installed basis worldwide, the excellent service infrastructure and the processes established over many years. With state-of-the-art communication technology for remote plant monitoring and intelligent analysis tools in the Sunny Portal, we can identify potential power losses and system failures at an early stage. In this way, we not only increase technical availability but also the energy yield of large-scale PV projects – and successfully distinguish ourselves from the competition.

Extensive Cost Reduction Program Secures Medium-Term Profitability

In view of rapidly altered market and competitive conditions, we have also made reducing costs an even higher priority. Our top development goal is to significantly reduce production costs by using new technologies and a higher proportion of carry-over parts. By establishing and expanding our purchasing offices in Germany, Poland, the USA and China, we have also laid the foundation for opening new procurement channels and certifying new suppliers. In addition, the Managing Board has designed several products to increase productivity together with the managers. For example, our new logistics center will make it possible for the first time to centralize all goods-receipt and supply activities at the location in Kassel, thus considerably reducing transport and storage time for our PV inverters. However, in order to safeguard the profitability of the corporate group in the medium term, additional personnel changes are unavoidable. SMA has therefore announced its intention to adapt the administrative functions in particular to the changed level of sales with a voluntary severance program. This year, we will cut the jobs of at least 500 temporary and permanent employees at home and abroad and take additional short-term personnel measures.

Great Employee Dedication, Even in Hard Times

The dedication of our employees is of central importance to the success of our Company. Last year showed us that SMA'ers support the necessary changes and stand behind the Company – and that they make a brilliant contribution to the Company's success even in hard times. It will remain our avowed goal to preserve and develop the unique SMA culture of cooperation and open communication.

Sustainable Position because of Presence in Global Growth Markets

SMA's internationalization strategy has proven to be perfect for the changed conditions: SMA is represented in 21 countries and in all important PV markets around the world, and can benefit in the long term from the growth markets of the USA, Japan and China in particular. With the founding of nine foreign companies in South Africa and Chile, we are present in other emerging PV markets and are therefore successively reducing our dependence on markets that are currently in decline, primarily in Europe. Accordingly, our goal is to extend sales and service structures in the growth regions of North America and the Asia/Pacific zone in order to increase our market share here on a long-term basis.

The US market is characterized primarily by project business for large-scale PV power plants. With a market share of over 50%, SMA is in an excellent position to benefit from future growth here. The new Sunny Central CP-US, with its UL certification and outdoor housing, is as sought-after as the turnkey MV Power Platform, which we likewise designed specifically for the US market.

SMA has also positioned itself successfully in the Japanese growth market. A crucial development success was achieved with the certification of the Sunny Boy 3500TL-JP and Sunny Boy 4500TL-JP. SMA is thus the first international PV inverter manufacturer to fulfill the demanding requirements for certification by JET (Japan Electrical Safety & Environment Technology Laboratories). In 2012, we developed the Sunny Central 500CP-JP for the fast-growing market segment of large-scale solar projects in Japan, and we received the first orders in the power station segment as early as the fourth quarter.

By acquiring Zeversolar, SMA laid the foundations for access to the fast-growing Chinese photovoltaic market. Zeversolar offers products that are specially tailored to the requirements of the Chinese photovoltaic market and will primarily service the Chinese market. With this market access, SMA will be able to discern Chinese competitors' developments and strategies more quickly and actively participate in developing market and grid-connection conditions in contact with local authorities and energy suppliers.

In the Best Position to Take Arising Opportunities

Dear shareholders, even though 2013 will certainly not be a simple year, the SMA Managing Board believes there are extremely good mid-to-long-term prospects for a successful restructuring of the energy sector toward decentralized energy supply based on renewable energies. SMA is best prepared for future challenges and from 2014 will know how to use the enormous potential of new markets and business models and to take the resulting opportunities in the best possible way: As a technology leader, which brings brand new product platforms and system solutions to market that provide substantial support to the energy supply of tomorrow. As a universal service provider, which ensures maximum availability and income security worldwide with its global service network and state-of-the-art remote monitoring solutions. And last but not least as an international energy management group, which successfully promotes and shapes the new decentralized energy supply structures around the world.



Pierre-Pascal Urbon
Chief Executive Officer
SMA Solar Technology AG

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Jürgen Dolle,**Chief Human Resources and Operations Officer**

Jürgen Dolle (*1954) studied German and social studies for the teaching profession, as well as social affairs. From 1981 through 2000, he worked in various positions as social educator at Diakonisches Werk Kassel, last as deputy managing director. Since 2001, he has headed SMA's human resources as vice president. He designed the models for our personnel development and anchored our corporate culture in all areas of the Company. Since April 2010, Jürgen Dolle has been responsible for the areas of Human Resources and Operations on the Managing Board.

Roland Grebe,**Chief Technology Officer**

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

Lydia Sommer,**Chief Financial, Legal and Compliance Officer**

Lydia Sommer (*1960) has served in a number of management capacities over the last 30 years, with an emphasis on finance and controlling at internationally

active companies, both at home and abroad. Before joining SMA, Lydia Sommer led the German Nokia Siemens Networks business unit as Country Director and General Manager. Since November 2012, she has been Chief Financial Officer at SMA, responsible for the Financial, Legal and Compliance business areas. Here, Lydia Sommer's focus is on process optimization for systematic cost reduction and expansion of the compliance system.

Pierre-Pascal Urbon,**Chief Executive Officer**

Pierre-Pascal Urbon (*1970) studied business administration and was active in M&A consulting until 2005 – when he joined SMA. In 2006, he was appointed to the Managing Board. Pierre-Pascal Urbon planned SMA's initial public offering and has decisively advanced the Group's internationalization. After the Annual General Meeting 2011, he took the position as Chief Executive Officer. On the Managing Board, he is responsible for the Company's strategic direction and driving internationalization.

Marko Werner,**Chief Sales Officer**

Marko Werner (*1963) is an electrical engineer and began his career at SMA in 1987. Until 2009, he worked in various management positions in the areas of product management, sales and marketing. He has built a global sales organization as well as successful key account sales and has developed innovative marketing concepts at SMA. In 2009, Marko Werner was appointed Chief Sales Officer.

THE SHARE

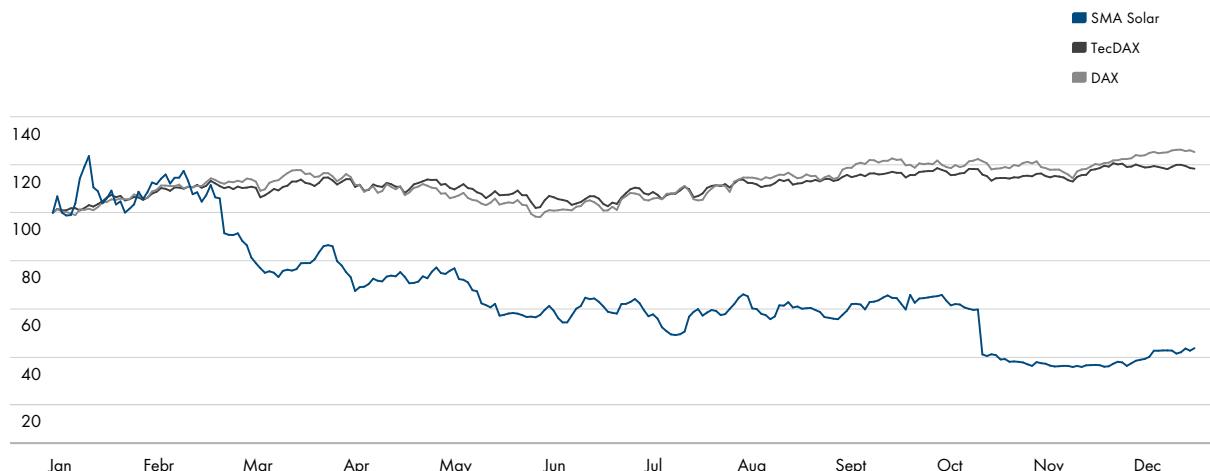
STOCK MARKETS DEFY THE DEBT CRISIS

In 2012, the stock markets were heavily influenced by international events, particularly by the financial and debt crisis in Europe and the USA. At the start of the year, the positive economic situation in Germany compensated for these negative effects. The DAX had a successful start to 2012 at 6,075.52 points and broke through the 7,000 mark for a short time on March 14, 2012. The continued bleak economic outlook in Europe caused the DAX to fall to its annual low of 5,969.40 points in the middle of the year. Good news for the preservation of the euro zone, above all the German Constitutional Court's approval of the European Stability Mechanism (ESM), had a positive effect on the DAX performance in the second half of the year. As a consequence, the leading German index repeatedly breached the 7,000 mark in August and approached the 7,500 mark during the rest of the third quarter. On September 21, the DAX posted an interim high of 7,451.62 points. Due to continued uncertainty on the capital markets with regard to US budgetary policy and further development in countries hit by the euro crisis, the DAX fell back below the important 7,000 point mark by mid-November. Increased optimism on the stock markets about a timely solution to the budget dispute in the USA and positive news from the US Federal Reserve, which plans to continue its low-interest-rate policy with a new interest rate pledge under certain conditions, resulted in positive development of the German leading

index. On December 20, 2012, the DAX hit its annual high of 7,672.10 points. At the end of the reporting period, the DAX closed on December 28, 2012 at 7,612.39 points. This is a price increase of 25.30% in comparison to the start of the year.

The German technology index, in which SMA is listed, followed a similar course. The TecDAX started 2012 successfully at 699.66 points. After a strong first quarter with an upturn of 12.89%, the TecDAX was at 789.87 points on March 30, 2012. Technology stocks declined to the middle of the year and closed June 29, 2012, at 743.74 points. In the second half of the year, technology stocks rose to an interim high of 829.72 points on October 5, 2012 on the basis of better-than-expected economic data from the euro zone and positive US labor market data. By November 16, 2012, the TecDAX, like the DAX, fell to 790.99 points as a result of bad news from the USA and the countries hit by the euro crisis. In the further course of the fourth quarter, the technology index received positive stimuli from the US government, which held out the prospect of a possible solution to the US budget blockade. On November 29, 2012, the TecDAX hit its annual high of 844.09 points. By the end of the year on December 28, 2012, the TecDAX was at 828.11 points, 18.36% higher than at the start of 2012.

Performance of the SMA Share 2012 in %



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Basis Data

Security code number	A0DJ6J
ISIN	DE000A0DJ6J0
Stock market code	S92
Reuters	S92G.DE
Bloomberg	S92 GR
Listing	Prime Standard of Frankfurt Stock Exchange
Initial public offering	June 27, 2008
Share class	Bearer shares without par value
Share capital	€34.7 million
Number of shares	34.7 million
Index	TecDAX, ÖkoDAX, CDAX, Prime All Share

€1.2 billion and €1.5 billion and EBIT margin of between 5% and 10% for 2012. Subsequently, the SMA share price sank 5.89% to €35.40 (closing price Xetra trading platform). On March 29, 2012, the German Bundestag adopted the amendment to the EEG (Renewable Energy Sources Act) relating to photovoltaics. On the same day, SMA announced the final figures for fiscal year 2011 and confirmed the sales and earnings forecasts for 2012. Although business figures developed in line with expectations, the SMA share price dropped and fell below the €30 mark by the beginning of April 2012 (€29.35 closing price Xetra trading platform on April 4, 2012).

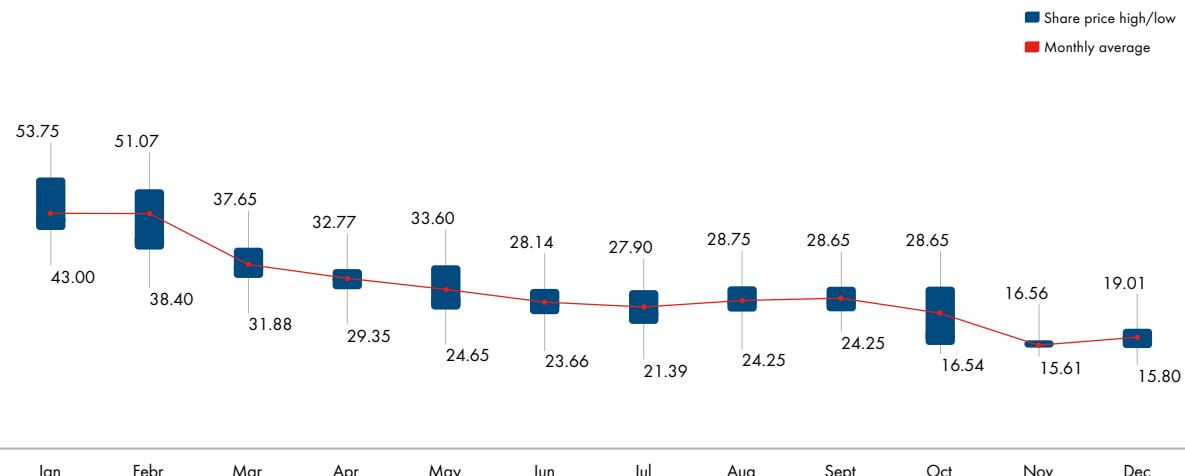
DIFFICULT MARKET ENVIRONMENT INFLUENCES SMA'S SHARE PRICE PERFORMANCE

SMA shares began 2012 positively at a price of €43.48 (January 2, 2012, closing price Xetra trading platform). In February 2012, the German Federal Government announced the premature and drastic reduction of solar subsidies. This led to negative development of the SMA share price and deep uncertainty on the capital markets. The SMA Solar Technology AG Managing Board published an exact forecast for the 2012 fiscal year for the first time on March 2, 2012. On the basis of the expected changes to subsidy conditions, the Managing Board expected sales of between

WAVE OF INSOLVENCIES IN THE SOLAR SECTOR ALSO AFFECTS SMA SHARE PRICE

Over the rest of the second quarter, investor interest in solar stocks declined considerably due to numerous insolvencies in the solar industry. The SMA share price sank to €23.33 on June 12 (closing price Xetra trading platform). In mid-June, the SMA share received positive stimuli from the renewed confirmation of the sales and earnings forecast for 2012 and numerous innovations that SMA presented at Intersolar, the leading trade fair for the photovoltaics industry. At the end of the first half of 2012, the SMA share price was €26.99 (June 29, 2012, closing price Xetra trading platform).

Highs and Lows of the SMA Share in 2012 in €



Price performance was negative in the third quarter, too, due to the difficult situation in the solar sector. On July 17, 2012, the SMA share posted an interim low of the reporting period at €21.38 (closing price Xetra trading platform). With the publication of the mid-year figures on August 9, 2012, the Managing Board raised the lower end of the sales and earnings forecast for 2012 to sales between €1.3 billion and €1.5 billion with an operating profit (EBIT) between €100 million and €150 million. Nevertheless, the price of the SMA share weakened by 7.7% to €26.20 on this date (closing price Xetra trading platform). The SMA share price was given positive impetus by the anticipated announcement of provisional sales and earnings figures during the Capital Markets Day planned for the end of September 2012. On September 27, 2012, the SMA share price was €28.65 (closing price Xetra trading platform).

SMA'S OUTLOOK FOR 2013 IS CHARACTERIZED BY EUROPEAN MARKET DEVELOPMENT EXPECTED TO DECLINE SHARPLY

The SMA Managing Board published an outlook for the 2013 fiscal year for the first time on October 18, 2012. Due to the massive subsidy cuts for the solar industry in Europe and expected sharp increases in price pressure, the SMA Managing Board is anticipating a sharp fall in sales in 2013 and cannot rule out the possibility of making a loss. As a result, the SMA share price fell below the €20 mark. On November 8, 2012, SMA released the sales and earnings figures for the third quarter of 2012 and again confirmed the forecast for the current fiscal year. The SMA share did not benefit from this announcement. On the basis of bleak market prospects for 2013, the SMA share posted its lowest price since the IPO in 2008 at €15.66 (closing price Xetra trading platform) on November 27, 2012. The SMA share finally gained positive impetus from the announcement on December 20, 2012 that SMA had acquired a majority shareholding of 72.5% in Jiangsu Zeversolar New Energy Co., Ltd., a leading inverter manufacturer in China. By the end of the year, the share price had climbed to €19.01 (closing price Xetra trading platform, December 28, 2012). This is a 56.28% drop in comparison to the beginning of the year.

REPORTING ON THE DECLINE OF LISTED SOLAR SHARES AROUND THE WORLD

As a PV inverter manufacturer and energy management group, SMA operates in a challenging market environment.

Last year, listed solar stocks posted significant falls with regard to their market capitalization worldwide. Many investment banks adjusted their research activities for the solar sector accordingly. Although SMA remains of interest to analysts as the market leader, the number of banks and securities firms producing regular reports fell from 25 to 13 in the reporting period.

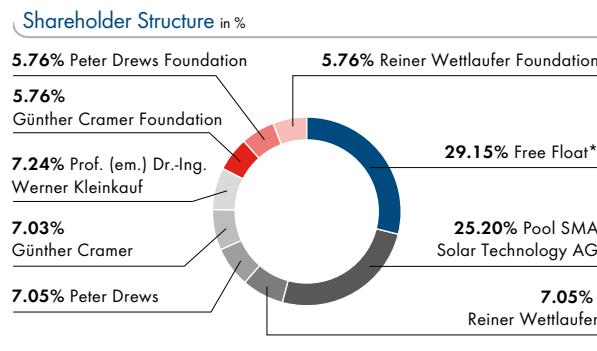
Research Coverage

Institution	Name
Bank of America/Merrill Lynch	Claus Roller
Citi	Jason Channell
Commerzbank	Lauren Licuanan
Deutsche Bank	Alexander Karnick
DZ Bank	Sven Kürten
Equinet Bank	Stefan Freudenreich
HSBC Trinkaus & Burkhardt	Christian Rath
Independent Research	Sven Diermeier
Landesbank Baden-Württemberg	Erkan Aycicek
Macquarie Group	Robert Schramm-Fuchs
Main First	Andreas Thielen
Metzler	Daniel Seidenspinner
Natureo Finance	Ingo Queiser
Warburg Research	Christopher Rodler

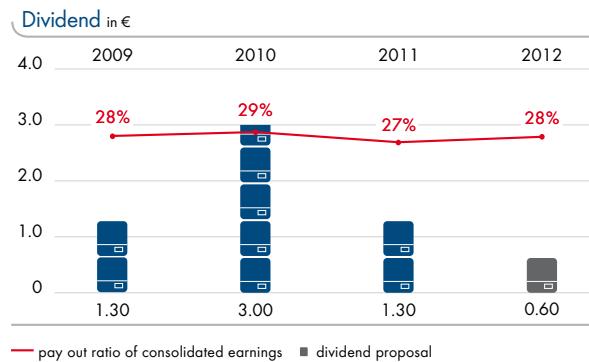
STABLE SHAREHOLDER STRUCTURE

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

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*Free Float calculated according to guidelines for stock indices of Deutsche Börse



ANNUAL GENERAL MEETING – LARGE MAJORITY ON ALL DECISIONS

The Annual General Meeting of the SMA Group was held at Kongress Palais Kassel on May 22, 2012 with more than 450 shareholders attending. The shareholders granted discharge to the Managing Board and Supervisory Board by a large majority of almost 100% and decided on a dividend of €1.30 per qualifying bearer share. This equates to a payout ratio of 33.8% and is therefore the highest payout ratio since the IPO in 2008. SMA will continue to attach a great deal of importance to the participation of shareholders in the Company's development and therefore targets a payout ratio of 20% to 40%. All relevant information and documents regarding the 2012 Annual General Meeting as well as the speech of Pierre-Pascal Urban, CEO, are available on the Web site at www.SMA.de/AnnualGeneralMeeting. ☎

The next SMA Solar Technology AG Annual General Meeting will be held on May 23, 2013 at Kongress Palais Kassel.

SMA IMPRESSES WITH NUMEROUS INNOVATIONS FOR GROWTH MARKETS AT CAPITAL MARKETS DAY

The Capital Markets Day 2012 took place on September 26, 2012 on the margin of the 27th EU PVSEC in Frankfurt/Main. As part of the management presentation, CEO Pierre-Pascal Urban spoke about the changed conditions in major European markets in the solar sector with regard to changes in demand for solar inverters. He also explained the change in what is driving demand in the solar industry from a pure focus on returns to an economical energy supply. He also announced provisional sales and earnings figures for the third quarter of 2012 and confirmed the outlook for 2012 as a whole. Pierre-Pascal Urban also explained that the planning figures for 2013 are being specified in detail at present and the Company will only be able to provide a forecast for the coming fiscal year once the analysis has been completed. In addition, Volker Wachenfeld, Executive Vice President of Off-Grid Solutions, demonstrated comprehensive solutions for controlling solar diesel hybrid systems and their potential in sunny countries. Using the example of the first flagship project in South Africa, he explained SMA's intelligent system solution. The SMA Fuel Save Controller is an intelligent interface between the solar and diesel generators. If the sun supplies enough energy during the day, the consumption of fossil fuel and the emissions of CO₂ can be reduced to a minimum. Subsequently, Greg Smith, Trainer at the US Solar Academy, presented the latest products developed specially for the rapidly expanding North American market and explained SMA's technological unique selling points with the help of numerous examples. Following the management presentation, Roland Grebe,



See also www.SMA.de/AnnualGeneralMeeting

Chief Technology Officer, presented SMA's product solutions for important topics of the future in a tour of the SMA stand at the EU PVSEC.

FOCUS ON ESSENTIAL EVENTS

Credibility, transparency and up-to-dateness characterize our communication culture and investor-oriented information policy. We therefore maintain regular dialog with the capital market. Our Investor Relations Web site www.IR.SMA.de provides comprehensive and up-to-date information about our Company. This includes, for instance, financial publications and a financial calendar. An interactive share chart enables comparisons between SMA share prices and selected stock market indices. In addition to these publications, Pierre-Pascal Urbon, Chief Executive Officer, addressed the capital market regularly via video message.

The Managing Board expected interest in listed solar shares to decrease as early as the beginning of fiscal year 2012. This was also apparent from the diminishing number of banks and securities firms producing regular reports. This is why the Managing Board and the Investor Relations team concentrated their activities on essential conferences and participated in two investor conferences in Frankfurt in the 2012 fiscal year. Key topics included major trends in the solar industry in 2012, SMA's unique selling points, technological approaches to cost reduction, and SMA's product innovations. On September 26, 2012, SMA organized its Capital Markets Day and presented analysts and institutional investors with innovative SMA technologies for important topics for the future and growth markets, such as the Sunny Central Compact Power series, whose weather-resistant housing allows it to be used under very challenging climatic conditions. An investor conference followed in London in October 2012.

In addition to numerous teleconferences with institutional investors, SMA is also making stronger use of new media channels such as the SMA Corporate Blog www.SMA-Sunny.com to keep shareholders informed.

SMA will also adhere to this concentration strategy in the coming year and only participate in essential conferences as well as limiting road shows to the financial centers of Frankfurt, London and Zurich. Lydia Sommer will be responsible for Investor Relations and communication with analysts and investors as the new Chief Financial, Legal and Compliance Officer in future.

SMA Share Key Figures

		2012	2011
Year's Closing Price (Xetra)	€	19.01	43.17
Annual High (Xetra)	€	46.47	89.25
Annual Low (Xetra)	€	15.66	36.05
Number of Shares	million shares	34.7	34.7
Market Capitalization at the End of the Year	€ million	659.65	1,498.00
Earnings per Share	€	2.16	4.79
Dividend per Share	€	0.60*	1.30
Dividend Amount	€ million	20.8	45.11
Dividend Pay Out Ratio	%	27.7	33.8
Dividend Yield at the End of the Year	%	3.2	3.0
Price Earnings Ratio at the End of the Year	€	8.8	9.0
Average Volume of Shares Traded per Trading Date (Based on the Number of Shares Traded on Xetra)	thousand shares	83.8	102.0
Position on the TecDAX at the End of the Year			
According to Market Capitalization		23	12
According to Trading Volume		9	7

*Dividend Proposal

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CORPORATE GOVERNANCE REPORT

SMA attaches great importance to adherence to the principles of good corporate governance and is guided by the recommendations and suggestions in the German Corporate Governance Code (DCGK). The Managing Board and Supervisory Board dealt comprehensively with its requirements, especially the amendments of May 2012. On December 5, 2012, following deliberations, the Managing Board and the Supervisory Board issued an amended Declaration of Conformity, reproduced below, pursuant to Section 161 (1), sentence 1 of the German Stock Corporation Act (AktG) replacing the Declaration of Conformity dated December 6, 2011, which was published on our Web site www.SMA.de. 

DECLARATION OF CONFORMITY CONCERNING THE GERMAN CORPORATE GOVERNANCE CODE

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

Since the last Declaration of Conformity dated December 6, 2011 SMA Solar Technology AG has complied with the recommendations of the "Regierungskommission Deutscher Corporate Governance Kodex" (Government Commission German Corporate Governance Code) in the version dated May 26, 2010, published in the electronic Federal Gazette (Bundesanzeiger) on July 2, 2010, with the exception mentioned below in number (1). The Company has complied with the recommendations of the "Regierungskommission Deutscher Corporate Governance Kodex" (Government Commission German Corporate Governance Code) in the version dated May 15, 2012, published in the electronic Federal Gazette (Bundesanzeiger) on June 15, 2012, with the following exceptions and will continue to comply with them with the following exceptions:

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

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

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

The Managing Board and the Supervisory Board are therefore considering subjecting the remuneration structure for the Supervisory Board to a review during the course of 2013.

Niestetal, December 5, 2012

The Managing Board

The Supervisory Board

TRANSPARENCY

Transparency is a key element of good corporate governance. Our aim is to provide all shareholders, financial analysts, media and interested members of the public at large with timely information about the business situation and significant corporate changes. All important information is also made available on our Web site www.SMA.de.  Reporting on the business situation and the results of operations takes place in the Annual Report, in the press conference on Annual Results, and in the Quarterly and Half-Yearly Financial Reports. Furthermore, the public is informed through press releases and, wherever stipulated by the law, by means of ad hoc statements. Moreover, social networks are used to provide information on business data and important events. Transparency is particularly

important whenever deliberations and decisions of the Company might lead to conflicts of interest. Any conflicts of interest that may have arisen were disclosed by those members of the corporate bodies affected when discussion of this subject commenced. The member concerned did not participate in the adoption of any necessary resolutions by the Managing Board or the Supervisory Board. In respect of the fiscal year that has concluded, the following points should be mentioned:

- ~ There were HR service agreements between SMA Solar Technology AG and team-time GmbH regulating in particular the allocation of temporary employees. The sole shareholder and manager of team-time is the wife of a member of the Managing Board. Confirmation that the agreements concluded between the Company and team-time GmbH are in line with prevailing market conditions was provided by a report prepared by a leading German auditing firm. The auditors examined this report as part of the audit of the Annual Financial Statements 2010 and did not challenge it. Furthermore, a fairness opinion drawn up by a leading auditing firm confirmed that the contractual offer made by team-time GmbH was financially fair. The member of the Managing Board affected by the conflict of interest did not participate in the resolution that dealt with cooperation with team-time GmbH. team-time GmbH terminated the framework contract on the allocation of temporary employees on December 31, 2012.
- ~ SMA Solar Technology AG concluded a consultancy contract with Mr. Cramer that is limited in time and in content to Mr. Cramer's membership of the Board of Directors of the German Solar Industry Association e.V. (BSW). In accordance with the contract, for the duration of his Board duties for the German Solar Industry Association e.V. (BSW), Mr. Cramer is provided with an office, a company car and necessary means of communication for these duties. There is no remuneration for the consulting duties. Mr. Cramer's expenses are reimbursed (details are given in the Remuneration Report on page 30 et seqq.).  The Supervisory Board approved the conclusion of the contract at its meeting on May 26, 2011. Mr. Cramer did not participate in the vote.

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

At the end of the fiscal year and at the time this Report was published, the current members of the Managing Board and the Supervisory Board held, either directly or indirectly, 46.4% (2011: 46.4%) of all the shares issued. The Managing Board members held a total stake of 0.6% (2011: 0.6%) in the share capital and the Supervisory Board members held a stake of 45.8% (2011: 45.8%) in the share capital.

REMUNERATION REPORT

The Remuneration Report is a constituent part of the audited Consolidated Management Report and is shown on page 30 et seqq. 

THE COMPANY'S CORPORATE BODIES AND THEIR FUNCTIONS

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



See also Remuneration Report page 30 et seqq.



See also Remuneration Report page 30 et seqq.

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MANAGING BOARD

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

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

In March 2012, Mr. Pierre-Pascal Urbon was appointed as a member of the Managing Board for another five years, effective from October 1, 2012. In October 2012, Ms. Lydia Sommer was appointed to the Managing Board as a new member. Since November 1, 2012, the Managing Board has thus consisted of five members: Roland Grebe (Chief Technology Officer), Jürgen Dolle (Chief Human Resources and Operating Officer), Lydia Sommer (Chief Financial, Legal and Compliance Officer), Pierre-Pascal Urbon (Chief Executive Officer) and Marko Werner (Chief Sales Officer).

SUPERVISORY BOARD

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

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

The committees of the Supervisory Board are made up as follows:

Presidial Committee	Günther Cramer (Chairman), Dr. Erik Ehrentraut, Dr. Günther Häckl, Mirko Zeidler
Audit Committee	Dr. Erik Ehrentraut (Chairman), Johannes Häde, Alexander Naujoks, Reiner Wettlaufer
Nomination Committee	Peter Drews (Chairman), Dr. Erik Ehrentraut, Prof. (em.) Dr.-Ing. Werner Kleinkauf
Mediation Committee	Günther Cramer, Dr. Erik Ehrentraut, Dr. Günther Häckl (Chairman), Joachim Schlosser



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

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

The Supervisory Board reports annually on the focus of its activities and deliberations in the Supervisory Board Report (see page 137 et seqq.). You may consult the Rules of Procedure of the Supervisory Board on our Web site www.IR.SMA.de. The members of the Supervisory Board take the training and specialized training measures necessary for their tasks on their own responsibility, whereby they receive suitable support from the Company.

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

1. At least 25% of the Supervisory Board are to be women. In the process, both the shareholders and the employees should aim to provide at least one female Supervisory Board member. The Supervisory Board also aims for a share of at least 25% when the Managing Board is appointed. The Managing Board has already set the same objective for recruitment to management positions in the entire Company. This ambitious objective brings great challenges to the Company and is to be realized with the regular new election after next at the latest.

2. Maintain the composition of the Supervisory Board of members with a background of international experience at least in the previous scope.
3. Consideration of particular knowledge and experience in the application of accounting standards and internal control processes as well as in the field of auditing.
4. Consideration of technical expertise, especially also in the field of renewable energies, preferably in the field of photovoltaics.
5. Consideration of Company knowledge.
6. At least half of the shareholder representatives are to be independent. At the same time, at least one member is to possess expertise in the field of accounting or auditing.
7. Consideration of the age limit of 75 years at the end of the term of office.

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

- | | |
|---------------|---|
| Regarding 1 | There are currently no women in the Supervisory Board. The five-person Managing Board now has one female member, Ms. Lydia Sommer. |
| Regarding 2-5 | In the opinion of the Supervisory Board, these objectives are already implemented today. |
| Regarding 6 | Currently, at least three shareholder representatives are to be viewed as independent; two members, one of whom is independent, possess expertise in the fields of accounting and auditing. |
| Regarding 7 | Currently, one member of the Supervisory Board will exceed the age limit of 75 years at the end of his term of office. |

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COOPERATION BETWEEN THE MANAGING BOARD AND THE SUPERVISORY BOARD

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

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

SHAREHOLDERS AND ANNUAL GENERAL MEETING

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



See also IR Web site www.IR.SMA.de

CONSOLIDATED

MANAGEMENT

REPORT

**FISCAL YEAR 2012 –
SMA GENERATES POSITIVE FREE CASH FLOW***

7.2 GW

INVERTER OUTPUT SOLD

€102 MILLION

OPERATING PROFIT

€1.5 BILLION

SALES

* before the dividend payment date



€446.3 MILLION
NET CASH

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THE SMA GROUP: BUSINESS, OBJECTIVES AND STRATEGIES

BUSINESS ACTIVITY

SMA IS THE WORLD MARKET LEADER FOR PV INVERTERS AND INTELLIGENT MANAGEMENT SYSTEMS

SMA Solar Technology AG (SMA) and its subsidiaries (SMA Group) develop, produce and distribute PV inverters, transformers, choke coils, monitoring and energy management systems for PV plants and power-electronic components for railway technology.

As the central switchpoint, the PV inverter is the most important technological component of every PV plant, converting the direct current generated in the photovoltaic cell into grid-conforming alternating current. At the same time, the PV inverter takes over grid management and optimizes the energy yield of the PV plant as a whole. PV inverters from SMA stand out because of their especially high efficiency of up to 99%, which is a decisive factor for the economic efficiency of the whole system. High-quality SMA PV inverters are designed for a lifespan of over 20 years. SMA is the only manufacturer that can offer the technically appropriate type of inverter for every type of photovoltaic module and all power classes and for various regional requirements around the world – both for grid-connected applications and for stand-alone operation.

SMA is also well positioned to benefit from the growth potential of the global PV market in the long term and to promote efficient use of photovoltaics by developing innovative technologies. Self-consumption, i.e. the share of energy from the PV system that a household can use itself, will become much more important in Europe and America in future. Especially for this growth segment, SMA offers the SMA Smart Home, an integrated energy management solution. As important components of the SMA Smart Home, the Sunny Home Manager for intelligent optimization of self-consumption and the Sunny Boy Smart Energy for

temporary storage of solar power are tailored exactly to future energy supply. Innovative SMA system technology makes it possible, for example, to link forecasting instruments with the consumption behavior of end users and storage technology. SMA ensures the increased profitability of PV plants, especially in photovoltaics markets with variable electricity rates. SMA technologies thus enable end users to cover their power consumption largely with their own PV plants and reduce their dependence on rising energy prices. Also in this way, the burden on the transmission grids can be eased and the costly expansion of low-voltage grids can be reduced significantly.

In sunny regions, supplementing stationary diesel generators with photovoltaics, known as solar diesel hybrid solutions, offers further great potential and contributes to significantly reducing a generator's fuel consumption and therefore its costs. SMA technologies like the Fuel Save Controller ensure economical energy supply with solar diesel hybrid systems with or without restricted grid access. In conjunction with SMA inverters, it takes on the need-based control of solar power feed-in depending on load and generation profiles. The SMA Fuel Save Controller also allows the system to be monitored via remote diagnosis and offers a high degree of efficiency and flexibility for the system operator with optimum energy management. Together with the SMA Fuel Save Controller, SMA inverters also perform extensive grid management functions. The hybrid system can be expanded on a modular basis at any time, meaning it can be adjusted to the specific conditions of the plant. With its extraordinary skill in system technology and more than 20 years of experience with hybrid solutions, SMA has excellent qualifications to successfully tap the high potential of these new markets.

In addition, SMA customers throughout the world benefit from comprehensive services: from support in the installation and commissioning of PV plants, via a quick and simple device-replacement service to the free SMA Service Line for technical questions. Moreover, at the SMA Solar Academy SMA trains plant planners, installers, qualified electricians and people interested in solar power in seminars about photovoltaics.

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SMA is present in 21 countries and six continents in all important markets and therefore benefits from the international growth of the PV market. No other inverter manufacturer has a comparable international presence. Modern production sites with an overall annual capacity of up to 11.5 gigawatts (GW) ensure local added value in Niestetal and Kassel (Germany), Denver (USA) and Mississauga near Toronto (Canada). The competence center for coils (electromagnetic components) is in Zabierzów, near Krakow (Poland). SMA also maintains its own purchasing organizations in Germany, Poland, the USA and China. Furthermore, at the end of December 2012, a contract was signed for the acquisition of a majority shareholding of 72.5% in Jiangsu Zeversolar New Energy Co., Ltd., a leading inverter manufacturer in China, with economic effect from January 1, 2013.

Measured by annual sales of €1.5 billion, SMA was the world's largest and strongest-selling manufacturer of solar inverters in 2012. According to its own estimates, SMA's market share is nearly 25%. With EBIT of €102 million, SMA closed the year successfully. The EBIT margin of 7% is within the earnings forecast (2011: 14.3%). Consolidated net profit was €75 million. As at December 31, 2012, SMA had 5,584 employees worldwide (not including temporary employees). In 2012, SMA sold 7.2 gigawatts (GW) of inverter output. This is equivalent to supplying energy to 1.9 million households.

SMA has been listed in the Prime Standard of the Frankfurt Stock Exchange (S92) since June 27, 2008. With market capitalization of €660 million¹ SMA is the largest solar company in the TecDax. In recent years, the SMA Group has won multiple awards for its outstanding performance as an employer, and again took first place in the nationwide competition Great Place to Work® in 2012.

OUR VISION AND MISSION

Our vision and mission form the framework for today's tasks and the strategic orientation of SMA. In addition, they strategically connect our employees, shareholders, creditors, customers, suppliers and the public as well as our way of thinking and actions.

Our vision: The future of global energy supply belongs to renewable energies.

Our vision is that people are supplied with 100% renewable energy. SMA is developing appropriate technologies and products for this purpose. This is because fossil fuels are not only getting more expensive but they are also in large part responsible for climate change. Due to a steep decline in production costs and its numerous advantages, photovoltaics will constitute an important part of electricity production in both industrialized and newly industrialized countries in the future. Decentralized energy generation will mean that electricity is generated precisely where it is consumed. New technologies will make a decisive contribution to ensuring that solar power is globally competitive. As in no other type of energy carrier, the applications of solar power range from residential systems, the commercial sector and up to megawatt-class solar power stations. When coupled with smart grids, decentralized storage facilities and intelligent grid and/or load management, the solar inverter will be a decisive switch and control unit. But even developing countries will be able to spur electrification with the aid of photovoltaic power and thus lay the basis for economic growth and well-being for the more than one billion people who still have no access to electricity today.

Our mission: Thanks to its innovative strength and based on growing basic values, SMA will accelerate the global expansion of photovoltaics as part of the energy transition.

Through continued cost reductions, further enhancements and innovations in system technology, we will make the installation, operation and maintenance of PV plants even

¹Closing price on December 28, 2012

simpler, more reliable and secure and above all more cost-effective. Thus, with energy management solutions for the home as well as for trade and industry, we will ensure a high degree of satisfaction for our customers and at the same time enable the cost-effective use of PV technology in solar markets worldwide. Here, we do not only have the specific pricing of our solar inverters in mind but also the life cycle costs of PV plants over their entire service life. In this area, we are increasing energy yields through ever-improving efficiencies and reducing costs through simpler installation options and the broadest possible integration of components and communication, monitoring and protective devices in the inverters. With our high quality standards, we offer our customers a high degree of investment security.

We participate in national and international bodies, associations and institutions such as the German Solar Industry Association (BSW) or the European Photovoltaic Industry Association (EPIA) in order to provide an understanding of the advantages of renewable energies to a wide public and make an active contribution to creating the framework conditions for the expansion of photovoltaics. As the global market and technology leader, we also generate momentum for ecological and social issues and, above all due to our cooperative corporate culture, we are an especially attractive employer for workers all over the world.

PRODUCT PORTFOLIO

Products for a Decentralized Energy Supply

SMA is the sole manufacturer worldwide offering a complete range of solar inverter products and system technology for grid-connected PV plants. The products range from string inverters with an output of 700 watts to

central inverters with an output of 1.8 megawatts (MW) to intelligent energy management solutions that are optimally tailored to the requirements of our future energy supply. SMA thus supplies technically appropriate inverters for all requirements, output ranges and module types. SMA also provides fast and flexible service. It guarantees a high technical availability of PV plants. Moreover, the product range includes innovative power-electronic converter technology for decentralized energy supply systems for short and long-distance railway traffic as well as transformers and chokes.

In addition, SMA offers key technologies for the photovoltaic systems of the future. These include, for example, the battery inverter Sunny Island for implementing off-grid island systems and the Fuel Save Controller as a central component for solar diesel hybrid systems. Sunny Island not only plays a decisive role in supplying energy for remote, off-grid locations, but also in the rapidly growing market for intermediate storage of solar power for grid-connected systems. With the Fuel Save Controller, photovoltaics can be excellently integrated into diesel networks, considerably reducing the consumption of fossil fuels.

SMA also offers modern monitoring systems for PV plants and key technologies for intelligent energy supply structures. These technologies enable end users to cover their power consumption largely with their own PV plants and to reduce their dependence on energy suppliers and rising energy prices by optimizing self-consumption. This is particularly interesting in markets in which photovoltaics is already competing successfully with prices for conventional energy both at the household level and for commercial use.

The **Medium Power Solutions** division is responsible for the Sunny Boy, Sunny Mini Central and Sunny Tripower product families. The division also develops and distributes products used for monitoring PV plants and for energy management. The product families comprise 82 inverters

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and 15 communication products in total. SMA offers single-phase and three-phase inverters with outputs ranging from 700 watts to 20 kilowatts (kW). With the decentralized design of SMA inverters, the output levels of residential and commercial installations of up to 500 kW can be served without problems.

In 2013, SMA is also offering the SMA Smart Home, a unique energy management solution in the photovoltaic market. With the Sunny Boy 5000 Smart Energy, which stores solar power temporarily, and the Sunny Home Manager, which intelligently controls appliances in the household, SMA is making decentralized and renewable household energy supply a possibility for the future. The division mainly serves retail customers. According to a survey by IMS Research (from December 19, 2012), SMA is one of the most popular inverter brands in retail.

With central inverters from the Sunny Central product family, the **Power Plant Solutions** division serves the market for large-scale PV plant with outputs ranging from 500 kW to several megawatts. The product family contains 12 central inverters with numerous variants providing optimal technical solution and maximum investment security for any large-scale project. The inverters are distinguished among other things by extensive grid management functions such as the provision of reactive power and a wide input voltage range. In addition, SMA carries central inverters in its product portfolio that are suited to direct deployment in regions with challenging climatic conditions thanks to their robust housing. As the market leader in this segment, SMA offers complete turnkey solutions that allow feed-in directly to the medium-voltage grid of energy suppliers. The division predominantly serves project business customers.

With its **Service division**, SMA offers customers in Germany and abroad comprehensive after-sales services to guarantee the technical availability of SMA products during a lifespan of more than 20 years. The services encompass warranties, service and maintenance contracts as well as

commissioning. SMA Service presents itself as a universal service provider for the 50.2 Hz conversion of PV plants in Germany. SMA supports electric utility companies in data collection and deals with the entire conversion process – from first contact with the plant operator to quality assurance and reporting. In future, SMA together with strong partners will increasingly offer complete plant service (operation and maintenance) in the North American market, in addition to the primary services for inverters and medium-voltage components already provided. By taking on all services relating to the PV power station, the performance of the total system will be optimized. Through its global network of 90 service hubs, SMA can guarantee a rapid reaction time for the SMA inverter installed throughout the world with a total capacity of more than 25 GW. In the view of the Managing Board, SMA's service structure and processes represent a considerable competitive advantage. No other inverter manufacturer has a comparable service infrastructure. This is confirmed by the study conducted by IMS Research (from December 19, 2012) on customers' criteria for making decisions.

The operations of dtw, Off-Grid Solutions (in future Hybrid Energy Solutions) and Railway Technology are combined under **Complementary Divisions**.

dtw Sp. z o.o. ("dtw") concentrates on the manufacture of technologically innovative core components for the production of inverters, such as inductors and transformers. The Off-Grid Solutions division (in future Hybrid Energy Solutions) develops stand-alone inverters for the Sunny Island series for PV-supported off-grid power supply and system solutions for solar diesel hybrid systems. This system technology allows diesel generators to interact intelligently with PV systems and makes it possible to minimize fuel costs and CO₂ emissions. Railway Technology manufactures converters as individual devices and complete energy supply systems for railway coaches and multiple-unit trains for short and long-distance railway traffic.

IMPORTANT SALES MARKETS AND COMPETITIVE SITUATION

SMA Is Well-Prepared for Demand to Move Outside Europe

According to our own estimates, new PV plants with a photovoltaic output of approximately 31 GW were installed worldwide in 2012. This signals that global demand for photovoltaic plants has increased sharply and reached a new record level (2011: approximately 29 GW). High demand came in particular from the non-European markets North America, Japan and China. For 2013, SMA expects newly installed PV capacity worldwide to grow slightly. The SMA Managing Board estimates that the regional distribution of demand will continue. In 2013, the Chinese market is expected to grow the fastest with newly installed capacity of up to 10 GW, becoming the largest market.

Germany was once again the world's largest photovoltaics market in 2012 with approximately 7.6 GW of newly installed capacity (2011: approximately 7.5 GW). In the first six months of the year in particular, demand for PV inverters was characterized by catch-up effects and demand brought forward. This was caused by the commercial commissioning from December 2011 and the severe subsidy cuts planned by the German Federal Government. The cuts in solar subsidies have already been negatively affecting demand since the third quarter of 2012. For 2013, the Managing Board expects installed capacity of approximately 4 GW.

In the last calendar year, international photovoltaics markets developed in a mixed fashion due to changes in political conditions. In the opinion of the SMA Managing Board, Europe (not including Germany) accounted for almost two-fifths of global demand in 2012. In the reporting period, the solar markets in North America and China accounted for around one-third of global demand and made a significant contribution to growth. Further growth stimuli emanated in particular from the Japanese and Indian markets. Foreign markets will continue to contribute significantly to growth in the future. The Chinese, Japanese and US markets in particular have the potential to compensate for the decline

in the European markets. SMA will therefore press ahead with internationalization outside Europe in a consistent manner. In 2012, new foreign companies were established in Chile and South Africa. In December, SMA signed off the acquisition of a majority shareholding of 72.5% in Chinese inverter manufacturer Jiangsu Zeversolar New Energy Co., Ltd. with economic effect from January 1, 2013. This acquisition secures SMA access to the growth market of China and strategically enhances its position as a global market leader.

The regional shift of demand also led to a change in the size of installations toward larger PV systems. In the Medium Power Solutions division, the product family Sunny Tripower, a PV inverter that is mainly used in medium-sized PV systems, generated more than 50% of the division's sales. The submarket of large-scale solar projects with capacity up to the multi-megawatt range (industrial), which is represented in the Power Plant Solutions division, gained in momentum in 2012. The foreign markets of North America and India were primarily responsible for this, as was Germany. Numerous projects were carried out in North America in particular. With a market share of around 50%, SMA is the market leader in large-scale PV plants in North America.

SMA Is the Global Market Leader

Measured by the 7.2 GW of inverter output sold in 2012 (2011: 7.6 GW), SMA is the global market leader. We estimate that SMA accounted for nearly 25% of global demand. This high market share is unique in the solar industry. With its wide range of products, high product quality and flexibility, presence in 21 countries and unique service structure, SMA is excellently positioned in the global photovoltaics market. SMA also has more than 20 years' experience in the generation of electricity from the combined use of renewable energies and fossil fuels and offers intelligent energy management solutions to meet the requirements of future energy supply systems.

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ORGANIZATIONAL STRUCTURE

Legal Structure of the Group

As the parent company of the SMA Group, SMA Solar Technology AG (SMA) with headquarters in Niestetal near Kassel, Germany, provides all of the functions required for the 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. Via the subsidiary company SMA Railway Technology GmbH, the SMA Group additionally holds 10% of the shares in the Chinese company Changzhou SMA Electronics Co. Ltd., engaged in the field of electrical retrofitting of railway vehicles. This holding was not included in consolidation.

The Consolidated Financial Statements include the parent company and all 29 (2011: 24) subsidiaries including six domestic companies and 23 companies based abroad. In 2012, SMA founded five new companies and included them for the first time in the scope of consolidation. These include firstly the sales and service companies SMA South America SpA and SMA Solar Technology South Africa Pty Ltd. In addition, via SMA Railway Technology GmbH, and another domestic company, the SMA Group founded the Brazilian sales and service company, SMA Brasil Tecnologia Ferroviária Ltda., which was also included in the scope of consolidation for the first time. In Germany, SMA founded two more companies and included them in the scope of consolidation.

Future Organizational Structure

Because of the rapid growth in recent years, the present organizational structure had reached its limits. The SMA Group has therefore organized itself into the Medium Power Solutions, Power Plant Solutions and Service divisions and shifted focus even more directly onto customer requirements and the various market segments. The divisions were endowed with the functions required for operating business. They are also responsible for international business. SMA has bundled finance, human resources, legal, internal auditing, corporate communication, information technology, technology development and facility management in Corporate Functions. The divisions report directly to the Managing Board.

Since fiscal year 2012, SMA has organized its reporting by the Medium Power Solutions, Power Plant Solutions and Service divisions. The operations of dtw, Off-Grid (in future Hybrid Energy Solutions) and Railway Technology will be included in reporting under Complementary Divisions. The financial figures are given with those of the previous year to ensure transparent reporting.



Management and Control

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

Managing Board Expanded

Since November 2012, Ms. Lydia Sommer has been responsible for Finance, Legal and Compliance as a new Managing Board member. Pierre-Pascal Urbon was responsible for this area until October 31, 2012. The Managing Board has since comprised the following members: Roland Grebe (Chief Technology Officer), Jürgen Dolle (Chief Human Resources and Operating Officer), Lydia Sommer (Chief Financial, Legal and Compliance Officer), Pierre-Pascal Urbon (Chief Executive Officer) and Marko Werner (Chief Sales Officer).

Composition of the Supervisory Board

The SMA Supervisory Board, which represents shareholders and employees equally, consists of Günther Cramer (Chairman), Dr. Erik Ehrentraut (Deputy Chairman), Peter Drews, Dr.-Ing. Winfried Hoffmann, Prof. (em.) Dr.-Ing. Werner Kleinkauf and Reiner Wetzlauer for the shareholders. The employees are represented by Dr. Günther Häckl, Johannes Häge, Ullrich Meßmer, Alexander Naujoks, Joachim Schlosser and Mirko Zeidler.

Remuneration Report

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

Managing Board Emoluments

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

Non-Performance-Based Fixed Remuneration

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

Performance-Based Variable Remuneration

The members of the Managing Board also receive a performance-based variable salary, which depends on earnings before taxes (EBT) as recorded in the Consolidated Financial Statements for the current fiscal year audited by the auditor. In the case of negative earnings in any given fiscal year, they are set off against the earnings recorded for the next fiscal year. The target value (EBT) is adjusted annually by the Supervisory Board. If at least 100% of the target value is attained, then the full agreed variable

remuneration may be claimed. If less than 20% of the target value is attained, no claim may be asserted for the variable component. Values in-between are determined on a linear basis. If the target value is exceeded, this does not entitle payment of a higher variable component of the emoluments (cap). A maximum of half of the performance-based annual remuneration that is anticipated will become due is paid out after submission of the Half-Yearly Financial Report. The remainder is paid out after the approval of the Consolidated Financial Statements, which usually takes place at the end of March of the following year. If the Managing Board member's duties do not extend beyond one full fiscal year, then he/she receives one-twelfth of the performance-based variable remuneration determined for the entire fiscal year for each month of the fiscal year in which he/she carries out his/her duties.

Long-Term Bonus

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

Additional Benefits

All Managing Board members are entitled to

- ~ a Company car,
- ~ the employer's contribution up to the contribution assessment ceiling of the statutory social insurance scheme (pension, health, nursing care), even in the case of voluntary insurance and without furnishing any proof, and
- ~ appropriate D&O insurance.

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

Other Contractual Benefits

In the event of death or permanent disability, the emoluments will continue to be paid for six months. In the event of early termination of duties on the Managing Board without a good cause, the compensation payable is limited to the total remuneration for the remaining term of the contract and up to a maximum of one year's emoluments (severance pay cap). If the employment contract with a member of the Managing Board ends because it is amicably cancelled within a period of nine months from a change of control, this member is also entitled to a severance payment amounting to his/her remuneration claims. The same calculation basis applies as in the case of the severance pay cap. All members of the Managing Board are subject to a post-termination covenant not to compete for a period of two years that provides for a compensation payment amounting to 50% of the average gross monthly salary per month. The calculation basis is the annual salary (fixed and variable components) paid

out for the last full calendar year. The Managing Board member must set off any monies earned while he/she is otherwise employed during the non-compete period. The maximum cash value of the compensation sums payable in the case of a covenant not to compete after conclusion of Managing Board duties amounts to €0.470 million (2011: €0.386 million) for each of the Managing Board members Roland Grebe, Pierre-Pascal Urbon and Marko Werner, €0.450 million for Jürgen Dolle (2011: €0.386 million) and €0.385 million for Lydia Sommer (base annual salary). Günther Cramer, Peter Drews and Uwe Hertel waived their rights to compensation payments for the post-contractual covenant not to compete upon conclusion of their Managing Board duties.

In fiscal year 2012, the total emoluments payable to all members of the Managing Board amounted to €2.076 million (2011: €2.617 million plus a single payment of € 0.215 million), of which €0.534 million (2011: €0.543 million) corresponded to variable performance-based emoluments. The Managing Board members receive no separate remuneration for carrying out tasks at subsidiaries.

Remuneration of the Managing Board

€ '000	Remuneration not based on success		Success-based remuneration		Long-term bonus ¹		Additional benefits ² / Others		Total	
	2012	2011	2012 ³	2011	2012	2011	2012	2011	2012	2011
Günther Cramer (until May 26, 2011)	-	102	-	104	-	-	-	10	-	216
Peter Drews (until May 26, 2011)	-	102	-	104	-	-	-	9	-	215
Uwe Hertel (until December 31, 2011)	-	350	-	67	-	-	-	23	-	440
Jürgen Dolle	350	350	48	67	67	-	21	21	486	438
Roland Grebe	350	350	48	67	89	-	22	21	509	438
Pierre-Pascal Urbon	350	350	48	67	89	-	10	15	497	432
Marko Werner	350	350	48	67	89	-	22	21	509	438
Lydia Sommer (from November 1, 2012)	58	-	8	-	-	-	9	-	75	-
Total	1,458	1,954	200	543	334	-	84	335	2,076	2,617 215⁴

¹ Relates to the long-term bonus for fiscal years 2010 to 2012

² The contributions to the D&O insurance totaling €126,140 in 2012 (2011: €42,000) are not included, since they concern the members of corporate bodies of all companies of the SMA Group and an allocation to individual insured persons does not take place.

³ Includes final payments of €1,000 each for fiscal year 2011. No credits were granted nor were any advances paid to Managing Board members during the fiscal year. There are no pension commitments.

⁴ Mr. Hertel retired from the Managing Board as of December 31, 2011. In this connection, Mr. Hertel was promised a single payment of €215,000. With this payment, all of Mr. Hertel's claims resulting from his previous Managing Board duties and relating to his retirement from the Managing Board are satisfied.

Supervisory Board Emoluments

At the Annual General Meeting held on April 30, 2008, remuneration of the Supervisory Board from the fiscal year 2008 onwards was newly regulated in Section 11 of the Articles of Incorporation. Since then, it has remained unchanged. Under these arrangements, at the end of the fiscal year the Supervisory Board members receive a fixed remuneration of €10,000 in addition to reimbursement of their cash expenses. In addition, they receive annual variable emoluments based on the Company's success amounting to €200 per €1 million of net earnings as recorded in the Company's Annual Financial Statements, however not exceeding €20,000. The variable remuneration is payable after the Annual General Meeting that resolves on granting discharge to the Supervisory Board for the fiscal year. The remuneration payable to the Chairman amounts to twice the amount mentioned above and the remuneration payable to his/her deputy amounts to one and a half times the aforementioned amounts. If a Supervisory Board member does not participate in one or several meetings of the Supervisory Board, then his remuneration is reduced by one-third of the total amount in accordance with the provisions of the Articles of Association.

Supervisory Board members who sit on a committee also receive €1,500 per meeting day and each committee chairman receives twice the aforementioned amount. No remuneration is payable for meetings of the Nomination Committee. The remuneration is payable at the end of the fiscal year. Supervisory Board members who have only sat on the Supervisory Board or a committee for part of the fiscal year receive remuneration *prorata temporis*.

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

The performance-based remuneration payable to Supervisory Board members does not contain any components that depend on the Company's long-term success (e.g. share options or phantom stocks). As at December 31, 2012 11 of the members of the Supervisory Board held shares in SMA.

The total emoluments payable to the members of the Supervisory Board amounted to a total of €0.388 million in the fiscal year (2011: €0.484 million), of which €0.173 million were variable emoluments (2011: €0.268 million).

According to Item 5.4.6 Sentence 4 of the German Corporate Governance Code, the members of the Supervisory Board receive compensation commensurate to their tasks and the situation of the Company. In its most recent amendment published in the Federal Gazette on June 15, 2012, Sentence 5 recommends that performance-based compensation, if granted to Supervisory Board members, should be focused on sustainable Company development. It is unclear whether the current compensation arrangement for the Supervisory Board follows the Code's recommendation, because the latter contains no solid definition of the term "sustainable." The Managing Board and the Supervisory Board are therefore considering subjecting the remuneration structure for the Supervisory Board to a review during the course of 2013. Because changes to the remuneration structure would also require the amendment of Section 11 of the Articles of Incorporation, the Managing Board and Supervisory Board will consider submitting a proposal for amendments to the next Annual General Meeting.

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Remuneration of the Supervisory Board

€ '000	Remuneration not based on success		Success-based remuneration		Remuneration for committee duties		Total	
	2012	2011	2012	2011	2012	2011	2012	2011
Günther Cramer (Chairman from May 26, 2011)	18.3	12.0	23.8	24.0	12.0	3.0	54.1	39.0
Peter Drews (from May 26, 2011)	10.0	6.0	13.0	12.0	-	-	23.0	18.0
Siegfried L. Drueker (until May 26, 2011)	-	4.0	-	8.0	-	-	-	12.0
Dr. Erik Ehrentraut (Chairman until May 26, 2011; Deputy Chairman from May 26, 2011)	15.0	17.0	19.5	34.0	27.0	31.5	61.5	82.5
Dr. Günther Höckl	10.0	10.0	13.0	20.0	6.0	6.0	29.0	36.0
Johannes Häde	10.0	10.0	13.0	20.0	10.5	10.5	33.5	40.5
Dr. Winfried Hoffmann	10.0	10.0	13.0	20.0	-	-	23.0	30.0
Dr.-Ing. Martin Hoppe-Kilpper (until May 26, 2011)	-	4.0	-	8.0	-	-	-	12.0
Prof. (em.) Dr.-Ing. Werner Kleinkauf	10.0	9.4	13.0	18.9	-	-	23.0	28.3
Ullrich Meßmer	10.0	9.4	13.0	18.9	-	-	23.0	28.3
Alexander Naujoks	9.6	10.0	12.5	20.0	10.5	10.5	32.6	40.5
Joachim Schlosser	10.0	10.0	13.0	20.0	-	-	23.0	30.0
Reiner Wettlaufer (Deputy Chairman until May 26, 2011)	10.0	12.0	13.0	24.0	10.5	15.0	33.5	51.0
Mirko Zeidler	10.0	10.0	13.0	20.0	6.0	6.0	29.0	36.0
Total	132.9	133.8	172.8	267.8	82.5	82.5	388.2	484.1

Beyond the remuneration of the Supervisory Board, the employee representatives that are employees of the Company receive fee payments unrelated to their Supervisory Board duties. From such duties, the employee representatives received a total of €0.370 million (previous year: €0.379 million). SMA Solar Technology AG concluded a consultancy contract with Mr. Cramer for the duration of his Board duties in the German Solar Industry Association (BSW) that is limited both in terms of time and content. There is no remuneration for these duties. However, other expenses totaling approximately €24,000 were incurred. SMA Solar Technology AG also concluded a consultancy contract with Mr. Hoffmann that is limited in terms of content. There is no remuneration for these duties. However, other expenses totaling approximately €2,500 were incurred.

Other

The Company has taken out professional indemnity insurance (D&O insurance) for the members of the corporate bodies of all companies of the SMA Group. It is effected or extended every year. The insurance covers the personal liability risk of the members resulting from a breach of duty when exercising their duties in the event any claims for economic losses are asserted against them. The deductible in the policy for the fiscal year 2012 was 10% of the damage, however no higher than one and a half times the fixed annual emoluments of the member of the corporate body.

Information Concerning Takeovers Required by Section 315 (4) HGB

Number 1: The share capital of SMA Solar Technology AG amounts to €34.7 million. The capital is divided up into 34,700,000 no-par-value bearer shares.

Number 2: Each share has the right to one vote. On October 1, 2010, the four founders and main shareholders of SMA Solar Technology AG Günther Cramer, Peter Drews, Prof. (em.) Dr.-Ing. Werner Kleinkauf and Reiner Wetzlaufer transferred equity stakes to the next generation within their families by way of a gift. The new shareholders concluded a pool agreement for a period of seven years. During the term of this agreement, the voting rights emanating from the shares transferred may only be exercised as a block vote. In addition, the shares may only be sold to third parties with the consent of the other members of the pool or if narrowly defined prerequisites are satisfied. At the end of the fiscal year, the shareholders who coordinate their voting rights in "Poolvertrag SMA Solar Technology AG" hold a total of 8,744,470 shares or 25.200% of the Company's voting rights. Beyond this, the Managing Board is not aware of any restrictions affecting voting rights or the transferability of shares.

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

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

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

Number 7: The Articles of Incorporation include the provisions on the powers of the Managing Board regarding Authorized Capital II. The Managing Board, after obtaining the consent of the Supervisory Board, was entitled to increase the share capital on one or several occasions by up to a total of €10 million by issuing new bearer shares in return for cash contributions and/or contributions in kind in the period up to December 31, 2012. The Managing Board, with the consent of the Supervisory Board, was entitled to cancel the statutory subscription rights of shareholders in the case of capital increases in return for contributions in kind for the purpose of issuing shares to employees of the Company and companies affiliated with the Company, in the case of fractions and in the case of capital increases in return for cash contributions if the issue amount of the new shares does not fall significantly below the stock exchange price of shares of the same class and terms that are already listed at the time the Managing Board sets the final issue amount and in such cases, the total pro rata amount of the issued capital attributable to the new shares in respect of which the subscription right is excluded may not exceed 10% of the issued capital available at the time the new shares are issued. Furthermore, and following a resolution adopted by the Annual General Meeting on May 27, 2010, the Managing Board, in the period up to May 26, 2015, is

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

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

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

Corporate Governance Statement

The SMA Corporate Governance Statement (Section 289a of the German Commercial Code) has been posted on the web site of SMA Solar Technology AG: www.IR.SMA.de. 

OBJECTIVES, CORPORATE STRATEGY AND ENTERPRISE MANAGEMENT

FINANCIAL GOALS

SMA is pursuing the financial goal of sustainably increasing the value of the SMA Group. The value-oriented management system is an integral component of the uniform controlling and planning processes throughout the Group. The most important management parameters for us are sales, the operative earnings margin (EBIT margin), research and development expenses, net working capital in relation to sales and investments.

Sales and Earnings Targets

SMA's sales and earnings situation depends on market share, price dynamics and the development of the global market. With our wide range of products, our international presence, a sales offensive and the access to the Chinese market gained via Zeversolar, the Managing Board expects that we will maintain or even slightly improve upon our market share of nearly 25% in the established photovoltaics markets in the current fiscal year.

For 2013, the SMA Managing Board expects moderate growth in the global photovoltaics market. The sales forecast is shaped by severe subsidy cuts in European markets and various assumptions regarding market development in the different photovoltaics markets and submarkets.

All scenarios assume that the fall in specific selling prices will continue in 2013. The upper end of the sales forecast, €1.3 billion, assumes that there will be a slight rise in global demand. In this scenario, the established foreign photovoltaics markets compensate for the expected decline in demand.

in Europe, particularly in Germany. In addition, due to the current lower price level for PV plants, young photovoltaics markets are growing more quickly. The lower end of the sales forecast, €0.9 billion, assumes that there will be a worldwide fall in overall demand for PV plants.

In such a short space of time, we will be unable entirely to offset the decrease in sales and the high pricing pressure with new products, lower cost prices and advances in productivity. The SMA Managing Board therefore expects to break even, at best, but does not rule out making a loss.

Research and Development Targets

SMA is a technology-driven company. The long-term expansion of research and development lies at the heart of our corporate strategy. Therefore, development expenditure constitutes an important management parameter. At the end of the fiscal year, SMA employed 1,000 research and development employees worldwide and set new standards for the photovoltaics industry in all fields of application for PV inverters and energy management systems. SMA will continue to press ahead with its research and development activities in the future in order to retain its technological leadership. In 2013, the Managing Board expects development expenditure (including capitalized development projects) to increase to up to €120 million. In addition, SMA will expand its network of strategic research and development cooperation in a targeted fashion.

Net Working Capital

Net working capital is the total amount of short-term, interest-free working capital (inventories plus accounts receivable less accounts payable). In the medium term, SMA expects a slight increase in net working capital, which should amount to 19% to 22% of sales in future (December 31, 2012: 18.3%). We are aiming to reduce inventories of raw materials, consumables and supplies in a consistent manner. The higher target value when compared to the reporting date is primarily due to stronger foreign and project business. These businesses are generally accompanied by longer payment periods.

Capital Expenditure

SMA will adjust its investment behavior in view of the high level of market uncertainty. For the fiscal year 2013, SMA is planning investments in land and buildings of up to €10 million. SMA will invest up to €65 million in machinery and equipment. Investments for 2013 are characterized by aftereffects from previous years, such as the expansion of the IT infrastructure, that has not kept pace with the rapid building expansion at SMA in recent years. In addition, investments for the start of production of new product lines are scheduled in 2013 and 2014. Investments in intangible assets primarily concern the capitalization of development projects and in the medium term amount to up to €45 million. The aim of SMA is that total annual investments do not surpass 10% of sales in the medium term.

Dividend Policy

SMA attaches great importance to a balanced dividend policy. By setting a target dividend payout ratio of between 20% and 40% of consolidated earnings, we want to ensure that the SMA Group has enough funds both for future growth and for temporary crises. At the same time, we want to secure a fair share of the profits for our shareholders.

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NON-FINANCIAL PERFORMANCE INDICATORS

Research and Development

Intelligent System Technology for New Direction of the Energy Sector

The realignment of the energy sector is gaining momentum. Purchase decisions are based less and less on returns and more on the competitive supply of energy. Applications for which photovoltaics is the more cost-effective and sustainable alternative compared to other ways of generating energy are growing in significance due to the sharp fall in production costs for solar power. For many operators, a PV system on their own residential or commercial roof is no longer just an investment, but the cheaper alternative to domestic energy generated by conventional means. In Germany, Japan and the USA in particular, interest in intelligent energy management to optimize self-consumption is therefore on the rise. SMA already offers suitable solutions in this area that can be integrated into existing systems and offer users the maximum degree of independence and convenience. In the next few years, SMA is expecting the change in the photovoltaics markets to trigger increased demand for industrial applications in the power plant sector. This calls not only for innovative technology but also prodigious experience and skill in system and grid management. SMA is a front-runner in all segments and is therefore in the best position to actively help shape and promote the energy revolution in Europe and future energy supply around the world.

Extension of Technology Leadership through Development of Future Technologies and Intelligent System Solutions

Development of New Product Platforms

In order to benefit from the changed market requirements in the solar industry as best we can and to keep pushing the

reduction of costs, SMA has promptly focused its research and development activities on the new conditions. SMA plans to continue expanding its technology and innovation leadership. The research and development department has broken new ground and is concentrating on developing brand-new product platforms. Our new development concept provides for a modular design. This not only enables us to cut costs but also increases the rate of innovation. The first products of the new generation will be launched in 2014.

Maximum Increase of Self-Consumption with the SMA Smart Home

In Medium Power Solutions, research and development is focused on optimizing self-consumption and integrating storage. After the successful market launch of the Sunny Home Manager, the intelligent energy manager for households with PV systems, SMA introduced the SMA Smart Home for the first time at Intersolar 2012. The integrated system concept – based on the Sunny Home Manager, an optional battery and other system components – automatically coordinates power consumption in the household with solar power generation without compromising on convenience for the occupants. It considers weather forecasts, the household's consumption behavior and the current demand on the power grid and the energy markets. This results in a significant rise in the self-consumption rate, savings in energy costs and associated increased independence from increasing energy prices for system operators, and less strain on the power distribution grids. SMA's most interesting new concept for the expert audience in this context was the Sunny Boy 5000 Smart Energy inverter, a wall-mountable PV inverter with an integrated battery, which stores solar power temporarily and enables it to be used later, for example, in the evening. While larger storage systems can only be fully utilized on high-yield days, the Sunny Boy 5000 Smart Energy's battery, which only holds around two kilowatt hours, charges quickly and increases the self-consumption rate by up to 50% nearly all year round. Optimum use is thus made of the lithium-ion battery's available charge-discharge cycles, which minimizes the specific storage costs. Its market launch is planned for 2013.

In future, SMA will also integrate control of heat pumps in the Sunny Home Manager to support water heating and heating with photovoltaics. The integrated system concept will ultimately be completed by the integration of electric vehicles. For the continued development of the SMA Smart Home, SMA is cooperating closely with renowned manufacturers in the household appliance, air-conditioning and automotive industries. In February 2013, SMA signed a cooperation agreement with Miele, the pioneer in household appliances that can be connected to smart grids. The goal is to develop efficient solutions that are suitable for everyday use and offer users the best possible convenience. This will also constitute an important focal point for research and development in the future.

Control the Complete System Intelligently – Product Innovations for PV Integration and Intelligent Energy Management Presented at Intersolar 2012

Alongside the new Sunny Boy 5000 Smart Energy and the SMA Smart Home, SMA presented many other innovative products at Intersolar 2012. Most impressive in Medium Power Solutions was the Sunny Tripower, which is particularly suited for use in larger residential systems with power classes from 5 kW to 9 kW. The Webconnect communication interface is available in the new Sunny Tripower for the first time. It allows simple online monitoring via the Sunny Portal without any external communication devices. This makes installation much simpler and drastically lowers costs for the communication link.

For large-scale PV plants, SMA presented an inverter of the megawatt class for the first time. In comparison with the preceding model, the Sunny Central 900CP XT lowers system costs with its higher performance and the possibility of outdoor installation. SMA is now also offering the Power Plant Controller for controlling PV parks intelligently and flexibly. It is suitable for PV power plants in the megawatt class and is characterized by extremely fast reactions and data exchange. This means that it guarantees operators maximum plant availability at any time.

SMA presented the new Sunny Island 6.0H/8.0H for the supply of off-grid areas. They simplify the installation, commissioning and daily handling of stand-alone power systems with their new operating concept, OptiUse.

The new Web version of the Sunny Design design software has also been available since the end of 2012. Without downloading or installing any software, plant planners and installers now have worldwide and mobile access to the full and improved range of functions of the tried and tested design program Sunny Design using any common Web browser.

Internationalization Continues Steadily, Including in Product Development

Product Range for International Markets Expanded

In view of SMA's internationalization strategy, product innovations for the growth markets in Asia and the USA were top priority in 2012. Having founded its sales and service company in Japan in early 2012, in June SMA was the first international inverter manufacturer to obtain certification from the Japan Electrical Safety & Environment Technology Laboratories (JET) for the sale of two inverter models on the Japanese market. SMA has been selling the Sunny Boy 3500TL-JP and the Sunny Boy 4500TL-JP in Japan since October 2012. In order to cater for commercial and industrial solar projects as well, SMA also developed the central inverter Sunny Central 500CP-JP. Although no JET certification is required in the large-scale plant segment, SMA tested the new central inverter in its own test center to JET standards in order to ensure optimum suitability according to Japanese requirements. The Sunny Central 500CP-JP can be installed directly outdoors and will be deployed in one of the largest PV power stations in Japan: 140 devices are being delivered to Kagoshima in the south of the country for the 70 megawatt project. The power station is to be completed in fall 2013. In the meantime, SMA has received more orders for PV power stations in Japan.

SMA has also extended its product range with a cost-efficient and powerful device for the US market: The new Sunny Central CP-US achieves peak efficiencies of 98.7%. With its UL certification, outdoor housing and first-class features, it is suitable for power classes of 500 kW to 800 kW and can be deployed with great flexibility.

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With their wide-ranging technical functions, SMA's central inverters already comply with many countries' specific grid-connection requirements and regulations. As a front-runner in grid integration, experts from SMA work in various bodies and working groups around the world to determine necessary connection conditions.

Solar Power Saves Fuel – Intelligent Control for Solar Diesel Hybrid Systems in South Africa

In the last quarter, the focus for solar diesel hybrid systems was on the successful realization of the first megawatt-class power station in South Africa. As an addition to efficient energy generators, in sunny regions photovoltaics contributes to significantly reducing a generator's fuel consumption and therefore its operating costs.

The system in Thabazimbi supplements the diesel energy supply of a chrome ore mine with up to 1.8 gigawatt hours of solar energy every year. SMA supplied 63 Sunny Tri-power 17000TLs for the lighthouse project and completed the intelligent control solution in November.

The system centers on the Fuel Save Controller from SMA, which SMA also premiered before the expert audience at Intersolar 2012. In conjunction with SMA inverters, it takes on the need-based control of photovoltaic feed-in depending on load and generation profiles. So that the hybrid system's local grid works reliably and stably even with a high proportion of photovoltaic energy, the Fuel Save Controller accounts for the load limits from the generator control systems. The diesel generators' running times and start and stop operations are reduced to a minimum, which increases service life. This reduces fuel consumption and costs.

Together with the SMA Fuel Save Controller, SMA inverters also perform extensive grid management functions. The hybrid system can be expanded on a modular basis at any time, meaning it can be adjusted to the specific conditions of the plant. The SMA Fuel Save Controller also allows the system to be monitored via remote diagnosis. This creates optimum energy management and more efficiency and flexibility for the system operator.

Important Research for the Development of Photovoltaics

Research and Development Partnerships Intensified and Expanded

As the leader in PV system technology, SMA is a sought-after partner in different expert committees, associations and research projects. Most notable cooperation at the regional level is with the "Competence Network Decentralized Energy Technologies" (Kompetenznetzwerk Dezentrale Energietechnologien, deENet), the Fraunhofer Institute for Wind Energy and Energy System Technology (IWES), the Centre of Competence for Distributed Electric Power Technology (KDEE) and the "Institute for Decentralized Energy Technologies" (Institut für dezentrale Energietechnologien, IdE), founded in 2011. SMA is a founding partner of the IdE along with the University of Kassel and other companies. SMA also continued to expand its network of research and development partnerships internationally in 2012. SMA is currently involved in 12 different collaborative research projects researching new photovoltaic technologies. This ranges from testing new components and optimizing PV plant system technology to grid integration and electric mobility. With many years of experience in researching and developing PV system technology, SMA can apply important knowledge and actively shape the future development of photovoltaics.

New Research Projects for Large-Scale Plants and E-Mobility

Together with TÜV Rheinland and the KDEE at the University of Kassel, SMA initiated the Giga-PV research project to optimize large-scale PV plants for use in sunny regions of the planet. These areas enjoy superb conditions for generating solar power – particularly with large-scale PV plants. However, the often extreme climatic conditions there present particular challenges to the plants and their components. As an expert in the development of inverters and system components that can be used outdoors, SMA is in demand here. The goals of the research project are the optimum adaptation of components to extreme environmental conditions and the further reduction of costs for large-scale PV plants. The three-year project is funded by the Federal Ministry of Education and Research. SMA is project manager.

SMA is cooperating with Fraunhofer IWES, LichtBlick AG and Volkswagen AG for another pioneering project: The INEES project tests the intelligent connection of electric vehicles to the grid in order to provide system services for the power grid. The goal of the project is the ability to use vehicle batteries as temporary storage to compensate for variations between renewable energy generation and power consumption. To make this possible, SMA is developing an additional component for the Smart Home – a DC quick-charging station that also allows energy from the vehicle to be fed back into the power grid. Initial results from the field test are expected in 2014.

Overall, SMA continued to extend its technology leadership last year. With intelligent products that are tailored exactly to the requirements of future energy supply and offer their users the best possible convenience, SMA successfully positioned itself as a driving force in the energy revolution and a specialist for sophisticated energy management and system solutions. On the basis of the continuous development of its product range and research in new, pioneering areas, SMA is best placed to actively shape the energy supply structures of the future.

Research and Development Expenses

in € million	2012	2011	2010	2009	2008
Research and development expenses	108.1	99.9	82.9	56.3	35.0
of which capitalized development projects	20.2	16.1	10.9	7.2	2.0
Depreciation of capitalized development projects	11.2	5.6	1.1	-	-
Research and development ratio in %	7.4	6.0	4.3	6.0	5.1

Employees

Concentrate on the Essentials – a Management Principle at SMA

For many years, employee participation has been deeply rooted alongside innovation and customer orientation as a central value in SMA Solar Technology AG's mission statement. SMA's cooperative corporate culture encourages employees to act with commitment and on their own initiative, to contribute their knowledge and to help shape the Company's development constructively. The Company mission statement is the starting point for management conduct in the Company. The managers concentrate on sustaining and developing employee motivation. They are guided by SMA's corporate culture, which was again the recipient of awards in 2012.

By following the management principle "concentrate on the essentials," SMA employees purposefully align their conduct to the Company's interests and meet the pronounced volatility of the photovoltaics market with a high degree of flexibility. This is also reflected in the SMA Group's strategic personnel planning: In the first three months of 2012, foreseeable cuts in different incentive programs and the considerable degree of dynamism generally in global photovoltaics markets resulted in modified requirements for resource planning.

Flexibility and Sustainability – Strategic Personnel Planning Close to Market Requirements

Because of sometimes strong demand fluctuations during the year, sustainable personnel planning at SMA has to meet generally high operational flexibility requirements. Therefore, SMA has used personnel flexibility instruments for many years in close cooperation with the works council. SMA can react in the medium term to changes in demand with fixed-term employment contracts. Flexitime accounts allow fluctuations to be absorbed in an optimum fashion during the year. In times of high capacity, employees amass flexitime hours that can be drawn on in months with weaker demand. SMA counters short-term fluctuations in demand

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by using temporary staff. It is particularly important to SMA that temporary employees are paid the same hourly rate as SMA employees and participate in the Company's success. In 2012, the number of temporary employees deployed by SMA internationally peaked at approximately 1,300 (2011: up to 1,800 temporary employees). Since 2007, SMA has taken on around 1,300 temporary employees as permanent staff.

In 2012, personnel work at SMA was heavily influenced by the consequences of cuts to various subsidy programs and the severe collapse of the European market. In the fourth quarter of 2012, the Managing Board and works council jointly prepared and approved a comprehensive package of measures to adapt personnel structures and staff costs on the basis of the forecast for 2013. The negotiating partners' highest priority was securing SMA's future viability.

The market decline, the accompanying collapse of demand in the major photovoltaic markets of Germany and Italy and increasing price pressure make staff reductions unavoidable in several Company and regional units. In this respect, the Managing Board negotiated a voluntary severance program with the works council. This offers employees attractive terms for concluding a termination agreement. This and other fast-acting measures are intended to avoid compulsory redundancies. The employees were thoroughly informed about the measures and the reasons for them on October 19, 2012.

SMA will also adjust apprentice numbers to future requirements. The Company sees it as its clear social responsibility to offer young people doing apprenticeships at SMA the longest-term employment prospects possible. For this reason, SMA has always trained apprentices in line with the forecast requirement for skilled workers. In total, 320 apprentices were being trained at SMA on December 31, 2012 (December 31, 2011: 360 apprentices).

The first effects of the measures introduced are already reflected in employee figures for 2012 and will then be seen in future reporting periods.

Employees

Reporting date	12/31/2012	12/31/2011	12/31/2010	12/31/2009	12/31/2008
Employees (excl. temporary employees)	5,584	5,532	4,466	2,954	2,220
of which domestic	4,649	4,670	4,057	2,736	2,080
of which abroad	935	862	409	218	140
Temporary employees	639	943	1,140	1,277	489
Total employees (incl. temporary employees)	6,223	6,475	5,606	4,231	2,709

The number of employees has fallen by 252 employees including temporary employees within 12 months, with the increase in employees still in effect into the middle of the fiscal year being adjusted in the second half.

At the end of the year, the SMA Group had 5,584 employees (December 31, 2011: 5,532 employees, figures exclude temporary staff). The number of temporary and permanent employees consequently increased by 52 or 0.9% year-on-year. This staff increase occurred in the foreign companies, while the SMA Group cut 21 jobs in Germany. On December 31, 2012, the SMA Group had 4,649 employees at the German locations (December 31, 2011: 4,670 employees, figures exclude temporary staff).

Promoting and Retaining Talent – Attractive Development Programs Specifically for Engineers

The employees of the R&D departments are not affected by the staff reduction measures. Due to the continued consistent focus on future technologies and innovation leadership, the R&D departments are in fact highly important for the Company as a whole. SMA has the clear aim of being an attractive employer for engineers in order to gain qualified employees for the Company and to retain them for the long term. The attractive development opportunities and prospects specifically for engineers at SMA are an important part of this.

SMA supports employees with high potential in three alternative career paths. Depending on their skill and inclination, they can advance in expert, project or management careers. In addition, SMA knowledge management has for many years actively promoted the networking of technology employees with experience and information sharing, transparent identification of experts for certain fields and support programs specially tailored to the working practices of certain employee groups.

As a technology leader, SMA offers its developers extensive mentoring by experienced managers in order to broaden their horizon of experience. SMA experts work in various bodies and working groups around the world and participate in research partnerships with universities, for example. Talented employees and young skilled staff are purposefully included in ongoing projects and prepared for the assumption of additional duties. Another aspect of sustainable talent promotion and employee retention is the comprehensive training program, which is continually aligned to the current requirements of the Company and the market via personnel development.

Long-term Employment Prospects – Life-Long Learning and Development in Accordance with the Corporate Strategy

Education has been an essential component of employee development at SMA for many years. This investment pays off in the long term and will continue to be made in future. In view of changed market conditions, SMA is also defining its internal education policy more precisely and bringing learning closer into line with the corporate strategy. In 2012, SMA significantly reduced the education budget and the number of classroom training courses and will focus in future on new methods and types of learning, e.g. Web-based training and independent learning in the workplace. These forms of learning will then be developed further in order to provide barrier-free and need-based access to SMA's comprehensive education program to employees in foreign companies, too. In order to cope with the demands of the modern working world successfully, it is important for us to keep our employees' knowledge, expertise and skills up to date, but also to enhance them on a continuous basis.

In December, SMA won the HR Excellence Award 2012 for its development of internal skill management. The Human Resources Excellence Awards regularly evaluate and reward outstanding human resources projects by the criteria of innovation, creativity, implementation in corporate strategy, results, efficiency and sustainability. SMA impressed with its model that systematically identifies the skills required for the success of the Company and describes them transparently for all employees. The particular focus lies on the integration of employees in the foreign companies in order to accommodate the continued internationalization of the Company in this area, too.

Intercultural Skills and Global Networking – Cornerstones of Internationalization in HR

SMA continued to expand its international presence in 2012. This is how SMA coped with the shift of demand to non-European markets. Two companies were founded in Chile and South Africa. SMA Railway founded its first foreign company in Brazil in December 2012. The establishment and expansion of foreign companies in 21 countries increased the number of employees abroad by 73 to a total of 935 as of the reporting date of December 31, 2012 (December 31, 2011: 862 employees, not including temporary employees). At the end of 2012, SMA acquired a majority shareholding in Jiangsu Zeversolar New Energy Co., Ltd., Suzhou, China, with economic effect from January 1, 2013. The company develops, produces and distributes PV inverters and employed more than 450 people around the world at the end of 2012, around 150 of which in development. In 2013, SMA will continue to extend its international commitment. The regions North America, Japan, India, China, Chile and South Africa are of particular strategic significance.

In 2012, intercultural skills became more important due to the increasing global networking of SMA companies. The HR department prepared SMA employees for their international duties and supported them in their work in intercultural contexts. The portfolio included global team development for an R&D department as well as intercultural training for apprentices, employees and managers and preparation for working abroad by way of intercultural coaching. In addition, SMA knowledge management founded the

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"Internationalization" knowledge network in 2012. In this network, all internationally active employees can swap experiences and learn from each other. Tried and tested knowledge management methods are transferred to international contexts and provided to the foreign companies.

Gender Diversity and Diversification – SMA Promotes Equal Opportunities

Gender diversity management is a central component of the sustainable HR strategy at SMA. As an employer, SMA creates good general conditions for equal opportunities between women and men and for the compatibility of professional and private lives. The Company emphasized this in 2011 by signing up to the German "Diversity Charter." SMA thus committed itself to promoting the diversity of its employees and creating a working environment in which all employees enjoy equal opportunities regardless of gender, nationality, religion or ideology, disability, age and sexual orientation.

SMA has set itself the goal of steadily and sustainably increasing the proportion of female employees at all levels of the Company – particularly in management positions and technical occupations. The number of women at specific levels of management should correspond to the proportion of female employees in that area. This is a particular challenge in industries focused on technology like the solar industry. SMA has not yet reached its target. On the contrary, the proportion of women in the core workforce and in management positions actually declined slightly in 2012. The measures taken as a response to changed conditions in the photovoltaics market made the endeavors toward the gender diversity targets above extra-difficult.

Gender Diversity: SMA Employees

in %	12/31/2012	12/31/2011
Female	25.6	25.8
Male	74.4	74.2

Gender Diversity: SMA Executives

in %	12/31/2012		12/31/2011	
	Female	Male	Female	Male
Domestic executives	12.0	88.0	14.2	85.8
of which Managing Board	20.0	80.0	0	100.0
of which General Managers and Vice Presidents	7.7	92.3	7.0	93.0
of which Directors	18.1	81.9	18.2	81.8
of which Senior Man- agers and Managers	10.9	89.1	13.8	86.2
Executives abroad	23.1	76.9	26.0	74.0
SMA executives	14.2	85.8	15.7	84.3

Employees are SMA's most important resource. Creating good working conditions and thus making work enjoyable for all employees is of great interest to the Company. To reach the gender diversity targets, the Company will continue to work consistently on comprehensive measures to improve the working environment for women and men at SMA and will start new initiatives.

In 2012, SMA considerably expanded the provision of flexible working hours and workspace models for all areas of the Company. Consequently the part-time ratio for both genders rose from 4.4% at the end of 2011 to 5.5% in December 2012. SMA's family service offers an extensive range of childcare services, e.g. for vacation periods and emergencies and advice on reconciling nursing care and career. In addition, a concept for personnel development based on phase of life is currently being developed, which is aligned more closely than before to the needs of employees and the requirements of the individual areas of the Company at the same time. Lydia Sommer, responsible for Finance, Legal and Compliance on the Managing Board since November 1, 2012, initiated a mentoring program at SMA in order to support women in their professional development, to network women in the Company with each other more effectively and to make them more visible. Since 2011, SMA has also been a partner in the "MentorinnenNetzwerk für Frauen in Naturwissenschaft und Technik" (Mentor Network for Women in Science and Technology). This mentoring network is an inter-university institution of the ten universities in Hessen for the support of female students and doctoral candidates in the STEM fields (science, technology, engi-

neering and mathematics). Last year, SMA posted three female employees from technical areas as mentors in the network. In 2013, SMA will further expand its commitment with the target of winning talented young female staff for the Company and to make the posted employees more committed by allowing them to complement their work in a meaningful way.

SMA achieved success in filling open positions in top management with women. The proportion of women in management has increased 0.7% year-on-year to 7.7% (December 31, 2011: 7.0%). The proportion of women on the Managing Board has increased to 20% with the appointment of Lydia Sommer as Chief Financial, Legal and Compliance Officer. In 2011, the Supervisory Board and Managing Board set the target of increasing the proportion of women in both bodies to 25% by the regular Supervisory Board election after next.

Attractive Employer – Even in Hard Times

In 2012, SMA again demonstrated its quality as an employer: In March, the Great Place to Work® Institute Germany again honored SMA as Germany's best employer. In the previous year, SMA had taken first place in the category of large companies with more than 5,000 employees. In 2012, SMA received the "Life-Long Learning" special prize for the fourth time for its outstanding achievements in educating its employees. The Great Place to Work® Institute also honored SMA as one of the best employers in all of Europe.

The focus on future technologies and the prospective shortage of skilled workers make it the central task of our personnel work to gain qualified employees for the Company and to retain them at SMA for the long term. Consistently keeping an eye on and improving our attractiveness as an employer for women and men and the high quality of our HR tools is an important contribution to our technology leadership.

Corporate Social Responsibility

Social and ecological responsibility has been an important part of corporate culture since SMA was founded. Sustainability is therefore especially important for SMA, and the Company understands it to mean combining long-term economic success with the protection of the environment and social responsibility. From this we derive specific maxims that extend across all areas of our enterprise. This includes a high-quality product portfolio based on long-life technology and the optimization of our production processes to ensure they meet the highest standards of quality, safety and environmental friendliness. As an international company, we ensure the observance of human rights and recognized labor standards.

Core Topics for Sustainable Development

1 | Sustainable Economics

2 | Innovative Products for a Sustainable Energy Supply

3 | Production without Waste

4 | Socially and Environmentally Responsible Supply Chain

5 | Environmental Management for Sustainable Economics

**6 | Efficient and Renewable Energy Supply
with Minimized Consumption**

7 | Committed Employees

8 | Sustainable Regional Development

9 | A Livable and Sustainable Society – Everywhere

10 | Constructive Dialog

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In 2012, the ten most strategically important fields of action were identified and the SMA sustainability mission statement was formulated. The SMA sustainability mission statement is to help make sure our actions are geared as consistently as possible to principles of sustainability.

Climate Protection and Promotion of Renewable Energy: Environment

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

SMA Solar Technology AG has had an environmental management system certified in accordance with DIN EN ISO 14001 since 2010. This enabled environmental protection at the Kassel/Niestetal site to be spurred on and strengthened. The measurable environmental performance is evaluated, analyzed, improved and communicated by means of regular internal audits. This fosters environmental awareness among the employees that is characterized by open communication and target-oriented cooperation.

There are no special environmental requirements for production at SMA, since our environmentally friendly production methods use only very small quantities of materials harmful to the environment. These are recycled by certified disposal companies in accordance with statutory requirements.

In October 2012, the PV inverter production site in Denver, Colorado, USA won the "Gold Leader Award for environmental stewardship." This award is for companies' voluntary environmental engagement that goes far beyond legal requirements. It is awarded by the Colorado Department of Public Health and Environment.

SMA pursues a comprehensive sustainable energy concept in which energy efficiency and the use of renewable energies play an important role. Fundamental elements of the energy concept are: consistent expansion of photovoltaics in the construction of new buildings on the Company's

sites, CO₂-neutral inverter production at "Solar-Werk 1," and off-grid supply of the SMA Solar Academy based on decentralized renewable energy. SMA will also employ a sustainable energy concept at its new site in the industrial park "Sandershäuser Berg" in Niestetal, which will be based on the greatest possible reduction in energy consumption, on a high degree of efficiency both of the building and production, and on energy supplied from renewable sources. The new logistics center in Magna Park Kassel also fits into SMA's sustainable building concept: It features an environmentally friendly design with low-pollution and low-emissions materials and energy-efficient operation. In addition, the SMA-operated PV plant on the roof of the hall generates up to 1.8 gigawatt hours of clean energy a year. SMA is also focusing on sustainable technologies and concepts inside the building. The reduction of storage space, transport and energy requirements results in a considerable improvement of the balance in terms of CO₂. With the sustainable energy and building concept, SMA is not only showing that eco-friendly construction is possible in the industry, but is also taking a pioneering role in climate protection.

Mobility Management

Mobility management within SMA is also part of climate and environmental protection. It raises employees' awareness of environmentally friendly mobility behavior on the way to work and of an intelligent choice of transport between the SMA locations. Company mobility management includes both in-house measures and measures with external players. In 2012, SMA was the first North-Hessian participant to receive the "bike + business award" from ADFC Hessen sponsored by the Hessian Minister of Economics, Transport and Regional Development. Our second place in the "Germany's Bicycle-Friendliest Company 2012" competition, which we were awarded by the German Association of Environmental Management e.V., is also the result of SMA's intensive work on the issue of mobility.

Regional Development and Responsibility for Emerging and Developing Countries: Commitment to Society

For SMA, taking responsibility for positive social development is a matter of course. SMA promotes charitable projects, organizations and initiatives in the fields of culture, work and social matters, education, science and research, and renewable energy projects in emerging and developing countries. In doing so, the Company uses both donations and sponsoring as well as direct personal support, for example through voluntary work by employees.

As one of the biggest companies in the region of North Hesse, SMA also makes a significant contribution to regional development. In terms of culture, in 2012 SMA supported dOCUMENTA (13), the North Hesse Culture Summer, the Kassel Music Days and the Kassel Volunteer's Center, for example. In the area of education, science and research, we support the "Jugend forscht" and "Hessen SolarCup" competitions, as well as the "Solarenergie macht in Sachsen-Anhalt Schule" school project and the North Hesse Student Research Center. With the MENSCH mentoring program from the "Jumpers – Jugend mit Perspektive" society and the mentoring program for young female engineers from the MentorinnenNetzwerk (women mentors network), SMA supports this area not only financially but also gives its employees the opportunity to become socially involved.

In order to make people's access to electricity easier or, indeed, even possible, SMA, together with its employees and project partners, was still involved in 2012 in various aid projects in developing and emerging countries building PV plants for schools, hospitals, children's homes and others in Madagascar, Nepal, Uganda, Gambia and Kenya.

Commitment to the North Hesse Location: Networks, Collaborations and Initiatives

In addition, SMA is also involved in numerous networks, cooperation projects and initiatives in North Hesse both financially and by providing expertise and human resources, because these activities play an increasingly important role in the further development of the region.

Since 2003, SMA has been an active member of the "Competence Network Decentralized Energy Technologies" (deENet), whose goal is to create around 20,000 jobs in the field of decentralized renewable energy by 2020 through technological progress and sustainable regional development in North Hesse.

In 2006, SMA began participating in the Incubator Project at the University of Kassel. The founding team from the university paves the way for the application of science in the economy.

SMA also participates in the project "Regional Energy Supply 2020," in which a municipal energy supply system with a high share of regional renewable energies and an intelligent power distribution grid will be developed and presented in a selected municipality in the region. In 2012, SMA was also a committed member of the "German Industry Climate Protection and Energy Efficiency Group" and in the learning network of the "CO₂-neutral regional state administration" project run by the federal state of Hesse.

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Compulsory Principles for Supply and Business Relationships: Values, Standards and Guidelines

Our actions are shaped by clearly defined values and principles, which are enshrined in our mission statement. The SMA mission statement is a point of reference for our employees and makes it clear after which principles we model our relationships to business partners, customers and the public.

The values and principles relating to sustainability were supplemented and specified by the SMA sustainability mission statement developed by the sustainability work group and adopted by the Managing Board in 2012.

As an internationally operating company, we align our activities to nationally and internationally recognized standards. In addition to quality, price and flexibility, SMA also takes social and environmental standards into account when selecting suppliers and business partners. In this regard, as early as 2009 SMA signed the cross-sector Code of Conduct issued by the German Association Materials Management, Purchasing and Logistics. In 2010, this Code of Conduct was supplemented by SMA's own guidelines for suppliers (Supplier Code).

Our suppliers must confirm their compliance with SMA's Supplier Code in writing. Selected suppliers' and partners' compliance with the agreed guidelines is being monitored. Furthermore, the Supplier Code is not static but is being constantly developed and adapted to the continuously changing legal and economic conditions that SMA is subject to as a globally active company.

CORPORATE STRATEGY

The global transformation in the energy sector from central power plants to decentralized energy production is only possible with system technology. In order to make full use of the enormous potential of renewable energy, the decentralized energy carriers have to be linked to virtual power stations and integrated with modern storage technology. As the market and technology leader, SMA has focused its strategy on this global growth market. The corporate strategy is based on the three pillars of innovation, cost reduction and internationalization.

Innovation Leadership

The development of innovative technologies for decentralized energy supply has been an essential cornerstone of our corporate strategy since SMA was founded. In the last five years alone, SMA has invested almost € 400 million in research and development. In 2012, more than € 1 billion in sales was generated with products launched within the last three years. With more than 400 global patent applications so far, SMA is the world champion in the development of system technology in the photovoltaics sector.

In order to continue extending our innovation leadership, we are concentrating on the development of completely new product platforms for all power classes. Our top development goal is to significantly reduce production costs by using new technologies and a higher proportion of carryover parts. The additional functions, which vary according to photovoltaics markets, are offered as an option in the new generation of products. This reduces the complexity of our products considerably. With this new development approach, we will shorten innovation cycles even further in future. The first products of the new generation will be launched in 2014.

In addition, we will upgrade our technological solutions for energy management. The SMA Smart Home centers around the Sunny Boy Smart Energy, the first wall-mountable PV inverter with an integrated battery. This innovative product can substantially increase the proportion of power from the PV system that the household can use itself. The little battery stores enough energy to meet the energy needs of a family of four for around three hours in the evening. But that is not enough to realize the vision of complete internal power supply for a household. We will therefore, for example, integrate control of heat pumps in the Sunny Home Manager, our intelligent household energy manager, to support water heating and heating with photovoltaics on sunny days. By combining the Sunny Home Manager and Sunny Boy Smart Energy, households can use more than 60% of the power from the PV system themselves. The rest of the energy produced by the PV system is fed into the grid or, in future, partially stored in the batteries of electric cars. Our innovation thus gives private households the prospect of the greatest degree of independence and economical energy supply in the long term. Moreover, the SMA Smart Home makes a decisive contribution to relieving the grid and integrating photovoltaics, supporting the success of the energy transition.

As part of our innovation strategy, we will also bundle our technical expertise in designing hybrid systems with our experience in large-scale PV plants. Our system technology makes synchronizing the management of stationary diesel generators and photovoltaic plants on an industrial scale possible for the first time. Especially in sunny regions, the use of PV plants is economically sensible in order to lower operating costs in comparison to stationary diesel generators. In 2012, we executed a major flagship project for a mining company in South Africa with great success.

So that we can service the growing market of large-scale PV plants in an optimum fashion, we are continually expanding our technical expertise in medium voltage technology and developing turnkey solutions to meet international demand. The SMA Transformer Compact Stations in the 500 kVA to 1,800 kVA power classes are the ideal link between SMA central inverters and the medium-voltage grid. Thanks to the international IEC standard, they can be used around the world and are tailored precisely to the Sunny Central CP XT inverter. As a turnkey medium-voltage solution with medium-voltage switchgear and a transformer, usable for all matched medium voltages, the Transformer Compact Stations enable highly flexible project planning and an even faster start for large-scale solar projects. SMA equips large-scale PV plants with the MV Power Platform primarily for the American market. With up to two Sunny Central CP-US inverters – which are suitable for outdoor use – a transformer and a Disconnect Unit mounted on a steel plate, this solution can be used completely open, with a roof or enclosed. The turnkey MV Power Platform is based on multi-award-winning SMA Sunny Central technology.

We will augment our services in the Service division, also by offering operational control in selected photovoltaics markets. We benefit from our broad installed basis, the excellent service infrastructure and the processes established over many years. With the state-of-the-art communication technology for remote plant monitoring and intelligent analysis tools in the Sunny Portal, we can identify potential power losses and system failures at an early stage. In this way, we not only increase technical availability but also the energy yield of large-scale PV projects.

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Cost Reduction

In view of rapidly altered market and competitive conditions, SMA will make reducing costs an even higher priority. By establishing and expanding our purchasing offices in Germany, Poland, the USA and China, we have laid the foundation for opening new procurement channels and certifying new suppliers. Global purchasing makes it easier for us to increase competition between suppliers and systematically reduce material costs. When carrying out structured tendering processes, we not only consider purchase terms and conditions, but we also assess our suppliers' quality, logistics costs and working conditions in particular.

In addition, the Managing Board has designed several projects to increase productivity together with the managers. For example, our new logistics center will make it possible for the first time to centralize all goods-receipt activities, all warehouses and the establishment of central supply for all production sites at the location in Kassel. The new warehouse not only saves space and equipment, but also considerably reduces transport and storage time for our PV inverters.

We have also initiated a project in the Service division to significantly increase productivity. In 2012, we bundled our service activities, which were previously spread over eight locations, in our new Service Center at Sandershäuser Berg, laying the foundation for an efficient and inexpensive flow of materials and goods.

However, the projects to increase productivity are not enough to secure the profitability of the corporate Group in the medium term. SMA will therefore adapt the administrative functions in particular to the changed level of sales. In 2013, we will cut the jobs of at least 500 temporary and permanent employees at home and abroad and take additional short-term personnel measures. By consolidating office space, the number of currently leased office containers will be lowered to less than 750. By streamlining production and service processes, properties leased above that amount can be discontinued. These structural changes will make SMA more compact.

Internationalization

In order to defend or even increase our market share, we will continue intensifying our sales activities in all important photovoltaics markets. According to a study by IMS Research, a leading market research company for the electronics industry, SMA has the most popular brand in the solar sector and excellent unique selling points.

In the growth regions of North America and Asia/Pacific, SMA will expand the existing sales and service infrastructure. Close proximity to our customers allows us to identify changing market conditions at an early stage and design appropriate solutions for our customers. We will adapt our infrastructure in Europe to the changed prospects for growth and future areas of application. In Europe in particular, access to solar power professionals is of central importance for launching and establishing innovative energy management systems in the market.

By acquiring Zeversolar, SMA laid the first foundations for access to the Chinese photovoltaics market. The Managing Board estimates that with Zeversolar we will meet the local energy supply companies' strict tender conditions. The products are adapted to specific Chinese conventions and requirements. We will use Zeversolar products mainly to service the Chinese market. In the international markets, Zeversolar will act as an independent brand with specific unique selling points. In relation to this, we will develop Zeversolar's selling capacity.

Excellently Positioned for the Global Energy Transition

In 2012, SMA focused strategy on the changed market and competitive situation. We will organize ourselves more compactly in order to respond more flexibly to highly fluctuating demand. Our technological approaches make the transformation of the energy sector toward the use of decentralized energy generators possible. With our international presence, we have reduced our dependence on individual photovoltaic markets and can benefit from global growth in demand. SMA has had a very solid financial basis for

years and has generated positive free cash flow before dividend payment in a challenging market environment. With our attractive cash flow profile, high cash reserves of almost half a billion euros at the end of 2012 and high equity ratio of over 60%, SMA boasts the financial strength to achieve its strategic goals under its own power.

ENTERPRISE MANAGEMENT

Leading Indicators

In order to be able to react to market developments in time, it is very important for us to recognize opportunities and risks early on. For this purpose, we discuss what are commonly referred to as operative leading indicators both at Board level (corporate Group) and at division level with the Division Managers, Vice Presidents and the General Managers of the subsidiaries. Such leading indicators include for example changes in incentive programs for PV plants and their effect on regional market potential, the development and competitive position of SMA in regional markets, the acceptance by our customers of new products as well as market-relevant information from discussions with customers, suppliers and associations. The new divisional structure allows us to respond more quickly to changes in the leading indicators. The myriad influencing factors and the complex way they interact make it difficult to produce a detailed forecast that holds up in the long term. Therefore, on the basis of operative leading indicators, we have drawn up scenarios for annual and medium-term planning. The Managing Board and Division Managers are informed on a monthly basis both about the financial development of the SMA Group and about operative leading indicators.

The monthly reporting includes detailed comments on, for example, the development of orders placed and order volumes, the amount of inverter output sold, sales figures, the operating result, cash flow statements, research and development activities, investments, net working capital and the number of employees. There are also other important key figures. The aim is to compare the changes in decisive items on the income statement and balance sheet both with the budget and with the previous month and to take any corrective measures as required. Annual planning and medium-term planning are both checked and adjusted if necessary every six months. The basis of the information used for reporting is provided by an electronic management information system (SAP Business Warehouse).

Intra-Group Management System

The basic elements of the intra-Group management system are the twice-weekly Managing Board meetings, which Division and Business Area Managers attend once a week, and the quarterly business reviews with major subsidiaries. During these meetings, the individual divisions, units and subsidiaries provide information about the implementation of the corporate strategy and whether corporate goals have been attained, on a quarterly or monthly basis depending on their relevance. In addition, the intra-Group control system encompasses the regular risks and opportunities report and the report prepared by the Internal Auditing Department.

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THE FISCAL YEAR 2012

ECONOMIC CONDITIONS

General Economic Conditions

According to the Kiel Institute for the World Economy (IfW), the global economy continued to slow in 2012. The IfW says this was caused by uncertainty connected to the sovereign debt crisis in the euro zone and the future fiscal course in the USA. The IfW's forecast for growth in global production in 2012 was 3.4% (2011: 3.6%). The World Bank anticipates even lower growth of global gross domestic product (GDP). While it still expected GDP growth of 2.5% in June, by the end of the year it was only 2.3%. In its World Economic Outlook in fall 2012, the International Monetary Fund (IMF) cut its forecast for growth in 2012 from 3.9% to 3.3%. The IMF expects growth of 3.6% for 2013. The IfW expects similar expansion of global production at 3.4%.

The euro zone economy in 2012 remained in recession under the influence of the sovereign debt and banking crisis. The IMF sees a major downside risk for the euro zone in a strengthening global economy. In the reporting period, GDP declined by 0.4%. The IMF again expects negative GDP of -0.2% in 2013. Italy and Spain in particular are expected to experience shrinking economic output again at -1.0% and -1.5% respectively.

According to the IfW, economic development in Germany was negatively affected by a weak external environment and the uncertainty over the economic policy for overcoming the euro zone crisis. Although Germany performed better than the other euro zone countries, with GDP growth of 0.7% it is far behind the growth of output of 3.0% in 2011. For 2013, IfW experts expect a weak rise in gross domestic

product of just 0.3%. The German Federal Government is somewhat more optimistic with average GDP growth of 0.5%.

The IMF's estimate for the USA remains almost unchanged. IMF economists still assume a growth rate of 2.0% for 2013. It will be essential for future development in the USA that it solves its urgent problems with the "fiscal cliff" and develops a medium-term strategy to reduce high sovereign debts.

In the newly industrialized countries, the economy slowed down to a surprising degree over the course of 2012. In the IfW's view, reasons for this include weakness in the advanced national economies and structural problems in the newly industrialized countries. Accordingly, the IfW expects growth rates of just 5.3% for 2012. Major growth stimuli, IMF and IfW experts agree, will come from newly industrialized and developing countries. The institutions expect a growth rate of 5.5% in 2013. Growth will continue to be driven by China in particular, whose growth the IMF still estimates at 8.2%.

Economic Conditions in the Sector

Drastic Subsidy Cuts Negatively Impact Solar Sector

The development of the solar sector in 2012 was shaped by the severe adjustments of subsidy conditions in Europe and the sovereign debt crisis in the euro zone. Despite changed conditions in the EU, the growth of global demand for PV systems has continued. This is attributable in particular to the growth markets of Germany, North America, China, Japan and India. The Managing Board estimates that new PV plants with a total output of approximately 31 GW were installed (2011: approximately 29 GW). We estimate that the solar sector was characterized by overcapacity again

in 2012. This development encouraged price competition and consolidation in the industry and resulted in worldwide insolvencies in the solar sector during the reporting period.

Germany was once again the world's largest photovoltaics market in 2012 with approximately 7.6 GW of newly installed capacity (2011: approximately 7.5 GW). A significant portion of the new installations occurred in the first nine months of the year with more than 6.2 GW and is primarily attributable to purchases being brought forward in the wake of amendments to the German Renewable Energy Sources Act (EEG). With the photovoltaic amendment at the end of June 2012, extensive changes to the compensation of photovoltaic power were adopted by agreement in the Mediation Committee of the Bundestag and Federal Council. They were effective retroactively from April 1, 2012. In addition to a considerable one-off cut to compensation rates of 15%, there were also monthly subsidy cuts of 1%. The established range of 2.5 GW to 3.5 GW of annual new installations remained, but support is to stop entirely if a total installed photovoltaic capacity of 52 GW is reached.

In Italy, the Conto Energia V came into effect in August, with the result that the feed-in tariff for power from PV plants was reduced very sharply. The new feed-in tariff allows for the subsidization of new PV plants only until the subsidy cap of €6.7 billion is reached. According to the Gestore dei Servizi Energetici (GSE) agency, €6.5 billion of the available subsidy had already been reached by December 2012. In December 2012, the Spanish government stipulated the expected national energy reform, which plans 7% taxation on income from electricity production from January 1, 2013. In Great Britain, after subsidy cuts in August, a further reduction of the feed-in tariff was made in November. The new tariffs are GBP 0.1544 (€0.19) per kilowatt-hour for PV plants with an output below 4 kW and GBP 0.1303 (€0.16) per kilowatt-hour for PV plants with rated power of 10 kW to 50 kW.

Several new subsidy schemes started outside Europe. In July 2012, the new Japanese subsidy model came into effect. It subsidizes PV plants over 10 KW with JPY 42 per kWh for a duration of 20 years. After the high level of new installations in 2012, the Japanese government is now planning to cut solar subsidies. The change is likely to apply from April 2013 and provides for a new feed-in tariff of between JPY 35 and JPY 39 per kilowatt-hour. In May 2012, South Africa announced photovoltaics projects with 1.05 GW as part of the state subsidy program REIPP (Renewable Energy Independent Power Producer Procurement). The target of the program is to install plants totaling 8.2 GW by 2030. With up to 900 MW, Australia exceeded its targets for the expansion of renewable energy in 2012 (800 MW). The Chinese PV industry was significantly favored by advantageous loans and non-repayable subsidies. Moreover, China announced its intention to increase installed photovoltaic capacity from 7 GW in 2012 to 40 GW in 2015. The USA remains one of the most important markets. In 2012 as a whole, the US Solar Energy Industries Association (SEIA) expects newly installed PV capacity of approximately 3.2 GW. The US market is characterized primarily by project business for large-scale installations.

The SMA Managing Board assumes that the sharp fall in production costs for solar power will provide important growth impulses from applications in which photovoltaics is the more cost-effective solution in future. In sunny countries in particular, solar power is often more attractive economically than generating electricity with fossil fuels. However, photovoltaics can also compete successfully with the electricity rates for households in some European markets today. With the change in the areas of application, topics such as the regulations governing solar diesel hybrid systems, energy management, improving self-consumption and intermediate storage of solar power are becoming increasingly important.

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Impact of General Conditions on Business Development in 2012

SMA Systematically Continues Its Internationalization Strategy

With sales of €1.5 billion and EBIT of €102 million, SMA was in line with the forecast for the fiscal year 2012¹. SMA performed well in a difficult market environment. Due to wholesale changes to subsidies in Europe and purchases being brought forward as a result, the first nine months of 2012 were positive for SMA. The German market especially was the most important sales market with sales of approximately €576 million (before sales deductions) in this period. In the fourth quarter, however, there was a sharp decline in demand for PV inverters. In addition, global overcapacity in the solar sector, intensified competition and increasing price pressure influenced earnings in the reporting period. In 2012, SMA achieved an EBIT margin of 7%.

Due to the trend in Europe, the non-European markets increased in importance. Particular growth impulses came from North America, Japan and Thailand. This made itself felt in the export ratio, which increased to 56.3% year-on-year (2011: 53.6%). In 2012, SMA continued to propel its internationalization rigorously and founded foreign companies in South Africa, Chile and Brazil. SMA is therefore represented in 21 countries and can thus reduce its dependence on individual markets.

Comparison of the Actual with the Forecast Business Development

SMA Hit Its Demanding Targets

SMA made a positive start to the 2012 fiscal year. Crucial to this were catch-up effects resulting from the high level of commercial commissioning in Germany from the fourth quarter of 2011 as well as low interest rates and good weather conditions. On January 13, 2012, the SMA Managing Board gave a guidance for business development in 2012 for the first time. For the current fiscal year, the Managing Board expected slight growth of global demand for PV plants, but could not rule out decline of the global market at that time. SMA expected positive impetus for growth from the foreign markets of China, the USA, Japan and India. Because of numerous changes to subsidy programs in major European markets and the high level of uncertainty due to the current euro and debt crisis, SMA was not able to deliver a sales and earnings forecast for the fiscal year at that time.

The SMA Managing Board published the precise forecast for fiscal year 2012 on March 2, 2012. For the current fiscal year, management expected declining sales of between €1.2 billion and €1.5 billion and forecast an EBIT margin of 5% to 10%. The reason for this was primarily the radical cutting of subsidies in Germany and the associated collapse of demand for medium-sized and large-scale PV power plants in the core markets. Although SMA exceeded its own sales forecast of €350 million to €390 million in the first quarter of 2012 with sales of €405.0 million and tripled its operating profit year-on-year, the SMA Managing Board stuck by its annual forecast.

¹ Sales and EBIT guidance as of August 9, 2012: Sales 2012: €1.3 billion to €1.5 billion; EBIT: €100 million to €150 million

In the second quarter, SMA continued its sales growth and generated 16.6% higher sales year-on-year with €833.7 million in the first half of 2012. In the first six months of the year, SMA thus exceeded its own expectations in many areas in a difficult market environment. On August 9, 2012, the SMA Managing Board adjusted the lower end of the 2012 sales and earnings forecast first published in March on the basis of the positive business development in the first half of the year. The Managing Board now expected sales of between €1.3 billion and €1.5 billion and operating earnings (EBIT) of €100 million to €150 million.

In the course of Capital Markets Day, the SMA Managing Board released a forecast for the third quarter of 2012 and again confirmed the forecast for the year as a whole. Although SMA exceeded the sales forecast of €300 million to €350 million with sales of €363 million, the first signs of the massive subsidy cuts in Europe could be seen.

With sales of €1.5 billion achieved in 2012, SMA is at the upper end of its sales forecast. EBIT amounted to €102 million and was thus at the lower end of the earnings forecast. SMA also met expectations of investments in intangible assets and buildings and acquisition of machinery and equipment for approximately €100 million to €150 million with €100.2 million. SMA also achieved a net working capital ratio of 18.3%, 0.7 percentage points below the forecast of 19% to 21%.

RESULTS OF OPERATIONS, FINANCIAL POSITION AND NET ASSETS

Results of Operations

Group Sales and Earnings

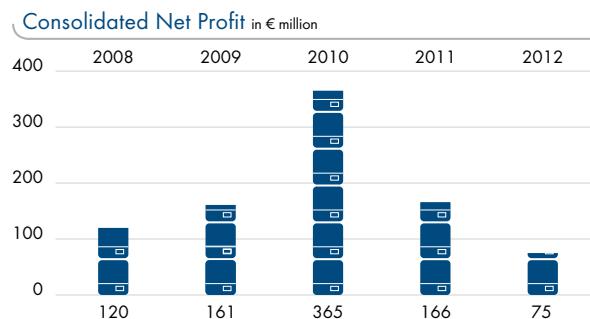
SMA In Line with Sales and Earnings Forecast

In the 2012 fiscal year, the SMA Group generated sales of €1,463.4 million (2011: €1,676.3 million). The sales forecast of €1.3 billion to €1.5 billion adjusted upward in August was therefore fulfilled. The year-on-year 12.7% decline in sales is attributable to the reduction of selling prices and a downturn in business. Following a positive start to fiscal year 2012, the SMA Group did not continue its sales growth in the fourth quarter. In total, SMA sold PV inverters with an output of 7,188 MW in 2012. This equates to a reduction of 5.3% compared with the same period of the previous year (2011: 7,591 MW).

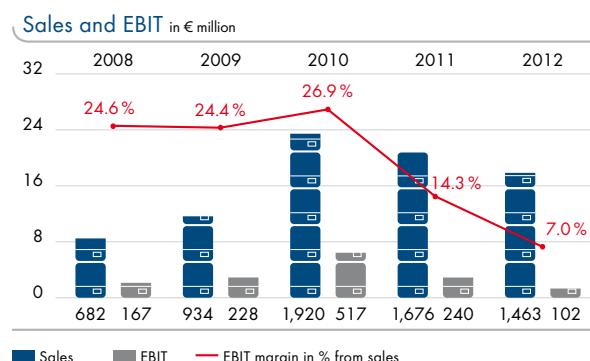
Based on the size of the global photovoltaics market estimated by the Managing Board of 31 GW, the market share of the SMA Group in the reporting year of nearly 25% was slightly below the level of the previous year (2011: 26%). The decline is primarily attributable to young photovoltaics markets such as China and Japan, in which SMA does not yet have such a high market share as it does in Germany or the USA.

In 2012, gross foreign sales amounted to €845.9 million, 8.0% below the previous year's level (2011: €919.4 million). The decline is primarily attributable to lower selling prices. Our export ratio of 56.3% was higher than the previous year's figure (2011: 53.6%). This underscores SMA's outstanding international position with its excellent sales and service structures and full range of products. In 2012, the most important foreign markets for the SMA Group were North America, Australia, Belgium and Italy.

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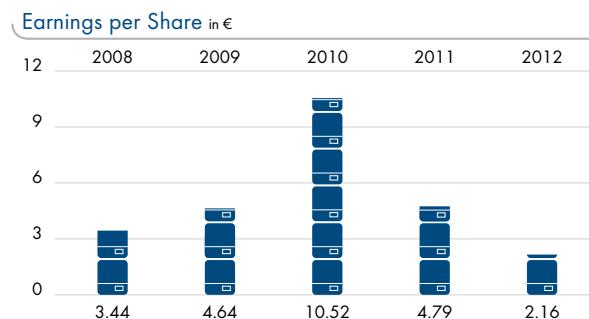


In 2012, EBIT was €102.0 million (2011: €240.3 million). SMA is thus at the lower end of its earnings forecast of €100 million to €150 million. At 7.0%, the EBIT margin was significantly below the previous year's figure (2011: 14.3%). The fall in the operating result is attributable particularly to the price decline, higher expenses for risk provisioning, impairment losses on receivables and inventories and higher amortization. Consolidated net profit was €75.1 million (2011: €166.1 million). Earnings per share fell to €2.16 (2011: €4.79).



€0.60 Dividend Payout Recommended

In the year under review, SMA Solar Technology AG as the parent company of the SMA Group registered annual net income of €65.0 million (2011: €133.2 million) in its separate commercial statements. The Managing Board will recommend that the Supervisory Board propose a dividend payout of €0.60 per qualifying bearer share at the Annual General Meeting on May 23, 2013. The amount paid out in dividends will thus amount to a total of €20.8 million (2011: €45.1 million). The payout ratio in relation to consolidated net profit of 27.7% is within the range of 20% to 40% announced by the Managing Board. With the recommended dividend, SMA is one of the few dividend-paying stocks in the solar sector.



Sales and Earnings per Segment

Medium Power Solutions Division Benefits from Sales Being Brought Forward and Catch-Up Effects in Germany

The **Medium Power Solutions** division comprises the former segment of the same name and the former Electronics Manufacturing segment. Off-Grid products for off-grid PV plants, which previously belonged to the Medium Power Solutions segment, are managed in the Off-Grid Solutions division as of 2012. The Off-Grid Solutions division is shown under the "Complementary Divisions."

The Medium Power Solutions division is responsible for the Sunny Boy, Sunny Mini Central and Sunny Tripower product families. The division also develops and distributes products used for monitoring PV plants and energy management. The product families comprise 82 inverters and 15 communication products in total. SMA offers single-phase and three-phase inverters with outputs ranging from 700 W to 20 kW. SMA products feature a particularly high efficiency of up to 99%, simple installation and a lifespan of over 20 years. The division primarily serves retail customers.

In 2012, the Medium Power Solutions division achieved external sales revenue of €934.8 million, which is lower than the previous year's level (2011: €1,117.7 million). With a share of SMA Group sales of 63.9% (2011: 66.7%), it was the division with the strongest sales.

The performance of the Medium Power Solutions division was marked by catch-up effects and sales being brought forward as well as strong international business in the first half of 2012. The catch-up effects are the result of the commercial commissioning of many PV plants in Germany in the fourth quarter of 2011. A large number of these PV plants were not equipped with inverters until the first half of 2012.

The announcement of cuts in incentives in key European solar markets also led to demand for inverters being brought forward. In the second half of the year, demand in Germany and Europe declined.

There was further positive demand particularly from the US, Belgian, British and Australian markets. The key sales drivers in 2012 were the inverters in the Sunny Tripower and Sunny Boy product families.

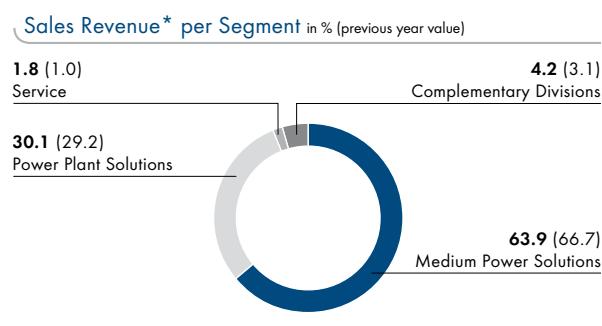
In 2012, EBIT was €91.3 million (2011: €146.5 million). In relation to internal and external sales revenue, this corresponds to an EBIT margin of 8.8% (2011: 12.2%).

Power Plant Solutions Increases Sales in North America by 75% and Achieves Market Entry in Japan

With the central inverters from the Sunny Central product family, the **Power Plant Solutions**, formerly the High Power Solutions segment, serves the market for large-scale PV plants with outputs ranging from 500 kW to several megawatts. The product family contains 12 central inverters with numerous variants providing optimal technical solutions for any large-scale project. As the global market leader in this segment, SMA also offers central inverters that feed directly into the medium-voltage grid of energy suppliers. Central inverters, which can be installed without the usual compact concrete substations, complete the portfolio. This is especially important in regions with poor transport routes. The exceptional efficiencies of these devices reach up to 98.7%. The division predominantly serves project business customers.

In 2012, external sales revenue at €440.8 million was slightly below the previous year's level (2011: €489.5 million). Project business in North America in particular developed very well. In the second and third quarter of 2012, the division benefited from the transitional standard for ground-based plants in Germany. The Power Plant Solutions division's share in total SMA Group sales was 30.1% (2011: 29.2%). The most important markets included North America, Germany, Thailand and Greece. The first large order in Japan was also billed in the third and fourth quarters of 2012. The most successful products included the Sunny Central Compact Power series of inverters.

In view of the shift in demand toward larger inverters, the SMA Group has further strengthened the Power Plant Solutions division with new staff throughout the world. The operating profit before interest and taxes (EBIT) was €45.2 million in the reporting period (2011: €103.1 million). In relation to internal and external sales revenue, the EBIT margin was 9.7% (2011: 20.1%). The price pressure and structural expansion of the division as well as one-time items such as impairments on inventories are the main reasons for the decline in the operative earnings margin.



*Gross sales revenue before sales deductions

The Service Division Benefited from Warranty Extensions

SMA offers customers in Germany and abroad various after-sales services to guarantee the technical availability of SMA products during a lifespan of more than 20 years. The services encompass warranty extensions, service and maintenance contracts as well as commissioning. Through a global network of 90 service hubs, SMA can guarantee a rapid reaction time for the SMA inverters installed throughout the world with a total capacity of more than 25 GW. In the view of the Managing Board, SMA's service structure and processes represent a considerable competitive advantage.

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In 2012, external service revenues amounted to €26.9 million (2011: €17.6 million). Notable sales drivers were especially services subject to charge, the commissioning of PV plants, and repairs as well as service and maintenance contracts subject to a charge. In the reporting period, EBIT was €-15.8 million (2011: €-7.5 million). The obvious decline in earnings is in particular attributed to higher staff expenditures as well as scheduled infrastructure costs of the new Service Center at Sandershäuser Berg. As of 2014, the Managing Board of SMA expects to make the Service division profitable following the expiry of the standard warranty period for the years of high volume.

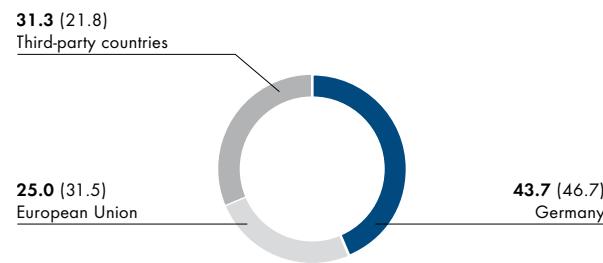
Complementary Divisions with Positive Development

The operations of dtw, Off-Grid Solutions (in future Hybrid Energy Solutions) and Railway Technology are combined under the **"Complementary Divisions."**

dwt Sp. z o.o. ("dwt"), acquired in August 2011, concentrates on manufacturing technologically innovative core components for the production of inverters, such as inductors and transformers. The Off-Grid Solutions division develops stand-alone inverters for the Sunny Island series for PV-supported off-grid power supply and system solutions for solar diesel hybrid systems. This system technology allows diesel generators to interact intelligently with PV systems and makes it possible to minimize fuel costs and CO₂ emissions. Railway Technology manufactures converters as individual devices and complete energy supply systems for railway coaches and multiple-unit trains for short and long-distance railway traffic.

The Complementary Divisions posted a positive development in 2012. In particular, the acquisition of dtw in the third quarter of 2011 is reflected in sales and earnings. External sales increased by 18.3% to €60.9 million (2011: €51.5 million). EBIT also developed positively and rose to €8.7 million (2011: €0.4 million). In relation to internal and external sales revenue, this corresponds to an EBIT margin of 6.3% (2011: 0.4%).

Sales Revenue* by Region in % (previous year value)



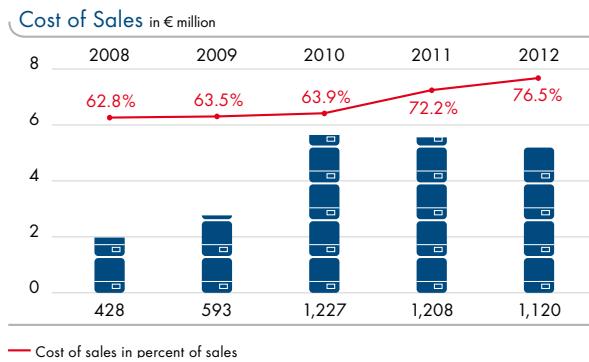
*Gross sales revenue before sales deductions

Development of Significant Income Statement Items

Risk Provisioning Depress Gross Margin

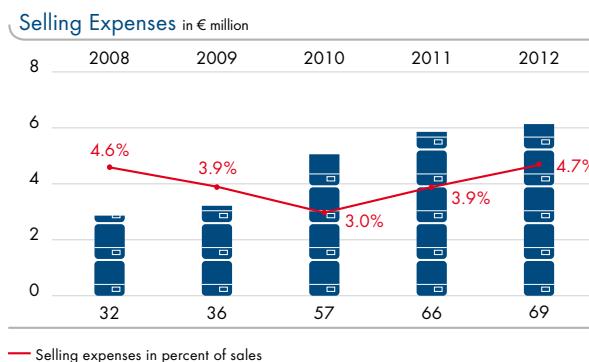
In 2012, cost of sales totaled €1,119.8 million (2011: €1,208.2 million). SMA's strategy of reducing costs through technical innovations already began to pay off in the reporting period. In addition, the purchasing organization was further expanded. Purchasing offices were established in China, Poland and the USA in order to better support the international procurement process. Material expenses adjusted for impairment on inventories improved by €133.1 million to €766.4 million (2011: €899.5 million). This means that the material expenses ratio improved by 1.3 percentage points to 52.4%. In relation to the quantity of sales, this is an improvement of 9.0%.

The fall in the gross margin to 23.5% (2011: 27.9%) is mainly attributable to higher expenses for risk provisioning because of additional work to purchased components used in various product families. In addition, the higher impairment losses for inventories and scheduled amortization had a negative impact on the gross margin. The cost of sales was attributable as follows: 70.4% to material expenses, 15.9% to personnel expenses and 13.7% to depreciation and amortization as well as other expenses.



International Sales Organization Expanded Further

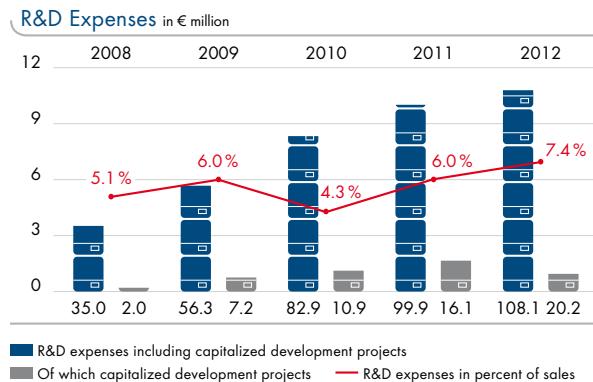
With the expansion of international sales and marketing structures, selling expenses increased as expected year-on-year by 4.7% to €68.9 million (2011: €65.8 million). The ratio of selling expenses to sales was 4.7% in 2012 (2011: 3.9%). The increase of personnel costs and other expenses results primarily from the increase in staff. In 2012, sales companies were founded in Chile and South Africa and expanded in Japan, Thailand, America and Australia. SMA Railway Technology founded a foreign company in Brazil in December 2012.



Research and Development Expenses Reflect the High Importance of the Department

Development expertise is a major strategic unique selling proposition of SMA and therefore expanded rigorously. In 2012, research and development expenses amounted to €87.9 million after the capitalization of development

projects (2012: €83.8 million). Total research and development expenses before the capitalization of development projects amounted to €108.1 million (2011: €99.9 million). This means SMA invested 7.4% of sales revenue in the development of new products in the fiscal year (2011: 6.0%). Depreciation of capitalized development projects, entered under production costs, amounted to €11.2 million in 2012 (2011: €5.6 million).



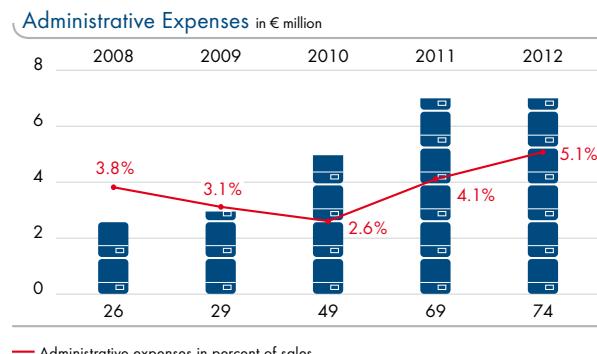
The increase in research and development expenses is based primarily on the increase in employees. At the end of 2012, the SMA Group had 1,041 employees (not including temporary employees) in the research and development department (December 31, 2011: 1,012 employees). The increase in other costs is mainly attributable to the further expansion of development cooperation and an intensification of the measures to protect intellectual property. SMA is currently working on some 400 new patents being granted globally. The rise in capitalized development projects reflects the enormous amount of activity in the development of new devices.

Administrative expenses in the fiscal year totaled €74.4 million (2011: €68.8 million). In view of increasing internationalization, SMA has created new structures in a targeted manner and set up the divisions accordingly. In the wake of this, personnel costs rose by 16.2% to €48.8 million. Other administrative expenses were lowered by 6.3% to €24.2 million by reducing services. The ratio of administrative expenses to sales was 5.1% in 2012 (2011: 4.1%).

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The balance of other operating income and expenses totaled €-10.4 million in 2012 (2011: €-9.4 million). In addition to the effects of foreign currency valuation, the impairment losses on receivables, expenses for the voluntary severance program of €5.1 million and other miscellaneous expenses and income are included here.

In a difficult overall market, SMA generated EBIT of €102.0 million (2011: €240.3 million). At 7.0%, the EBIT margin is below the previous year's figure of 14.3%. The decline in earnings is primarily attributable to the drop in selling prices for PV inverters and increased risk provisioning. These effects are only partially compensated for by cost reductions.



Financial Result

The financial result worsened in 2012 due to a decrease in interest income to €2.7 million (2011: €3.3 million). This was caused by generally lower market interest rates, which resulted in a €1.9 million decline in interest income from reinvestment to €4.6 million (2011: €6.5 million) despite continued professionalization of investment management. The lower market interest rates were also a significant factor leading to the decline in financial expenses to €2.1 million (2011: €3.4 million). Interest expenses for loans increased by €0.1 million year-on-year to €1.1 million.

Earnings before Interest, Taxes, Depreciation and Amortization (EBITDA) of €171.9 million resulted in an EBITDA margin of 11.7% (2011: 17.3%). SMA achieved a return on sales (EBT in relation to sales) of 7.2% (2011: 14.5%). The return on equity after taxes (consolidated net profit in relation to average equity in the reporting period) was 9.3% in the reporting year (2011: 21.9%); the return on assets after taxes (consolidated net profit in relation to average total assets in the reporting period) was 5.6% (2011: 12.7%).

Multi-Period Overview of Results of Operations

in %	2012	2011	2010	2009	2008
EBIT margin	7.0	14.3	26.9	24.4	24.6
EBITDA margin	11.7	17.3	28.5	26.2	25.9
EBT margin (return on sales)	7.2	14.5	27.0	24.9	25.1
Return on equity after taxes	9.3	21.9	64.3	46.8	69.2
Return on assets (after taxes)	5.6	12.7	37.1	27.1	37.8

Value Added

Low Capital Intensity Clearly Emerges from the Value-Added Statement

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

In 2012, net value added was €439.3 million in fiscal year 2012 (2011: €560.7 million). The decrease is mainly due to reduced sales revenue. This is attributable to the price slump in the photovoltaics markets associated with the reduction of selling prices. At the same time, net value added is negatively affected by higher depreciation and amortization as a consequence of investment activities in the last 12 months. Therefore, a higher share of 75.7% of net value added was attributable to SMA employees in comparison with the previous year (2011: 56.0%). The lower income in the reporting period is also reflected in taxes paid

to the government and the payout to the shareholders. The proportion of net value added levied by the government has decreased to 6.7% (2011: 13.8%). With a similar payout ratio as in previous years, the shareholders' share of net value added is 4.7% (2011: 8.0%).

Value-Added Statement

Output method	2012 in € million	2011		Change in %
		2012 in %	€ million	
Sales revenues	1,463.4	94.7	1,676.3	95.6
Financial income	4.8	0.3	6.6	0.4
Other income	52.6	3.4	48.1	2.7
Own work capitalized	24.9	1.6	22.8	1.3
Company performance	1,545.7	100.0	1,753.8	100.0
Material expenses	810.7	52.4	902.6	51.5
Changes in inventories	-14.7	-1.0	11.1	0.6
Other expenses	240.5	15.6	229.0	13.1
Prepayments	1,036.5	67.0	1,142.7	65.2
Gross value added	509.2	33.0	611.1	34.8
Depreciations	69.9	4.5	50.4	2.9
Net value added	439.3	28.5	560.7	31.9
Distribution statement				
Employees	332.5	75.7	313.8	56.0
Lenders	2.1	0.5	3.4	0.6
Government	29.6	6.7	77.5	13.8
Shareholders	20.8	4.7	45.1	8.0
SMA Group	54.3	12.4	120.9	21.6
Net value added	439.3	100.0	560.7	100.0
				-21.7

Financial Position

Principles and Objectives of Financial Management

The SMA Group maintains both a strong financial basis and an adequate operative earnings potential. This allows SMA to take constant advantage of opportunities that arise in the photovoltaics market flexibly and independently from banks and credit institutions.

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

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

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

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

Financing Analysis

In the previous year, SMA continued to use the favorable interest rate environment in order to arrange long-term real estate loans selectively. The level of financial liabilities, which was €33.9 million at the end of 2011, changed slightly to €35.6 million.

Most of the provisions set aside by the SMA Group are for warranty obligations from our various product families. The other financial liabilities basically comprise bonus obligations to employees and obligations related to vacation and flexitime commitments.

Sufficient credit lines for current business were available from the five core banks. In comparison to December 31, 2011, equity rose by €31.4 million to €820.7 million. The high equity ratio of 61.8% (2011: 57.4%) underlines the solidity of the balance sheet structure.

Liquidity Analysis

In 2012, SMA achieved positive free cash flow before dividend payment in a difficult market environment. That is a great result, as SMA continued to invest heavily in infrastructure in 2012. The positive free cash flow before dividend payment of 2012 emphasizes that our business models puts us in a position to generate cash, even under challenging competitive conditions.

In the reporting period, gross cash flow amounted to €165.8 million, considerably below the figure of the previous year (2011: €240.7 million). The decline is primarily attributable to lower consolidated earnings year-on-year. A compensatory effect was produced by higher expenses for risk provisioning because of additional work to purchased

components used in various product families. The higher impairment losses for inventories and scheduled amortization also had a compensatory effect. Gross cash flow is calculated by considering earnings before income taxes and the financial result plus interest payments received, depreciation and amortization, changes in provisions, profit/loss from the disposal of fixed assets and other non-cash expenses/income received minus interest paid and income taxes paid.

Net cash flow from operating activities amounted to €116.1 million in the fiscal year compared to the previous year's figure of €238.9 million.

Net cash flow from investing activities amounted to €-260.1 million in the reporting period (2011: €-129.1 million). Among the most important investments in fixed assets were the construction of the world's largest service center for PV inverters in Niestetal, Germany, and the expansion of the office buildings at the headquarters of the Company in Niestetal/Kassel, Germany. On a larger scale, SMA also invested free funds in time deposits with an original term to maturity of over three months.

In 2012, a significant item in the net cash flow from financing activities amounting to €-43.2 million (2011: €-91.4 million) was SMA Solar Technology AG's dividend payout of €45.1 million. Not including the dividend payment, SMA generated positive cash flow from financing activities in the reporting period.

Cash and cash equivalents amounting to €185.3 million (December 31, 2011: €371.1 million) include cash in hand, cash held at banks and short-term deposits with an original term to maturity of less than three months. With time deposits with a term to maturity of more than three months and fixed-interest-bearing securities as well as interest-bearing financial liabilities, this resulted in net cash of €446.3 million (December 31, 2011: €473.3 million). This means that SMA continues to have excellent liquidity reserves.

Multi-Period Overview of Financial Position

in € million	2012	2011	2010	2009	2008
Shareholders' equity	820.7	789.3	728.4	407.6	280.8
Equity ratio in %	61.8	57.4	58.2	56.7	59.8
Non-current liabilities	263.6	241.1	167.2	95.1	58.6
Current liabilities	244.4	343.9	355.8	215.9	130.2
Share of non-current other provisions in total assets in %	8.5	7.9	6.4	5.7	4.5
Financial liabilities (incl. finance lease liabilities)	35.6	33.9	21.2	20.2	21.6
Net cash	446.3	473.3	523.4	344.8	239.4
Net working capital	268.0	281.7	284.6	98.6	78.0
Net cash flow from operating activities	116.1	238.9	386.3	221.5	188.8
Net cash flow from investing activities	-260.1	-129.1	-210.7	-201.5	-94.5
Net cash flow from financing activities	-43.2	-91.4	-46.8	-36.1	93.3

Investment Analysis

The expansion of infrastructure in previous years puts SMA in a good position for the future.

In 2012, the volume of investment in fixed and intangible assets totaled €100.2 million (2011: €160.2 million not including additions from the acquisition of dtw) and was thus significantly lower than the previous year. This equates to an investment ratio in relation to sales of 6.8% (2011: 9.6%).

With €72.9 million, a large part of investments corresponded to investments in fixed assets (2011: €132.9 million). Investments in prepayments/assets under construction decreased by almost 50% year-on-year to €54.4 million, primarily because of the commissioning of the service center and administrative buildings. €13.7 million went on land and buildings. The construction of the world's largest service center for PV inverters at the "Sandershäuser Berg" industrial park is one of the biggest investment projects in the history of SMA with a total volume of more than €50 million.

Further investments went on new buildings at the Niestetal/Kassel headquarters. Due to intensive investing activity in recent years, the scheduled depreciation of fixed assets increased considerably to €52.3 million from €39.5 million in the previous year.

The investments in intangible assets of €27.3 million almost exclusively went on capitalized development work. With €17.6 million, amortization of intangible assets was clearly above the previous year's figure (2011: €10.9 million). This was due to the scheduled depreciation and a need to carry out value adjustments on capitalized development projects.

Investments Compared to Depreciations and Net Cash Flow from Operating Activities

in € million	2012	2011	2010	2009	2008
Net cash flow from operating activities	116.1	238.9	386.3	221.5	188.8
Capital expenditure ¹	100.2	160.2	158.3	82.1	63.9
Depreciation and amortization	69.9	50.4	31.3	16.3	8.9

¹ See Notes 16 and 17 page 117 et seqq.

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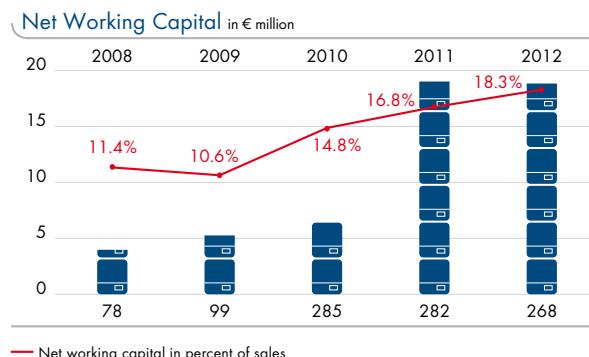
Net Assets

Analysis of the Asset Structure

The total assets of the SMA Group fell on December 31, 2012 by 3.3% to €1,328.7 million (2011: €1,374.3 million).

Non-current assets increased by €18.2 million to €520.2 million. The increase is the result of investment in fixed and intangible assets. Other financial assets fell by €6.8 million to €51.1 million year-on-year.

As of December 31, 2012, net working capital decreased to €268.0 million (December 31, 2011: €281.7 million). This amounted to 18.3% of sales, below the range of 19% to 22% forecast by the SMA Managing Board.



Overall, with €221.4 million on December 31, 2012, stock value was lower than the previous year (December 31, 2011: €256.4 million). Within stock value, various effects caused changes in inventories. SMA significantly decreased inventories of raw materials, consumables and supplies to €128.4 million in the reporting period (December 31, 2011: €179.8 million).

Inventories of unfinished goods and work in progress were also reduced to €27.2 million (December 31, 2011: €31.5 million). The change in inventories of raw materials, consumables and supplies and unfinished goods is attributable to the initial successful implementation of the new logistics strategy. Clearances of materials no longer required were also an effect.

An opposing effect can be identified in finished goods. SMA increased inventories of Sunny Central inverters due to project prefabrication and inventories of string inverters in order to increase delivery capacity in individual markets. On the reporting date, the inventory of finished goods and goods for resale was valued at €65.0 million (December 31, 2011: €44.3 million).

Trade receivables amounted to €119.3 million on the reporting date (December 31, 2011: €141.1 million). This included receivables of €11.6 million that were written down (December 31, 2011: €9.8 million). With active receivable management, the level of receivables was lowered by 15.5% year-on-year. Due to increasing project business and internationalization, days sales outstanding rose to 33 at the end of the reporting period (December 31, 2011: 28 days).

The lower inventories of raw materials, consumables and supplies are reflected in the trade payables. On the reporting date, these were at €72.7 million (December 31, 2011: €115.8 million).

Importance of Off-Balance-Sheet Financing Instruments

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

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

Multi-Period Overview of Net Assets

in € million	2012	2011	2010	2009	2008
Goodwill, intangible assets and fixed assets	443.8	417.7	297.7	164.5	99.6
Financial assets and long-term securities (incl. deposits with a total term to maturity of more than three months)	295.5	135.6	190.0	140.0	20.6
Cash and cash equivalents (incl. deposits with a total term to maturity of less than three months)	185.3	371.1	354.1	225.0	240.7

OVERALL STATEMENT BY THE MANAGING BOARD ON THE TREND OF BUSINESS 2012

In the 2012 fiscal year, the SMA Group performed in line with expectations. Sales amounted to €1.5 billion, at the upper end of the forecast for the fiscal year. The EBIT of €102.0 million (7.0% EBIT margin) was also within the range forecast by the SMA Managing Board. SMA closed the 2012 fiscal year with positive free cash flow before dividend payment, highlighting the unique advantages of the business model. With net liquidity of almost half a billion euros and an equity ratio of more than 60%, SMA has a solid financial basis.

The development of business was once again marked by high dynamism in the various photovoltaics markets and subsegments. Particularly in Europe, the drastic cuts to remuneration for solar power led to a decline in demand starting in the third quarter and accelerating in the fourth. In contrast, demand for system technology in North America, Australia and Thailand developed positively on the basis of SMA's local presence. However, the growth of inverter output sold in these regions did not fully offset the sudden decline in demand in the European markets. In 2012, SMA therefore sold approximately 5% less inverter output than in the previous year (2011: 7.6 GW). The inverter output sold by us can generate enough solar power for around 1.9 million households.

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The regional shift of demand is also reflected in the product mix. While in established European photovoltaics markets SMA products for small and medium-sized solar applications (residential and commercial) are in higher demand, demand in the growth regions is determined more by large-scale solar projects and industrial applications (industrial and commercial). SMA profited from this trend and sold more inverter output for large-scale solar projects. The inverter output sold in the Sunny Boy and Sunny Tripower product groups, which are used mainly in small and medium-sized PV systems, decreased slightly.

SMA's numerous unique selling points allow us to achieve fair prices for products and services on the market. Nevertheless, SMA is not able to distance itself entirely from the competitive situation. Specific sales prices per watt fell to 19.1 eurocents per watt in 2012 (2011: 20.9 eurocents per watt). Due to the regional shift in demand and the pressure on prices, SMA's sales fell 13% in 2012 to €1.5 billion (2011: €1.7 billion).

In such a short space of time, SMA was not able to compensate for the sudden change in demand with ongoing measures for increasing productivity or new products and services. In addition, one-time items such as risk provisioning because of additional work to purchased components used in various product families and the write-down of inventories had a negative impact on the earnings situation of SMA. However, with operating earnings of €102 million, SMA met its challenging targets for the 2012 fiscal year.

In the 2012 fiscal year, we presented numerous product innovations to our customers at leading trade fairs in Germany and the USA. The solutions we presented offer high customer value, especially in view of the changing market environment, with particular regard to the economical use of photovoltaics and system operators' increasing indepen-

dence from rising electricity prices. For example, at Intersolar in Munich we presented our integrated system concept SMA Smart Home. Our problem-solving approach is based on the Sunny Home Manager and integrates batteries and other system components. With the SMA Smart Home, households can automatically attune power consumption to solar power generation without compromising on convenience and thus significantly increase their self-consumption. This solution for optimizing self-consumption will be of enormous relevance in future, particularly in view of falling payments for solar power in European markets. Likewise at Intersolar in Munich, we also presented a three-phase inverter from the Sunny Tripower product family in the 5 kW to 9 kW power class for the growing market of small commercial PV plants. The product features state-of-the-art grid-integration functions, high efficiency and simple connection to our Sunny Portal without installing additional components. In future, we will be able to satisfy demand for central inverters for large-scale solar projects with the first megawatt inverters from SMA. The Sunny Central 900CP XT, presented at Intersolar, has unique technology allowing its output to be increased to almost 1 MW at an ambient temperature of 25 degrees Celsius. The device also features durable housing, which allows it to be installed in regions with challenging climates.

We have also achieved crucial development success with the certification of the Sunny Boy 3500TL-JP and Sunny Boy 4500TL-JP. SMA is thus the first international PV inverter manufacturer to fulfill the demanding requirements for certification by JET (Japan Electrical Safety & Environment Technology Laboratories). In 2012, we developed the Sunny Central 500CP-JP for the fast-growing market segment of large-scale solar projects in Japan.

To tap into the promising solar diesel hybrid system market segment, SMA designed the Fuel Save Controller in 2012. This innovation allows need-based control of photovoltaic feed-in depending on load and generation profiles. The product was presented to the expert audience at the Intersolar trade fair and was deployed in a megawatt-class power plant in South Africa at the end of the year.

In 2012, we intensified our sales activities. For example, SMA founded new sales and service companies in the young photovoltaics markets South Africa and Chile. In addition, SMA Railway Technology founded a foreign company in Brazil. We also secured entry to the rapidly growing Chinese market with a 72.5% interest in Zeversolar. SMA is represented by its own foreign companies in 21 countries, and in comparison with its competitors it has the largest international infrastructure and will therefore be able to benefit from the regional shift in demand.

We continued to hone our unique selling points in 2012 by expanding our service activities. Alongside comprehensive after-sales services at home and abroad, SMA Service presents itself as a universal service provider for the 50.2 Hz conversion of PV plants in Germany. SMA supports electric utility companies in data collection and deals with the entire conversion process – from first contact with the plant operator to quality assurance and documentation. In future, SMA together with strong partners will also increasingly offer complete plant service (operation and maintenance) for large-scale PV plants in selected markets, e.g. North America, in addition to the primary services for inverters and medium-voltage components already provided. By taking on all services for the whole plant, the plant's performance will be optimized.

With an international network of 90 service hubs, SMA guarantees a rapid reaction time for the SMA inverters installed throughout the world.

SMA is not able to escape the sudden change in conditions. The SMA Managing Board has therefore focused strategy on the new market and competitive situation. The strategy centers on continuing to extend our innovation leadership, taking consistent steps to reduce costs and accelerating internationalization. In addition, SMA's personnel structure must be adapted to the changed level of sales. The SMA Managing Board therefore decided to downsize by at least 500 temporary and permanent employees in fall 2012. Further fast-acting personnel measures were also presented to the employees. The structural changes will make SMA more compact, and it will be able to respond more flexibly to changes in conditions in future.

Overall, SMA performed well under difficult market and competitive conditions in 2012. We also laid the foundations for maintaining or even improving upon our high market share of nearly 25% in future. We also introduced the required organizational changes at an early stage in 2012. The technological innovations we have presented make us an important driver of the energy revolution and set trends in the solar industry. We will continue on our path of technology orientation and concentration on system technology. In times of perpetual change in individual markets, our internationalization strategy, which we introduced early on, is paying off. In 2012, we already generated more than 56.3% of our sales abroad.

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SUPPLEMENTARY REPORT

SIGNIFICANT EVENTS AFTER THE END OF THE REPORTING PERIOD WITH EFFECTS ON NET ASSETS, FINANCIAL POSITION AND RESULTS OF OPERATIONS

Acquisition of a Majority Shareholding – Founding of New Subsidiaries

Important growth impulses are emanating from non-European markets. In China in particular, the SMA Managing Board estimates that up to 10 GW of photovoltaic output will be newly installed in 2013. At the end of 2012, SMA therefore acquired a majority shareholding of 72.5% in Chinese inverter manufacturer Jiangsu Zeversolar New Energy Co., Ltd. with economic effect from January 1, 2013. This acquisition secures SMA access to the growth market of China and strategically enhances its position as a global market leader. The transaction is still subject to approval by the Chinese government authorities and the responsible anti-trust offices. The SMA Managing Board expects this approval during the first quarter of 2013. In order to better serve the markets in the Arabic region, SMA will also found a sales and service company in Saudi Arabia.

Changes in Subsidy Conditions in Important Markets

Germany: In a surprise move on January 28, 2013, Federal Minister for the Environment Peter Altmaier presented a proposal for "electricity price protection." On February 14, 2013, he settled on a joint draft with Economics Minister Philipp Rösler that entails drastic changes to the German Renewable Energy Sources Act (EEG) and heavy cuts for new and existing photovoltaic plants. In 2013 and 2014, the reallocation charge payable by all customers is to be frozen at its current level of 5.287 eurocents/kWh. Thereafter, it shall be permitted to rise by a maximum of 2.5% per year. Future investors in and operators of PV, wind and biomass plants are also to be subjected to heavy cuts. If it seems that the EEG reallocation charge cannot be maintained, the guaranteed compensation for the acceptance of clean power shall only be given some months after the new plants are commissioned. And for the first time, owners of existing eco-power plants are affected by the retroactive amendment: they are supposed to forego parts of the compensation for a certain period of time with an "energy solidarity surcharge." In industrial internal generation and PV self-consumption, a minimum participation in the EEG reallocation charge will also be introduced for plants with an output of 2 MW and above. In addition, energy-intensive industry shall be more involved in the costs for the subsidization of green power. Altmaier wants to decide whether the bill should actually be brought before the Bundestag after a top-level meeting with Chancellor Angela Merkel and the 16 Minister Presidents of German states in March. Because of the red-red-green

majority in the Federal Council, the legislation would have no prospect of being passed before the federal election without cross-party agreement. Altmaier's target is for the plans to come into force from August.

SMA estimates that the intended changes will have serious effects on the German photovoltaics market. With the feed-in tariff, which was already heavily reduced in 2012, and the new targets for the EEG reallocation charge, demand will be additionally negatively affected due to uncertainty. Reliable conditions and investment security will be lost and the fundamental principles of subsidization will be undermined. The freezing of the reallocation charge and the retroactive changes in particular will lead to severe uncertainty for investors. Overall, the measures would have a negative impact on the success of the energy transition in Germany.

Japan: On January 22, 2013, the Japanese government announced that solar energy feed-in tariffs are to be cut following the high level of new photovoltaic installations in 2012. In addition, according to the Japanese Ministry of

Economy, Trade and Industry, the costs for PV plants have fallen by 14% since 2012. Since the start of the Japanese fiscal year in April 2012, new installation of PV plants in Japan has amounted to around 1,400 MW. Since July 2012, one of the world's highest feed-in tariffs for solar power has been in force in Japan at JPY 42 (equivalent to approximately 35 eurocents) per kilowatt-hour (kWh). The change is planned from April 2013 and the new compensation could range between JPY 35 and JPY 39 per kilowatt-hour, according to the responsible minister.

Australia: The Australian government in Canberra ended the subsidization of rooftop PV systems early in November 2012, six months earlier than planned. Associations in Australia therefore fear another collapse in demand for photovoltaics. By 2020, the Australian government wants 20% of electricity production to be generated by renewable energy. However, the focus is increasingly on wind energy and hydropower.

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RISK AND OPPORTUNITIES REPORT

RISK AND OPPORTUNITIES MANAGEMENT

RISK MANAGEMENT SYSTEM

In the context of its global business activity, the SMA Group is exposed to a range of risks. Although SMA must accept risks to a certain extent, suitable countermeasures can be used to control and influence them.

The risk management system helps to identify risks at an early stage and communicate them in an understandable manner. The system is oriented toward the COSO ERM Framework, which is today the best-known international standard for establishing and systematically developing a Company-wide risk management system. The framework was published in 2004 in order to allow the integration of risk management systems and the Internal Control System. That includes not only strategic risks (products, technologies, markets, customers and changes in environmental factors), but also all downstream risks on the operational and procedural level. As an integrated approach, it covers everything that occurs in the Company and combines corporate goals and business processes, organizational levels, risk management and the internal controls. COSO ERM serves as an aide for formulating a risk strategy and for establishing and operating systematic risk management in order to identify potential risks at an early stage and thus to manage them proactively.

INTEGRATION IN THE EXISTING STRUCTURE AND PROCESS-ORIENTED ORGANIZATION

The SMA Managing Board bears the overall responsibility for effective risk and opportunities management, to ensure that all risks and opportunities are considered comprehensively and uniformly. The Supervisory Board is responsible

for monitoring the efficacy of the Group-wide risk management system. In order for this task to be performed, the Supervisory Board's Audit Committee processes the information for the full Supervisory Board. As part of its regular activities, the internal auditing department verifies compliance with the guidelines and the relevant matters in the risk notifications. The task of implementing and developing the system further was transferred to the Group risk management function, which is responsible for the centrally controlled risk and opportunities management process.

IDENTIFYING RISKS AND OPPORTUNITIES

A risk is defined by SMA as an event that ensues from a decision taken by Management (strategic), an action (operative) or external circumstances and – if the risk transpires – results in a negative deviation from the planned earnings. The Company must accept risks to a certain extent in order to utilize opportunities.

The Managing Board laid down the objectives of risk management in terms of the risk strategy and the principles of organization, risk analysis and risk communication in a risk handbook that applies to the entire SMA Group and is available to all employees.

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

RISK AND OPPORTUNITY ASSESSMENT

In the quarterly risk identification process, the risk officers determine the risk situation in a standardized bottom-up process. The relevant risk officer, by compiling a risk analysis, assesses the probability of a risk occurring and the amount of damage that might be caused by any risks that are detected. The likelihood of the risk transpiring is classified according to the evaluation categories "unlikely, possible, likely and very likely." The effect of risks on the Group's earnings is measured according to the categories "slight, medium, high and very high."

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

RISK AND OPPORTUNITY MANAGEMENT

Risks are identified by an early-warning system so that they can then be controlled, e.g. through damage prevention or damage limitation actions, the formation of sufficient security reserves or the transfer of individual risks to third parties (insurance companies, for example).

CONTINUOUS RISK AND OPPORTUNITY MONITORING AND REPORTING

The development of residual risks is monitored regularly using suitable early-warning tools and indicators. If a risk increases, management must be notified in good time in order to be able to take countermeasures. Our Risk Man-

agement System is designed to ensure that the relevant employees can identify risks early on and report them to the responsible decisionmakers in the Company.

Under the terms of the risk analysis, foreign companies, departments and units report both to the central risk manager and to the Managing Board according to defined risk categories for further prioritization and aggregation. Apart from quarterly risk notifications, immediate reporting duties have been laid down for all risk officers, who must report to the Managing Board if the risk situation changes significantly. Significant reported risks from all divisions and adjustments to the risk management process are addressed separately in regular meetings of the Risk Committee.

SMA can also recognize short-term deviations from business objectives through detailed and timely reports submitted by the Accounting department. Depending on the degree of urgency, reporting to the management takes place on an ad hoc, monthly or quarterly basis. Further methods for detecting risks are systematic market and competitive analyses and monitoring of economic, legal and subsidy-related framework conditions in target markets.

The significant individual risks on the reporting date are shown on page 74 et seqq. The evaluation here refers to a horizon of two years. 

MANAGEMENT OF OPPORTUNITIES

Making use of existing opportunities is one of the core tasks of each and every enterprise. As part of our risk management approach, which is integrated into the Company organization and deals both with risks and opportunities, we regularly identify and assess opportunities arising from our business activities and act accordingly. Identifying these opportunities early on and regularly is above all the task of management but also involves all the employees. We assess opportunities to the best of our knowledge, basing our assessment on assumptions relating to market development, the market potential of technology and solutions and the expected development of customer demand and prices.



See also significant individual risks on the reporting Date on page 74 et seqq.

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In this respect, the Group-wide planning process and the annual strategy meeting, held by the Managing Board and attended by all division managers, vice presidents and general managers of the foreign subsidiaries and which leads to strategy reports for all areas and foreign companies, are significant cornerstones. We employ continuous market and competitive analysis, systematic knowledge management, an open information policy within the Group and the promotion of creative employees in order to detect our potential for utilizing opportunities.

More explanations on the opportunities during the next fiscal year may be found by referring to the section Forecast Report.

COMPLIANCE MANAGEMENT SYSTEM

In view of increasing internationalization, in 2012 SMA strengthened the Group-wide compliance organization and developed the Compliance Management System. The Compliance department is responsible for managing the SMA Group's compliance organization and for the global implementation of the Compliance Management System to ensure adherence to legislation and guidelines in the Company.

The Supervisory Board's Audit Committee receives a report from the Compliance department once a year to satisfy itself of the efficacy of the Compliance Management System. The Compliance Steering Committee, consisting of the Chief Executive Officer, the Chief Financial, Legal and Compliance Officer, the Chief Human Resources and Operations Officer and the heads of the Compliance and Internal Auditing departments, reviews and decides upon compliance issues of fundamental importance. The key projects for 2012 were the implementation of the new SMA business principles defining the standard of lawful conduct for the SMA Group and providing employees worldwide with the corresponding compliance training. In addition, the efficacy of the Compliance Management System is improved by the development of various control processes, such as the business partner due diligence process.

In 2013, the continuous development of the Compliance Management System and its adaptation to changing market conditions and increasingly international business will be accelerated. One key area in the current fiscal year will be the raising of awareness of compliance risks. For this purpose, the Compliance department will continue and ramp up their dialog with SMA employees by means of compliance training sessions and various compliance events. In addition to its globally connected Compliance Helpline, the SMA Group will also introduce a notification system that promotes an early response to specific compliance risks. The overriding goal of all compliance measures is continual improvement of the Internal Control System by identifying and assessing compliance risks and implementing appropriate and effective control measures.

INTERNAL CONTROL SYSTEM

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

KEY FEATURES OF THE INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM IN RELATION TO THE GROUP ACCOUNTING PROCESS (SECTION 315 (2) NO. 5 HGB)

The control system pertaining to the accounting process is part of the overall Internal Control System, which is embedded in the Company-wide Risk Management System. It includes structures and processes designed to ensure that

subject matter related to the Company or transactions are recorded, processed and recognized and subsequently incorporated into the Consolidated Financial Statements. The Internal Control System as it pertains to the accounting process contains the principles, processes and measures geared to guarantee proper and reliable internal and external Group accounting as well as timely and trustworthy financial reporting.

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

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

RISKS WITH REGARD TO THE GROUP'S ACCOUNTING PROCESS

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

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REGULATIONS AND CONTROLS DESIGNED TO ENSURE THE PROPRIETY AND RELIABILITY OF GROUP ACCOUNTING

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

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

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

SMA has an accounting manual that specifies the provisions on accounting in accordance with the International Financial Reporting Standards (IFRS). The accounting manual applies to all employees involved in the accounting process; the accounting provisions also apply to all external service providers involved in the accounting process. Besides general accounting principles and methods, these provisions above all include rules concerning the balance sheet, income statement, statement of comprehensive in-

come, Notes, Management Report, cash flow statement, statement of changes in equity and segment reporting in compliance with EU legislation.

By laying down clear requirements, the accounting manual limits the degree of discretion that may be exercised by employees when recognizing, measuring and carrying assets and liabilities, and thus reduces the risk of non-uniform practices. The SMA accounting manual also contains detailed definitions of the components of the reporting packages to be prepared by the subsidiaries. The preparation and aggregation of additional data for the preparation of the Notes and the Management Report and reporting on subsequent events takes place at Group level. At Group level, the controls to ensure the propriety and reliability of the Group accounts include the analysis and, where necessary, a correction of the reporting packages submitted by the subsidiaries. In addition, a check is carried out centrally on the financial statements submitted by the companies included in the scope of consolidation while referring to the audit reports drafted by the local auditors. Each month upon submission of the reporting packages, the relevant employees at the subsidiaries at home and abroad and the individual divisions also confirm the propriety and completeness of each financial statement in the form of an internal declaration of completeness. The process of preparing the Group accounts is coordinated and monitored centrally according to a defined deadline and action plan. During this process, centralized contact persons in the accounting and controlling departments (help desks) support those responsible for preparing the financial statements at the subsidiaries at home and abroad.

THE USE OF IT SYSTEMS

Transactions at SMA and at all the larger subsidiaries are recorded using ERP systems produced by SAP AG, Walldorf. These are protected from misuse by appropriate authorization systems and access restrictions. The authorizations granted are reviewed and amended regularly. The centralized control and monitoring of nearly all IT systems, centralized change management and regular system backups minimize not only the risk of data loss but also the risk of

failure of IT systems relevant to accounting. External service providers with their own IT systems are engaged in the case of smaller companies.

When preparing the Consolidated Financial Statements for the SMA Group, the subsidiaries prepare their respective separate financial statements in the form of standardized reporting packages. As part of Web-based reporting, these reporting packages are then transferred to an IT consolidation system based on SAP SEM-BCS, meaning most manual work stages are no longer required. The application can be accessed via an encrypted data cable and security token. The reported data pertaining to the financial statements is checked on the basis of system controls. The use of the Group-wide IT consolidation system ensures that all data is recorded properly and completely and that business transactions within the Group are eliminated. All the consolidation processes required to prepare the Consolidated Financial Statements are carried out and documented within the IT consolidation system. This is where the various components of the Consolidated Financial Statements including important data for the Notes to the Consolidated Financial Statements are prepared. In fiscal year 2012, the introduction of SAP R/3 in some subsidiaries allowed further standardization of the structure and, with the aid of the interfaces (IDoc) created, enabled accounting entries to be made across accounting areas, thus ensuring automated invoice posting. The deployment of the new General Ledger in SAP ERP Financials supports matrix consolidation and combines the data distributed across several applications in SAP R/3.

DISCLAIMER

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

INDIVIDUAL RISKS

Important risks for the Company are described in the following section. The possibility of occurrences, as well as accompanying effects after countermeasures have been taken, are assessed. The order of the risks presented in the four categories reflects their current assessment for SMA.

Individual Risks

	Probability of occurrence	Potential financial impact	Risk development
External and Industry-Specific Risks			
Regulatory Risks	Very likely	Very high	→
Competition risks	Very likely	High	↗
Market Risks	Possible	Medium	→
Strategic Risks			
Investment Risks	Likely	High	↗
Risks from research and development activities	Likely	High	↗
Patent Risks	Likely	High	↗
Compliance Risks	Unlikely	Slight	→
Operating Risks			
Procurement and Inventory Risks	Likely	High	↗
Production Risks	Unlikely	Medium	→
Product Risks	Likely	High	↗
Personnel-Related Risks	Possible	Medium	→
IT risks	Likely	High	↗
Risks from environmental damage	Unlikely	Slight	→
Financial Risks			
Financing and liquidity risks	Unlikely	Slight	→
Risks from exchange rate fluctuations	Possible	Slight	→
Risks from changes to general interest rates	Possible	Medium	→
Risks from customer bad debt	Likely	High	↗

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

Probability of occurrence	Potential financial impact	Risk development
Unlikely	Slight	↗ Higher than in the previous year
Possible	Medium	→ Same as previous year
Likely	High	↘ Lower than in the previous year
Very likely	Very high	

development in the same year. However, non-European markets (especially the USA and Asia) quantitatively offset this decline in market volume. The Managing Board adjusted the outlook for sales and earnings for 2013 because of the changes to subsidy conditions.

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

EXTERNAL AND INDUSTRY-SPECIFIC RISKS

Regulatory Risks

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

As the world's largest photovoltaics market, Germany benefits from the Renewable Energy Sources Act (EEG). Any changes to these conditions can heavily influence market growth. The amendment to the EEG confirmed at the end of June again significantly reduced the feed-in tariff with retroactive effect from April 1, 2012. There are also incentive programs aimed at extending the use of photovoltaics in many foreign markets. Governments regularly examine these incentive programs and align them to the market situation. These adjustments range from bringing forward the date for reducing the feed-in tariff to withdrawing individual components of incentive programs. Cuts made in the core markets in 2012 had severe negative effects on market

The Risk of Aggressive Competition

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

Additionally, the ongoing degression of the feed-in tariff is creating further pricing pressure. A cut to the feed-in tariff can lead to a significant reduction of market volume. In 2012, overcapacity, both at module and inverter manufacturers, continued to result in a global decline in selling prices. Other possible scenarios are that competitors could improve the quality, functionality or performance of their products and/or local competitors could react more flexibly and adapt better to the prevailing market requirements in certain markets. Such competition may in the future lead to further falls in prices for products and services produced by the SMA Group and likewise to a loss in market shares.

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

SMA faces this price competition by offering technology and innovation leadership. With a research and development budget of up to €120 million for 2013, SMA is well prepared to continue setting important trends in photovoltaics in the years to come with significant product innovations. Regular monitoring and regular reports to the Managing Board ensure the early identification of project delays and the initiation of appropriate countermeasures. The trend toward complete solutions and the use of standard components will increase flexibility for the long term. The intention behind establishing decentralized purchasing organizations is to lower material costs in a consistent manner and to break away from dependence on individual suppliers.

By establishing foreign companies, SMA increases its proximity to customers where they are located and is able to react quickly to changes in specifications. With regard to ongoing internationalization, sales and marketing structures are being established and expanded abroad. China is expected to be the fastest growing and largest market in 2013. By acquiring a majority shareholding in Jiangsu Zeversolar New Energy Co., Ltd., Suzhou, China, with economic effect from January 1, 2013, SMA is trying to benefit from the expected growth potential with products specially tailored to the requirements of the Chinese photovoltaics market.

Market Risks

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

Furthermore, entry barriers to individual markets pose a risk to the planned internationalization of the Company. Certain countries for instance set high certification hurdles. However, obstacles in the way of our international expansion would have material effects on the development of the SMA Group in the future. Therefore, SMA always seeks to contact the certification authorities and energy supply companies abroad early on. Thanks to the information gleaned from such contacts, SMA is able to recognize and carry out any adjustments required in its products in good time. In addition, SMA pursues the strategy of being the first company to be represented in new photovoltaics markets, in order to reduce its dependence on individual markets.

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

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STRATEGIC RISKS

Investment Risks

In 2012, the integration of dtw Sp. z o.o., Zabierzów, Poland, was successfully completed. The integration serves to harmonize development processes and significantly reduce development times. SMA will continue to concentrate the sophisticated production of electromagnetic components in the dtw production sites. Nevertheless, the risk of a loss of expertise remains if knowledge holders migrate or if research and development activities are not continued as planned.

The above comments on competition and market risks show that SMA requires access to the Chinese market, the future world's largest photovoltaics market, and additional development resources. Previously, this market was not accessible for SMA because of regional distinctions. By acquiring a majority shareholding of 72.5% in Jiangsu Zeversolar New Energy Co., Ltd., Suzhou, China, a leading Chinese inverter manufacturer, with economic effect from January 1, 2013, SMA has laid the foundation for access to the fast-growing Chinese photovoltaics market. The company develops, produces and distributes PV inverters and currently employs more than 450 people around the world, around 150 of which in development. Products range from products for residential systems to PV power plants in the megawatt class. As one of the leading inverter manufacturers in China, Zeversolar offers products that are specially tailored to the requirements of the Chinese photovoltaics market. With this market access, SMA will be able to discern Chinese competitors' developments and strategies more quickly. Despite this transaction, market access in China remains difficult. If Zeversolar does not develop sales potential to the expected degree or cannot participate in the forecast market growth to the assumed extent, the profitability targets related to this investment could be missed. In addition, there are risks involved with the integration of employees, processes, technologies and products.

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

Research and Development Risks

The SMA Group offers customers a complete range of products. Here, the risk arises that vital technology trends are identified too late or that market launch is delayed due to development stages that are too long. As this could lead to sales losses and sinking market share, the SMA Group invests large sums of money in research and development in order to develop new processes, technologies, products and services. The development department has compiled timetables for all projects, which are regularly submitted to division management and the Managing Board. The planned development times can be adhered to through the consistent pursuit of milestones. In addition, the Managing Board intends to continue building development capacity and to expand partnerships with research institutions. These measures are to further reduce the development time of innovative products. However, we cannot rule out that individual development projects will fail to deliver commercially exploitable results.

With our patents and through constant monitoring of technologies and competitors relevant for SMA, we try to maintain and expand our technological edge. However, this is not possible in every case. Therefore, our employees actively contribute to new technical guidelines through, amongst other organizations, standards associations. This modus operandi allows us to recognize and implement changes in what is required of our products early on.

Patent Risks

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

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

The Intellectual Property Management department actively protects proprietary technologies and monitors patent applications. By employing experienced patent attorneys, SMA also strives to avoid the risk of lawsuits and any litigation costs. In the case of disputes related to intellectual property, we make provisions if we consider it likely that such claims might be asserted against us. Because there are significant intervals between the application and the disclosure of property rights, the danger of patent infringements cannot be fully ruled out in future in spite of optimum patent monitoring.

Compliance Risks

Our influential position on the market as technology and innovation leader as well as our steadily increasing international business give rise to diverse tax, brand, patent, competition, anti-trust and environmental risks. Legal disputes could affect the results of our business activities by tying up financial resources, damaging our reputation and brand and causing the loss of tangible and intangible Company assets. We are currently not aware of any risks from legal disputes or infringements of property rights that have a significant impact on the financial situation of our Company.

OPERATING RISKS

Procurement and Inventory Risks

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

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

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Regular inventory reviews are carried out in connection with short innovation cycles and resulting potential inventory write-down requirements. Early-warning systems and the consistent appointment of additional suppliers (second sources) contribute to the reduction of dependence on individual suppliers and strengthen SMA's negotiating position. Another step taken in this regard in 2012 is the internationalization of our purchasing structures by establishing decentralized purchasing teams in the USA, Poland and Asia to lower acquisition prices and logistics costs. Moreover, the acquisition of the majority shareholding in Jiangzu Zerversolar New Energy Co., Ltd. improves access to new procurement channels in China.

Production Risks

Production holdups – with either internal or external causes – or a delay in building up production capacities could significantly tie up working capital and lead to claims for compensation by customers for late delivery. Another possible consequence is a loss of customers. We have taken out appropriate insurance for fire damage and the accompanying production losses and building damage as well as for other kinds of operational disruption. We mitigate these risks through long-term production planning, monitoring of production processes, collaboration with temporary employees and external service providers and with flexible working-time models. In addition, we stockpile large amounts of critical components.

Product Risks

We are always striving to develop new products and solutions and to improve existing ones. For this reason, we use new materials in development or even sometimes employ new technologies to make innovations possible. This can result in products and services of the SMA Group being non-conforming or defective. Large delivery lots bear the risk of errors or defects affecting a product series or several product batches. Production shortcomings may on the one hand derive from errors on the part of the SMA Group or from defects in primary products provided by suppliers of the SMA Group. This may have a negative impact on results, both directly (because of necessary recall campaigns, for example) and indirectly (through damage to reputation, for example).

In order to improve the quality of products continuously, in addition to general process improvements covering all value-adding processes, new developments are backed by specific stress and qualification tests, tests are carried out on the whole series and advance quality planning is established during the development process.

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

Personnel-Related Risks

Qualified and motivated employees are the key factor for the continued development of our enterprise – above all as regards the area of technology, geographical expansion and the business success of the SMA Group. The loss of important employees could impair continued growth or the development of innovative products.

By promoting a cooperative corporate culture, performance-based remuneration and targeted further training and qualification options, we are able to strengthen our position as an attractive employer both in the eyes of existing staff and potential new employees. In this framework, we offer key employees varied development opportunities in a young and dynamic industry. Through the close integration of university research and education at the Kassel site and other partnerships with universities and institutes, we are also making a significant contribution to recruiting highly qualified young staff to the Company in the long term.

However, the prevailing strong competition for qualified graduates and for specialist and management staff could limit SMA's opportunities for growth. We minimize the risk of losing high-performers and subject-matter experts by adopting a broad management structure and structured knowledge management.

IT-Related Risks

Development, production, and sales and service depend on the efficient, uninterrupted operation of data processing and telecommunications systems. Increasing connectivity and the need for permanent availability place ever higher demands on the IT system. We reduce the risks of IT breakdowns by continually reviewing and improving IT security and employing advanced hardware and software solutions. Efficient protective programs are put in place to defend against malware. Alongside securing network and server availability, it is most important to minimize information loss via employees, service providers or external attacks. As a global market leader, trendsetter with regard to technological innovations and publicly traded stock corporation, SMA is in the public eye and therefore heavily under threat of industrial espionage. For example, the results of research and development are a critical success factor in times of intensifying competition and advancing internationalization. Distributed data centers and mirrored databases reduce the risk of data losses.

Environmental Risks

SMA employs a small amount of hazardous substances during production that in principle pose a risk to the environment. The comprehensive measures we take in production and in quality management ensure that SMA products are manufactured in a way that is environmentally friendly and guarantees compliance with all environmental regulations. In addition, SMA has safeguarded itself against certain environmental risks.

FINANCIAL RISKS

Financing, Currency and Liquidity Risks

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

For detailed information regarding the financial market risks and risk management, please refer to the Notes to the Consolidated Financial Statements on page 132 et seqq. under "(37) Objectives and Methods Concerning Financial Risk Management." 

The Risk of Rising Interest Rates and Restrictions in Available Credits

Some PV plants – especially large-scale projects – are financed with loans to a considerable extent. This is illustrative of the trend that traditional creditors are increasingly active in projects as investors, having a significant say in key decisions. If interest rates change together with demands on equity, this has considerable effects on the profitability of a photovoltaics project. If, for instance, banks apply credit restrictions, projects are delayed or even not real-



See also page 132 et seqq.

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ized. Market developments in 2012 made it more difficult for all companies in the solar industry to access the capital market. In some cases, it remained entirely closed to them due to the difficult environment.

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

Risk of Default or Customer Insolvency

In many target markets, subsidy conditions have worsened and/or further cuts are planned. This is compounded by the financial and economic crisis in connection with the European debt crisis as well as erratic conditions on the financial markets. For these reasons, potential risks arise with some customers due to financial problems. If customers can no longer keep up with their payment obligations, this can have a negative effect on business and on the assets, financial position and results of operations at the SMA Group.

As part of our credit control, we minimize the risk of non-payment by individual customers in accordance with the Company's credit guidelines by obtaining references and credit information for the purposes of a credit check and permanently monitoring general payment practices.

We request collateral for deliveries to customers depending on the volume and the credit rating of the customer and the country, and also evaluate historical data from our previous business relationship in order to preclude non-payment. If it can be shown that payment practices in our past business relationship have been impeccable, then SMA allocates each customer a standard credit limit determined by sales in the last 12 months, the market growth factor and the agreed payment terms. If it is envisaged that the credit limit calculated in this manner will not be sufficient for our future business relationship, then we examine whether we should ask the customer to furnish collateral or whether we can cover the gap by means of defined risk reserves.

OVERALL STATEMENT ON THE GROUP'S RISK SITUATION

On the basis of our Risk Management System, we assess the overall risk situation to be manageable. However, based on the current assessment, individual risks must be recognized that could lead to a threat to the Company as a going concern, especially if they occur simultaneously. However, the Managing Board estimates that their probability of occurrence is very low.

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

FORECAST REPORT

THE GENERAL ECONOMIC SITUATION

In January 2013, the World Bank lowered its global economic forecast for this year due to the weakening recovery in most industrial nations. Instead of its initial estimate of 3.0% growth, the World Bank now expects growth of only 2.4%. This puts the forecast only just above the figures for 2012. Recovery will not set in until the end of the first quarter. According to the World Bank, the main reason for the subdued growth outlook is the ongoing economic crisis in industrialized countries, which is responsible for the limited global development.

The World Bank also expects a smaller rise in gross domestic product for the newly industrialized countries. While six months ago it still expected growth in GDP of 5.9%, it now expects only 5.5%. The exception is the economy of China: According to the World Bank, it will grow by 8.4%. The growth forecasts for other economic regions such as the USA and Japan at 1.9% and 0.8% respectively are also much more restrained and, according to the World Bank, are not expected to lead to a dramatic recovery of the global economy.

For the euro zone, the World Bank predicts a decline in gross domestic product of 0.1%. In the worst-case scenario, the European Central Bank (ECB) even expects economic output to fall by 0.9%; at best, growth of 0.3% can be expected. Recovery will only return to the euro zone after 2013.

Despite the European debt crisis, the Ifo Institute says the German economy will continue to grow in 2013. In the current year, the Ifo Institute expects moderate growth of 0.7% and a decline of the German inflation rate to approximately 1.6% (2012: 2.0%).

FUTURE GENERAL ECONOMIC CONDITIONS IN THE PHOTOVOLTAICS SECTOR

In 2012, according to the SMA Managing Board, new PV plants with a total output of 31 GW were installed (2011: approximately 29 GW). Germany remained the world's largest photovoltaics market in 2012 with approximately 7.6 GW of newly installed capacity (2011: approximately 7.5 GW). More than 80% of the new installation in Germany occurred in the first nine months of the year due to the foreseeable changes in subsidies.

The shift in regional demand was already noticeable in the fourth quarter of 2012 and is expected to speed up in 2013. For the current year, the SMA Managing Board forecasts newly installed capacity of approximately 34 GW worldwide and expects lower demand for PV plants in Europe. However, the non-European markets will presumably be able to offset this decline in volume. The SMA Managing Board also expects China to emerge as the largest photovoltaics market. The Chinese government has increased expansion targets for photovoltaics to 40 GW by 2015 with the enactment of an incentive program. The Managing Board believes that strong growth stimulus will also emanate from the USA and Japan.

The regional shift in demand is also leading to a change in the size of installations toward more powerful PV plants. Demand in China and North America in particular is largely driven by large-scale (Industrial) and commercial PV power plants (Commercial). In conjunction with strong competition, this trend is causing average selling prices per watt to decline. The SMA Managing Board therefore expects considerably reduced market volume measured in euros.

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The SMA Managing Board estimates that the medium-term global prospects for photovoltaics are good. Photovoltaics has proven increasingly competitive in recent years and is gaining importance around the world. In the Managing Board's opinion, Asia, North America and South Africa in particular display considerable potential for growth. We expect attractive growth opportunities for manufacturers of innovative system technologies in the fields of solar diesel hybrid systems and large-scale PV plants. Energy management in particular will become more important because of rising electricity costs. Investing in decentralized energy supply systems creates independence and makes energy affordable for everyone in the long term. In the future, efficiently managed photovoltaic systems with battery storage will make a crucial contribution to sustainable energy supply in private households and commercial enterprises in the interests of the energy transition. In the medium term, SMA expects an attainable market of up to 6 GW for solar diesel hybrids. Due to the drastic increase of fuel costs to more than one US dollar per liter in places, in many sunny regions photovoltaics is already the more financially attractive alternative to conventional energy carriers. In sunny areas with good irradiation, a solar diesel hybrid system will pay for itself in just a few years.

In January 2013, important foundations were laid for the future global development of the solar industry. Representatives from over 140 countries, including more than 80 energy ministers and six heads of government, met in Abu Dhabi (United Arab Emirates) for the third general assembly of the International Renewable Energy Agency (IRENA), the subsequent Abu Dhabi International Renewable Energy Conference (ADIREC) and the World Future Energy Summit. In the context of these events, partnerships for the development of renewable energy were planned with nations that pursue similar energy and environmental goals. Countries including Germany, China, South Africa, Great Britain, France, Denmark and Morocco expressed their interest. One goal of these partnerships is to establish new sales markets for companies in the solar industry.

OVERALL STATEMENT ON THE EXPECTED DEVELOPMENT OF THE SMA GROUP

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

Last year, the Managing Board adjusted its strategy to the quickly and unexpectedly changing market and competitive conditions. The target for 2015 is to extend our innovation leadership, reduce costs consistently and continue pressing ahead with internationalization.

In the current fiscal year, SMA is concentrating on implementing the strategic measures it has defined, such as the development of completely new product platforms for all power classes. The first products are to be launched from 2014. Our top development goal is to significantly reduce production costs by using new technologies and a higher proportion of carryover parts. In addition, we will upgrade our technological solutions for energy management. These center on the Sunny Boy Smart Energy. In new projects in 2013, we will demonstrate our technical expertise in the design of hybrid systems as well our many years of experience in large-scale PV power plants. The focal points of research and development are accordingly the further reduction of system costs, our extensive work on grid integration and the continued development of innovative energy management solutions. To achieve our goals, we shall invest more than €120 million in research and development in 2013 and purposefully expand our network of strategic research and development partnerships.

By establishing and expanding our purchasing offices in Germany, Poland, the USA and China, we have laid the foundation for establishing new procurement channels, certifying new suppliers and systematically reducing material costs. Further measures for lowering costs are Company-wide projects to increase productivity and the adjustment of administrative functions to the changed level of sales. In 2013, we will cut the jobs of at least 500 temporary and permanent employees at home and abroad and take additional short-term personnel measures.

Because the major growth impulses will come from foreign markets in future, in 2013 we are focusing on the expansion of market access in Asia, particularly in China, and on the North and South America and South Africa regions. Our activities in Europe will be adapted to the changing, declining markets. In the years to come, we will continue with our tried and tested strategy of being among the first PV inverter manufacturers to be represented in developing markets, while focusing primarily on the Arab countries.

With its wide range of products, high product quality, extraordinary flexibility, presence in 21 countries and fast service structure, SMA is uniquely positioned in the photovoltaics market. Measured by the 7.2 GW of inverter output sold in 2012 (2011: 7.6 GW), SMA is the global market leader and has successfully defended its high market share in the established photovoltaics markets in a difficult market and competitive environment. Through consistent internationalization, the SMA Managing Board has laid the foundations for increasing the global market share slightly in 2013. An important step in this context was the acquisition of a 72.5% stake in Zeversolar, by which the SMA Managing Board set the course for access to the Chinese photovoltaics market.

The sales and earnings forecast for 2013 was published for the first time on October 18, 2012 and is based on assumptions regarding expected market development in various photovoltaics markets. All scenarios assume that the fall in specific selling prices will continue in 2013. The upper end of the sales forecast, €1.3 billion, is based on only a slight global decline in prices. In this scenario, the established foreign photovoltaics markets compensate for the expected decline in demand in Europe, particularly

in Germany and Italy. In addition, the Managing Board assumes that young photovoltaics markets are growing more quickly due to the current price level for PV plants. The lower end of the sales forecast, €0.9 billion, anticipates a stronger price slump and a worldwide fall in overall demand for PV plants. With regard to the operating result, the SMA Managing Board expects to break even, at best, but cannot rule out making a loss.

The trend to larger PV systems will also be reflected in the distribution of sales. According to estimates by the SMA Managing Board, the Medium Power Solutions (MPS) division will generate approximately 50% to 60% of sales in 2013. In particular, the share of three-phase inverters in MPS sales will increase to up to 60% in 2013. The predictions are that in 2013 approximately 40% of the division's sales will be generated by PV inverters in the Sunny Boy product family, which is principally deployed in PV plants with an output of up to 10 kW.

Large-scale PV power plants with an output of over 500 kW are expected to make up between approximately 30% and 40% of sales in 2013. Above all, a decisive contribution to sales in the Power Plant Solutions (PPS) division in 2013 will be made by international business in North America, India and South Africa. The Sunny Central Compact Power will probably be one of the central inverters that generate the greatest sales in this segment in 2013. This product family is characterized by its especially low system costs, extensive grid integration functions and easy installation at the site. An additional positive contribution is expected from the new medium-voltage technology.

Our service business will continue to benefit in 2013 from the high level of commissioning in the Power Plant Solutions division. In addition, new long-running service and maintenance contracts with larger volumes are expected to be signed in the Service division in 2013, which will lay the foundation for long-term success in service business. An additional driver for operating service business is known as the 50.2 Hz conversion. Because modernizations to existing systems are required on the basis of the System Stability Regulation, we assume that service business in Germany will pick up strongly in the years to come.

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Moreover, SMA will expand the range of services offered for inverters and medium-voltage components for selected markets such as North America comprehensively. In future, the range will also include complete plant service with operation and maintenance modules for large-scale PV plants. The advantage for the customer is that by taking on all services relating to the PV power station, the performance of the whole system will be optimized.

Among the Complementary Divisions, we expect a slight growth in sales to result from increasing activities relating to solar diesel hybrid systems. Earnings will probably be at the same level as in the previous year.

Due to foreseeable changes in different incentive programs and the generally high dynamism of global photovoltaics markets, exact forecasts of future sales performance are not possible. The Managing Board expects a similar sales level, but cannot currently rule out a further decline.

According to estimates by the SMA Managing Board, the shift in the product mix toward larger PV plants is causing considerable pressure on the gross margin. By systematically analyzing product costs, SMA has identified savings and an increased productivity potential for reducing production costs at an early stage in order to counteract this trend effectively.

SMA will continue with its successful strategy of producing primarily on the basis of orders received, especially as the Managing Board believes the annual production capacity of approximately 15 GW (including Zeversolar) is sufficient to meet global demand. Before the consolidation of Zeversolar, the net working capital ratio will be between 19% and 22%. After completion of the construction work in 2012, the acquisition of machinery and equipment and the increasing value of capitalized development projects will result in a stable investment volume of approximately €100 million in 2013. In the medium-term, SMA is aiming for total annual investments to comprise up to 10% of sales.

The pursuit of our internationalization strategy and our focus on the development of innovative products for solar applications and intelligent energy management solutions will lead to higher fixed costs. We will be unable entirely to offset the decrease in sales and the high pricing pressure with new products, lower cost prices and adjusted organizational structures. The SMA Managing Board therefore expects a sharply declining EBIT margin and to break even, at best. However, a loss cannot be ruled out at this time.

In addition, SMA generated a positive free cash flow before the dividend payment, even in the challenging market environment of last year. Because of this, our high cash reserves of almost half a billion euros at the end of 2012 and our high equity ratio of over 60%, SMA considers itself well equipped financially to benefit from the growth of global photovoltaics markets.

Niestetal, February 22, 2013

SMA Solar Technology AG

The Managing Board

CONSOLIDATED

FINANCIAL

STATEMENTS

**FISCAL YEAR 2012 –
SMA CONTINUES ITS INTERNATIONALIZATION STRATEGY**

NEARLY
25%
MARKET SHARE

56%
EXPORT RATIO



PRESENT IN
21
SOLAR
MARKETS

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INCOME STATEMENT SMA GROUP

€ '000	Note	2012	2011
Sales	5	1,463,363	1,676,342
Cost of sales	6	1,119,802	1,208,205
Gross profit		343,561	468,137
Selling expenses	7	68,866	65,779
Research and development expenses	8	87,917	83,758
General administrative expenses	9	74,400	68,765
Other operating income	10	27,646	23,307
Other operating expenses	11	38,036	32,860
Operating profit (EBIT)		101,988	240,282
Financial income		4,828	6,635
Financial expenses		2,074	3,368
Financial result	13	2,754	3,267
Profit before income taxes		104,742	243,549
Income tax expense	14	29,637	77,495
Consolidated net profit		75,105	166,054
of which attributable to non-controlling interest		0	0
of which attributable to shareholders of SMA AG		75,105	166,054
Earnings per share, basic (in €)	15	2,16	4,79
Earnings per share, diluted (in €)	15	2,16	4,79
Number of ordinary shares (in thousands)		34,700	34,700

STATEMENT OF COMPREHENSIVE INCOME SMA GROUP

€ '000	2012	2011
Consolidated net profit	75,105	166,054
Changes in fair values of available-for-sale assets	456	-67
Income taxes	-138	20
Changes recognized outside profit or loss (available-for-sale financial assets)	318	-47
Unrealized gains (+)/losses (-) from currency translation of foreign subsidiaries	1,044	-1,011
Changes recognized outside profit or loss (currency translation differences)	1,044	-1,011
Total comprehensive income	76,467	164,996
of which attributable to non-controlling interest	0	0
of which attributable to shareholders of SMA AG	76,467	164,996

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CONSOLIDATED BALANCE SHEET

SMA GROUP

€ '000	Note	12/31/2012	12/31/2011
Non-current assets			
Goodwill	16	311	311
Other intangible assets	16	66,424	56,489
Fixed assets	17	377,107	360,932
Other financial investments		75	75
Other financial assets	20	51,073	57,864
Deferred taxes	14	25,184	26,309
		520,174	501,980
Current assets			
Inventories	18	221,369	256,402
Trade receivables	19	119,288	141,101
Other financial assets	20	257,398	86,149
Claims for income tax refunds	14	11,302	6,832
Other receivables	19	13,846	10,697
Cash and cash equivalents	21	185,299	371,101
		808,502	872,282
Total assets		1,328,676	1,374,262
Shareholders' equity			
Subscribed capital		34,700	34,700
Capital reserves		119,200	119,200
Retained earnings		666,761	635,404
Equity attributable to non-controlling interest		2	2
	22	820,663	789,306
Non-current liabilities			
Provisions	23	112,815	108,502
Financial liabilities	24	32,775	31,475
Other financial liabilities	26	2,078	2,078
Other liabilities	27	94,422	80,693
Deferred taxes	14	21,553	18,369
		263,643	241,117
Current liabilities			
Provisions	23	89,879	68,260
Financial liabilities	24	2,788	2,420
Trade payables	25	72,691	115,760
Other financial liabilities	26	55,892	75,030
Income tax liabilities	14	681	36,970
Other liabilities	27	22,439	45,399
		244,370	343,839
Total equity and liabilities		1,328,676	1,374,262

CONSOLIDATED STATEMENT OF CASH FLOWS SMA GROUP

€ '000	Note	2012	2011
Consolidated net profit		75,105	166,054
Income tax expenses		29,637	77,495
Financial result		-2,754	-3,267
Depreciation and amortization		69,923	50,381
Change in other provisions		25,933	9,424
Losses from the disposal of assets		4,118	1,441
Other non-cash expenses/revenue		26,654	13,694
Interest received		4,553	5,771
Interest paid		-1,286	-87
Income tax paid		-66,087	-80,209
Gross cash flow		165,796	240,697
Increase/decrease of inventories		8,780	-14,801
Increase/decrease in trade receivables		20,900	-27,341
Increase/decrease in trade payables		-43,069	40,412
Change in other net assets/other non-cash transactions		-36,273	-93
Net cash flow from operating activities	31	116,134	238,874
Payments for investments in fixed assets		-72,906	-134,213
Proceeds from the disposal of fixed assets		60	470
Payments for investments in intangible assets		-27,304	-27,128
Payments for investments in fixed financial assets		0	-2
Payments for the acquisition of companies net of cash/ Payments for the acquisition of business units		0	-23,020
Proceeds from the disposal of securities and other financial assets		228,631	190,000
Payments for the acquisition of securities and other financial assets		-388,543	-135,152
Net cash flow from investing activities	32	-260,062	-129,045
Proceeds from increase of financial liabilities		3,739	16,502
Redemption of financial liabilities		-1,862	-3,807
Dividend payments of SMA Solar Technology AG		-45,110	-104,100
Net cash flow from financing activities	33	-43,233	-91,405
Net increase/decrease in cash and cash equivalents		-187,161	18,424
Net increase/decrease due to exchange rate effects		1,359	-1,406
Cash and cash equivalents as of 01/01		371,101	354,083
Cash and cash equivalents as of 12/31	34	185,299	371,101

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STATEMENT OF CHANGES IN EQUITY

SMA GROUP

		Equity attributable to the shareholders of the parent company					Equity attributable to non-controlling interest	Consolidated shareholders' equity
€ '000	Note	Share capital	Capital reserves	Market valuation of securities	Other retained earnings	Total		
Shareholders' equity as of January 1, 2011		34,700	119,200	0	574,508	728,408	2	728,410
Dividend payments of SMA Solar Technology AG		0	0	0	-104,100	-104,100	0	-104,100
Consolidated net profit		0	0	0	166,054	166,054	0	166,054
Differences from currency translation	22	0	0	0	-1,011	-1,011	0	-1,011
Changes not shown in the income statement	22	0	0	-47	0	-47	0	-47
Overall result								164,996
Changes in minority interests	22	0	0	0	0	0	0	0
Shareholders' equity as of December 31, 2011		34,700	119,200	-47	635,451	789,304	2	789,306
Dividend payments of SMA Solar Technology AG		0	0	0	-45,110	-45,110	0	-45,110
Consolidated net profit		0	0	0	75,105	75,105	0	75,105
Differences from currency translation	22	0	0	0	1,044	1,044	0	1,044
Changes not shown in the income statement	22	0	0	318	0	318	0	318
Overall result								76,467
Changes in minority interests		0	0	0	0	0	0	0
Shareholders' equity as of December 31, 2012	22	34,700	119,200	271	666,490	820,661	2	820,663

NOTES SMA GROUP

1. BASIC INFORMATION

The Consolidated Financial Statements of SMA Solar Technology AG for the year ended December 31, 2012 were prepared in compliance with the International Financial Reporting Standards (IFRS) as adopted by the EU, as well as in compliance with the regulations of Section 315a of the German Commercial Code (HGB). The requirements of the standards applied were fulfilled completely and provide a fair view of the net assets, financial position and results of operations of SMA Solar Technology AG and the subsidiary companies included in the scope of consolidation (hereinafter: the SMA Group or the Group).

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

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

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

The Managing Board of SMA Solar Technology AG authorized the Consolidated Financial Statements on February 22, 2013 for submission to the Supervisory Board. The Supervisory Board has the duty of reviewing the Consolidated Financial Statements and declaring whether it approves the Consolidated Financial Statements.

The SMA Group develops, produces and distributes PV inverters, transformers, choke coils, and monitoring and energy management systems for PV plants and power-electronic components for railway technology.

More detailed information on segments is provided in section 5. 

2. CONSOLIDATION

2.1. Scope of Consolidation and Consolidation Principles

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

Subsidiaries are fully consolidated from the date of acquisition, i.e. from the date on which the Group obtains control. Consolidation takes place according to the purchase method of accounting. In line with the purchase method of accounting, the cost of acquisition of the business combination is offset against the fair value of the assets acquired and liabilities assumed from the subsidiary at the date of acquisition. The cost of acquisition of the busi-



See also section 5 page 108 et seqq.

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ness combination consists of the fair value of the purchase price paid and the carrying amount of any non-controlling interests. The non-controlling interests may either be recognized at the proportionate value of the assets acquired and liabilities assumed (applied at SMA) or at their fair value. Transaction costs that are directly attributable to the acquisition are recognized in the consolidated profit provided they do not refer to the issue of shares in the SMA Group.

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

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

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

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

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

2.2. Scope of Consolidation

The scope of consolidation as at December 31, 2012 was expanded compared with December 31, 2011 due to the newly founded companies SMA South America SpA (Santiago, Chile), Solar Technology South Africa Pty. Ltd. (Centurion, South Africa), SMA Solar Beteiligungs GmbH, SMA Service International GmbH (Niestetal, Germany) and SMA Brasil Tecnologia Ferroviaria Ltda. (Itupeva, Brazil). All companies were fully consolidated. The existing investments are not consolidated due to their subordinate importance. Non-controlling interest's share in equity of the consolidated companies is shown separately within equity.

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

Name	Registered office	Holding	Con-solida-tion
Parent company			
SMA Solar Technology AG	Niestetal, Germany	F	
Shares in affiliated companies			
dtw Sp. z o.o.	Zabierzów, Poland	100%	F
SMA America Holdings LLC	Denver, USA	100%	F
SMA America Production LLC	Denver, USA	100%	F
SMA Beijing Commercial Co. Ltd.	Beijing, China	100%	F
SMA Benelux BVBA	Mechelen, Belgium	100%	F
SMA Brasil Tecnologia Ferroviaria Ltda.	Itupeva, Brazil	100%	F
SMA Central and Eastern Europe s.r.o.	Prague, Czech Republic	100%	F
SMA France S.A.S.	Saint Priest Cedex, France	100%	F
SMA Ibérica Technología Solar, S.L.	Barcelona, Spain	100%	F
SMA Immo Beteiligungs GmbH	Niestetal, Germany	94%*	F
SMA Immo GmbH & Co. KG (formerly SMA Immo GmbH)	Niestetal, Germany	100%	F
SMA Italia S.r.l.	Milan, Italy	100%	F
SMA Japan Kabushiki Kaisha	Tokyo, Japan	100%	F
SMA Middle East Limited	Abu Dhabi, United Arab Emirates	100%	F
SMA Railway - Technology GmbH	Kassel, Germany	100%	F
SMA Service - International GmbH	Niestetal, Germany	100%	F
SMA Solar - Beteiligungs GmbH	Niestetal, Germany	100%	F
SMA Solar India Private Limited	Mumbai, India	100%	F
SMA Solar UK Ltd.	Banbury, Great Britain	100%	F

Name	Registered office	Holding	Con-solida-tion
SMA Solar Technology America LLC	Rocklin, USA	100%	F
SMA South America SpA	Santiago, Chile	100%	F
SMA Australia Pty. Ltd.	North Ryde, Australia	100%	F
SMA Solar Thailand Co. Ltd.	Bangkok, Thailand	100%	F
SMA Solar Technology Beteiligungs GmbH	Niestetal, Germany	100%	F
SMA Solar Technology Canada Inc.	Vancouver, Canada	100%	F
SMA Technology Hellas AE	Glyfada, Greece	100%	F
SMA Technology Korea Co., Ltd.	Seoul, South Korea	100%	F
SMA Solar Technology South Africa Pty. Ltd.	Centurion, South Africa	100%	F
SMA Solar Technology Portugal, Unipessoal LDA (formerly Niestetal Services, Unipessoal LDA)	Palmela, Portugal	100%	F
Investments			
Changzhou SMA Electronics Co., Ltd.	Changzhou, China	10%	N
IdE Institut dezentrale Energietechnologien gemeinnützige GmbH	Kassel, Germany	10%	N
Uni Kassel International Management School KIMS GmbH; Kassel	Kassel, Germany	10%	N

F = fully consolidated; N = not consolidated

* The remaining shares are held by SMA Technologie-Holding GmbH

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

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

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2.3. Translation of Financial Statements in Foreign Currencies

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

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

Assets and liabilities of subsidiaries preparing their balance sheets in a currency other than the euro are translated using the current exchange rate at the balance sheet date. Items of the income statement are translated periodically using the average rate of the relevant month. The equity components of subsidiaries are translated at the corresponding historical exchange rate applicable upon accrual. Any resulting translation differences are recorded under other income within

equity as adjustment items for foreign currency translation or in shares of other shareholders. The accumulated amount recorded in equity is recognized through profit or loss upon the disposal of the relevant foreign subsidiary.

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

in €	Average rate		Closing rate	
	2012	2011	12/31/2012	12/31/2011
1 US dollar (USD)	0.77839	0.71890	0.75844	0.77567

3. ACCOUNTING METHODS AND AMENDMENTS TO ACCOUNTING STANDARDS

3.1. New IASB Accounting Standards

Standards and interpretations to be applied for the first time in the fiscal year

Standard/Interpretation		Date of compulsory application ¹	Endorsement (until 12/31/2012) ²
Amendment	IFRS 7 Transfers of Financial Assets	01/01/2011	yes

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

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

IFRS 7 Financial Instruments: Disclosures

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

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Standards and Interpretations that have been published but are not yet mandatory

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

Standard/Interpretation		Date of compulsory application ¹	Endorsement (until 12/31/2013) ²
Amendment	IAS 1	Presentation of Other Comprehensive Income	07/01/2012
Amendment	IAS 12	Income Tax Expenses	01/01/2013
Amendment	IAS 19	Amendments to IAS 19	01/01/2013
Amendment	IAS 27	Separate Financial Statements (2011)	01/01/2014
Amendment	IAS 28	Investments in Associates and Joint Ventures	01/01/2014
Amendment	IAS 32	Offsetting Financial Assets and Financial Liabilities	01/01/2014
Amendment	IFRS 1	Government Loans	01/01/2013
Amendment	IFRS 1	Severe Hyperinflation	01/01/2013
Amendment	IFRS 7	Offsetting Financial Assets and Financial Liabilities	01/01/2013
New	IFRS 9	Financial Instruments – Classification and Measurement	01/01/2015
New	IFRS 10	Consolidated Financial Statements	01/01/2014
New	IFRS 11	Joint Arrangements	01/01/2014
New	IFRS 12	Disclosure of Interests in Other Entities	01/01/2014
New	IFRS 13	Fair Value Measurement	01/01/2013
Amendment	IFRS 10, IFRS 11 and IFRS 12	Transitional Guidance	01/01/2014
Amendment	IFRS 10, IFRS 12 and IAS 27	Investment Entities	01/01/2014
Amendment	Annual Improvements	Annual improvements 2009–2011	01/01/2013

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

² Mandatory application according to adoption by the EU Commission - the standards themselves sometimes stipulate earlier mandatory application.

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

IAS 1 Presentation of Other Comprehensive Income

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

IFRS 9 Financial Instruments – Classification and Measurement

In November 2009, the IASB adopted the Standard for the Classification and Measurement of Financial Assets and added a corresponding regulation for financial liabilities in November 2010. The standard is part of the comprehensive IASB project to replace IAS 39 Financial Instruments – Recognition and Measurement. The adopted version stipulates that in the future, financial assets should in principle be recorded at amortized cost or at fair value through profit or loss. In addition, it provides for a non-reversible choice on a case-by-case basis for the measurement of equity instruments at fair value. The category of financial instruments is determined upon acquisition and may not be changed subsequently. In addition, the standard contains related regulations concerning for instance embedded derivatives, the fair value option and impairment losses/reversal of impairment losses. It is envisaged that the standard will apply mandatorily from 2015 onwards following its endorsement by the EU. SMA Solar Technology AG will observe the further development of the entire project to revise IAS 39 Financial Instruments – Recognition and Measurement.

IFRS 10 Consolidated Financial Statements

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

IFRS 11 Joint Arrangements

IFRS 11 deals with joint ventures and joint operations and the different ways they are recognized. In future, joint ventures must be included in the consolidated financial statements at equity; the option to apply proportionate consolidation is discontinued. The standard is to be applied from 2014. Whether joint arrangements will be relevant for SMA in the future cannot presently be foreseen.

IFRS 12 Disclosure of Interests in Other Entities

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

IFRS 13 Fair Value Measurement

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

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3.2. Disclosures to the Accounting Policies

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

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

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

With the purchase of dtw Sp. z o.o., the Group formed **goodwill**. There were no other intangible assets with an indefinite useful life in the periods under review.

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

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

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

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

	Useful life
Leasehold improvements	10 years
Buildings	25 to 33 years
Technical equipment and machinery	6 to 8 years
Business and office equipment	5 to 10 years

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

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

Impairment of intangible assets and fixed assets:

On each balance sheet date, the Group reviews whether there are any indicators that the value of an asset might be impaired. If such indicators exist or if an annual impairment test of an asset is required, the Group makes an estimate of

the recoverable amount of the relevant asset. The recoverable amount of an asset is its fair value less costs to sell or its value in use, whichever is higher. As a rule, the recoverable amount is to be determined for each individual asset. If it proves impossible to determine the recoverable amount for individual assets because the cash flows depend upon those of other assets, the cash flows are determined for the next higher group of assets (cash-generating unit) for which such a cash flow can be determined.

If the carrying amount of an asset or a cash-generating unit exceeds the recoverable amount, the asset or the cash-generating unit is impaired and written down to the recoverable amount. In assessing the value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments regarding the interest effect and the risks specific to the asset. In order to determine the fair value less costs to sell, an adequate valuation model is used. This is based on valuation multipliers, stock prices of quoted shares of entities or other available indicators for the fair value. Impairment costs are recognized under the expense category that corresponds to the function of the impaired asset in the enterprise. There were no indicators for a possible impairment in fiscal year 2011. In fiscal year 2012, impairment was taken into account on development projects. More information is provided in section 16. 



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

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

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

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

For subsequent measurements, financial assets as defined in IAS 39 are classified as financial assets at fair value through profit or loss, as loans and receivables, as held-to-maturity investments or as available-for-sale financial assets.

Financial liabilities as defined in IAS 39 are classified as financial liabilities at fair value through profit or loss or as other financial liabilities. Financial assets are designated to measurement categories upon their initial recognition. If permitted and necessary, re-designations are made at the end of the fiscal year.

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

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

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

recognized through profit or loss in the income statement. The derivative financial instruments held by the SMA Group are not part of effective hedging relationships in accordance with IAS 39.

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

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

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

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

Provisions account for all recognizable present (legal and constructive) obligations of the Group to third parties as a result of past events which are expected to lead to an outflow of resources with an economic benefit to settle the obligation, and the amount of which can be determined reliably. The provisions are recognized in line with IAS 37 at the estimated amount required to settle them. Insofar as the Group expects to receive a repayment, at least in part, for a reported provision (such as for an insurance contract), the repayment is recorded as a separate asset if the inflow of

the payment is highly probable. The expense for the formation of the provision is recognized in the income statement. Non-current provisions are carried in the balance sheet at their settlement amount discounted to the balance sheet date using corresponding term-dependent market interest rates. If the amount is discounted, the increase of provisions caused by expiration is recorded under finance costs.

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

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

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

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

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

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

Revenue is recognized if it is probable that the economic benefit will flow to the Group and the amount of the revenue can be measured reliably. Revenue is measured at the fair value of the consideration received. Discounts, rebates and other deductions are not taken into account. Revenue from the sale of goods and products is recognized if the material rewards and risks associated with the ownership of the goods and products sold have passed to the buyer. This is normally the case upon delivery of the goods and products. Revenue from services is recognized as soon as the services are rendered. Interest income is recognized when interest has accrued (using the effective interest rate, i.e. the internal

rate used to discount estimated future cash inflows over the expected term of the financial instrument to the net carrying amount of the financial asset). Dividends are recognized when the right to receive payment is established.

Current tax receivables and tax liabilities for the ongoing and for previous periods are measured at the amount which is expected to be reimbursed from the tax authority or to be paid to the tax authority. In order to calculate this amount, the tax rates and tax laws applicable at the balance sheet date are used. Current taxes that relate to items stated directly in equity are not recognized in the income statement but rather, they are recognized in equity.

Deferred taxes are calculated according to IAS 12 on the basis of the standard international balance-sheet-related liability method. This requires deferred tax items to be recognized for all temporary differences between the tax base of an asset or liability and its carrying amount in the consolidated balance sheet as well as for tax loss carryforwards. However, deferred tax assets are only recognized if realization is sufficiently likely.

Deferred taxes are measured using the tax rates that, under current legislation, would apply in the future on the probable date of reversal of the temporary differences. The effects of amendments to tax legislation on deferred tax assets and liabilities are recognized in profit or loss in the period in which the material conditions for such amendments to come into force arise. Deferred tax assets and liabilities are not discounted according to the regulations of IAS 12. Deferred tax assets and liabilities are offset within individual companies on the basis of maturity.

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3.3. Significant Judgments, Estimates and Assumptions

The preparation of the Consolidated Financial Statements requires management to make judgments, estimates and assumptions that affect the amounts of revenues and expenses, assets and liabilities reported on the reporting date as well as the disclosure of contingent liabilities. Uncertainty related to these assumptions and estimates may lead to results that require material adjustments to the carrying amounts of the relevant assets or liabilities in the future.

When applying the accounting and valuation policies, the management made the following judgments, which had a significant effect on the amounts recognized in the Consolidated Financial Statements. Judgments containing estimates are not taken into account here.

Management made a judgment on the first-time categorization of other financial assets. More information is provided in section 28. 

The key **assumptions** concerning the future and other key sources of **estimation uncertainty** on the reporting date associated with a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities during the next fiscal year are explained below:

Development costs are capitalized in line with the accounting policies presented when all required conditions are given. Initial capitalization of costs is based on an estimate by management that a project's technical and economic feasibility has been proven. This is normally the case when a development project has reached a specific milestone or a specific quality gate in the development process. When determining the amounts to be capitalized, management makes further valuation assumptions regarding the amount of expected future cash flows from the assets, the discounting

rates to be applied and the period of inflow of expected future cash flows generated by the assets. With this in mind, €20.1 million (2011: €16.1 million) were capitalized during the fiscal year. The increase in capitalization reflects the increasing development activities carried out by SMA in order to retain its technology leadership. The research and development costs recognized as expenses are presented in section 8. 

In addition to individual circumstances, provisions for overall warranty risks are also taken into account when setting aside provisions for warranty obligations. In the case of warranty risks, an obligation of five or ten years is generally adopted as a base. The expected warranty expenditure is based on historical values from the past. The expected warranty expenditure is calculated by referring to a weighted percentage determined by comparing actual warranty expenditure in the last five to ten years leading up to the previous year's sales and applying these percentages to the sales covered by warranty obligations. The warranty provisions are used up equally over the five- to ten-year warranty period. The value of the provision for individual cases and overall warranty risks amounted to €178.5 million (2011: €149.5 million) as at December 31, 2012. Accrued payments received for non-gratuitous warranties are collected over the warranty period as sales revenues on a straight-line basis since, in this case, a linear progression of warranty costs is also adopted as the best possible estimation method.

On each balance sheet date, the Group examines whether there are indicators for an impairment of non-financial assets. Estimating the value in use requires management to make an estimate of the expected future cash flows from the asset or the cash-generating unit and to choose a suitable discount rate in order to calculate the present value of these cash flows. There were no indicators for a possible impairment in the fiscal year 2011. In fiscal year 2012, impairment was recognized on development projects. More information is provided in section 16. 

Deferred tax assets are formed for all unused tax loss carryforwards to the extent that it is probable that there will be sufficient taxable profit to enable the loss carryforwards to be actually used. Determining the amount of deferred tax assets requires management to use significant discretion regarding the expected time of accrual and the amount of taxable income in the future as well as regarding the future tax planning strategies. Deferred tax assets for loss carryforwards amounting to €0.8 million (2011: €0.4 million) were fully recorded.

4. BUSINESS COMBINATIONS

In the 2012 fiscal year, there were no business combinations for which IFRS 3 is applicable.

As at August 1, 2011, 100% of the shares carrying voting rights in dtw Sp. z o.o. (Zabierzów, Poland) were acquired. With the acquisition of its long-standing supplier, SMA has secured technological leadership in the area of PV inverters. dtw specializes in the manufacture of technologically innovative core components for the production of inverters, such as inductors and transformers. In recent years, dtw has grown strongly and in 2010 generated sales of €74 million.

5. SEGMENT REPORTING

At the beginning of fiscal year 2012, the SMA Group reorganized its photovoltaics operations and adjusted the Group structure accordingly. The SMA Group is managed via strategic business units in the form of divisions, which are organized on the basis of the nature of the customer relationship and the characteristics of the sales organization. As a consequence, the operational management of the Group and internal reporting also changed.

In accordance with the regulations of IFRS 8 "Operating Segments" (management approach), this organizational repositioning led to a change in the segment reporting for all comparative periods. As a result, the number of reportable segments changed. On the basis of the information reported to the Group's chief operating decision makers for the allocation of resources and performance, the operating segments were identified by division according to the structure of the photovoltaics operations in line with IFRS 8. The Electronics Manufacturing segment was integrated in the former Medium Power Solutions (MPS) segment. Off-Grid Solutions (OGS) was removed from the MPS segment as an independent segment. The High Power Solutions segment (HPS) was renamed Power Plant Solutions (PPS). The new Service segment pools the functional service activities relating to photovoltaics, which were previously conducted in the previous MPS and HPS segments.

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The Railway Technology, Off-Grid Solutions and dtw segments are immaterial according to IFRS 8 and are combined in the collective item "Complementary Divisions".

Segment	Activities
Medium Power Solutions	Development, production and distribution of system technology for photovoltaic applications in the grid-tied building and commercial field. Responsible for the Sunny Boy, Sunny Mini Central and Sunny Tripower product families. The division also develops and distributes products used for monitoring PV systems and energy management.
Power Plant Solutions	Development, production and distribution of system technology for photovoltaic applications in the power plant sector. This includes the Sunny Central product family in the market for large-scale solar power plants with outputs ranging from 500 kW to several megawatts.
Service	After-sales services in Germany and abroad to guarantee the technical availability of SMA products during a lifespan of more than 20 years. The services include warranty services, service and maintenance contracts and commissioning.
Complementary Divisions	Operations of dtw, Off-Grid Solutions, in future Hybrid Energy Solutions, and Railway Technology.

The operating result of the segments is monitored separately by the Managing Board in order to make decisions on the allocation of resources and to determine the profitability of the segments. Group financing, currency and interest rate hedging and the income tax burden are controlled at Group level and are therefore not allocated to the individual operating segments.

As regards information about geographical segments, sales are assigned to countries using the destination principle. The Company waives to present non-current assets based on this classification. SMA Solar Technology AG develops and manufactures its products mainly in Germany. The production sites in North America and Poland are not capital intensive and therefore immaterial. Accordingly, a division of assets by regions is likewise not a part of internal management reporting.

The Group measures the performance of its segments through a measurement of segment profit or loss, which is referred to as "EBIT" in the internal management and reporting system. This measurement comprises gross profit, selling and general administrative expenses, research and non-capitalized development costs as well as other operating income (expense).

Segment assets include the intangible assets attributed to the relevant segments and fixed assets, inventories, and trade receivables. Segment liabilities include trade payables that are directly attributable to the relevant segments. Internal management reporting is in line with the accounting policies of external reporting.

The transfer prices between the business segments are determined using management prices based on usual arm's length market conditions. Income from external third parties is reported using the same valuation parameters as shown in the income statement.

Sales revenue in the Medium Power Solutions and Power Plant Solutions segments is subject to fluctuations for reasons including discontinuous incentive programs.

Financial Ratios by Segments and Regions

Segments	Medium Power Solutions		Power Plant Solutions	
	2012	2011	2012	2011
€ million				
External sales	934.8	1,117.7	440.8	489.5
Internal sales	100.5	80.8	27.4	24.7
Total sales	1,035.3	1,198.5	468.2	514.2
Depreciation and amortization	30.3	23.3	3.9	2.8
Operating profit (EBIT)	91.3	146.5	45.2	103.1
Segment assets	277.5	332.6	148.5	152.7
Segment liabilities	16.1	54.3	32.3	30.2
Capital Expenditure	38.7	26.8	3.4	4.8
Sales by regions				
Germany	525.8	635.6	106.1	141.9
European Union	259.8	332.6	78.7	174.1
Third-party countries	185.5	185.7	258.6	176.5
Sales deductions	-36.3	-36.2	-2.6	-3.0
External sales	934.8	1,117.7	440.8	489.5

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Service		Complementary Divisions		Reconciliation		Continuing operations	
2012	2011	2012	2011	2012	2011	2012	2011
26.9	17.6	60.9	51.5	0.0	0.0	1,463.4	1,676.3
84.7	72.4	76.3	42.0	-288.9	-219.9	0.0	0.0
111.6	90.0	137.2	93.5	-288.9	-219.9	1,463.4	1,676.3
2.4	1.4	3.4	1.7	29.9	21.2	69.9	50.4
-15.8	-7.5	8.7	0.4	-27.4	-2.2	102.0	240.3
38.9	31.2	40.5	45.1	823.3	812.7	1,328.7	1,374.3
2.3	3.2	2.2	3.6	455.1	493.7	508.0	585.0
7.3	3.9	2.3	1.8	48.5	110.5	100.2	147.8
8.4	2.2	16.9	17.2	0.0	0.0	657.2	796.9
14.4	15.3	23.6	21.5	0.0	0.0	376.5	543.5
4.4	0.4	20.9	13.3	0.0	0.0	469.4	375.9
-0.3	-0.3	-0.5	-0.5	0.0	0.0	-39.7	-40.0
26.9	17.6	60.9	51.5	0.0	0.0	1,463.4	1,676.3

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

€ million	2012	2011
Total segment earnings (EBIT)	129.4	242.5
Eliminations	-27.4	-2.2
Consolidated EBIT	102.0	240.3
Financial result	2.7	3.3
Profit before income taxes	104.7	243.6
Total segment assets	505.4	561.6
Other central items and eliminations	279.1	253.7
Cash and long-term time deposits	480.8	506.3
Financial instruments not designated and other assets	26.8	19.5
Deferred tax assets and income tax receivables	36.5	33.1
Other financial investments	0.1	0.1
Group assets	1,328.7	1,374.3
Total liabilities	52.9	91.3
Other central items and eliminations	19.8	24.5
Financial instruments not designated, liabilities and provisions	413.1	413.9
Income tax liabilities and deferred tax liabilities	22.2	55.3
Group liabilities	508.0	585.0

Circumstances are shown in the reconciliation which by definition are not part of the segments. In addition, unallocated parts of the Group head office, including cash and cash equivalents and buildings, are included therein, the expenses of which are assigned to the segments. Business relations between the segments are eliminated in the reconciliation.

In 2012, as in the previous year, no customer accounted for a share of more than 10% of Group sales.

NOTES TO THE INCOME STATEMENT SMA GROUP

6. COST OF SALES

€ '000	2012	2011
Material expenses	788,778	907,033
Personnel expenses	178,197	178,710
Depreciation and amortization	63,341	44,082
Other	89,486	78,380
	1,119,802	1,208,205

Cost of sales include, as direct costs, the product-related material expenses as well as all other expenses for the areas of Production, Purchasing and Service as well as Facility Management and IT.

The first successes in lowering production costs were achieved in 2012. Material costs were successfully reduced thanks to the close cooperation of Purchasing, Production and Development. Material expenses adjusted for impairment were cut by 15%. In 2012, material expenses include impairment on inventories of €22.4 million (2011: €7.5 million). Despite the heavy price slump for PV inverters, the material expenses ratio thus remained constant in 2012 at 53.9% (2011: 54.1%).

In 2012, the Purchasing and Service areas continued to be expanded in a targeted manner. However, this expansion was more than offset by the reduction of variable employee compensation as well as lower expenses for temporary employees. Personnel expenses remained steady year-on-year at €178.2 million (2011: €178.7 million).

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The development of depreciation is marked in particular by the investments in buildings and machinery during the last twelve months. This item also includes depreciation of capitalized development projects amounting to €11.2 million (2011: €5.6 million).

The change of the other expenses resulted mainly from higher provisions for risk provisioning for purchased components year-on-year. Although the costs for regular business operations were lowered during the year by various improvement projects, this did not fully compensate for the increase in risk provisioning. This resulted in an increase totaling €11.1 million to €89.5 million.

7. SELLING EXPENSES

€ '000	2012	2011
Material expenses	578	926
Personnel expenses	35,951	34,292
Depreciation and amortization	565	508
Other	31,772	30,053
68,866	65,779	

Selling expenses include expenditure for global sales activities, internal sales departments and marketing. On a year-on-year basis, SMA systematically expanded its global distribution and marketing structures to benefit from the global developments in the photovoltaics markets. In 2012, new sales companies were founded in South Africa, Brazil and Chile and the existing sales companies were expanded in Japan, Australia and Thailand. The increased expenses for current wages and salaries as a result of the increase in employees were partially offset by the reduced variable compensation. Personnel expenses increased by 4.8% to €35.9 million. Depreciation and amortization remained stable year-on-year.

The 5.7% increase of other expenses to €31.8 million is attributable to increased global marketing activities. SMA supports solar power professionals in the distribution of PV plants with specific marketing measures, thereby influencing the decision-making process.

8. RESEARCH AND DEVELOPMENT EXPENSES

	2012	2011
Material expenses	6,365	5,637
Personnel expenses	64,328	58,786
Depreciation and amortization	4,875	4,983
Other	32,539	30,481
108,107	99,887	
Capitalized development projects	-20,190	-16,129
87,917	83,758	

Research and development expenses include all costs that may be attributed to the areas of product development, development-related testing and product management. In order to strengthen its technological leadership even further, SMA systematically expanded the area of development. SMA employed 12% more staff there in comparison to the previous year. The increased expenses for current wages and salaries are partially offset by the reduced variable compensation and result in a 9.4% increase in personnel expenses. Other expenses increased by 6.7% to €32.5 million. The increase is mainly attributable to the further expansion of development cooperation and an intensification of the measures to protect intellectual property.

9. GENERAL ADMINISTRATIVE EXPENSES

	2012	2011
Material expenses	271	128
Personnel expenses	48,783	41,998
Depreciation and amortization	1,143	808
Other	24,203	25,831
74,400	68,765	

Administrative expenses include expenses for the Managing Board and for the Finance, Human Resources, Legal and Compliance, Corporate Communications and Quality Management departments. In view of increasing internationaliza-

tion, SMA has created new structures and set up divisions in a targeted manner. In the wake of this, personnel costs rose by 16.2% to €48.8 million. The increase in personnel is partially offset by the decrease of variable compensation. Depreciation and amortization increased by €0.3 million year-on-year to €1.1 million. Other expenses were reduced by 6.2% compared with the previous year. This was primarily achieved by reducing projects and recruitment costs.

10. OTHER OPERATING INCOME

€ '000	2012	2011
Revenues from foreign currency translation	18,783	20,997
Government grants	718	715
Other miscellaneous income	8,145	1,595
	27,646	23,307

Other operating income mainly comprises income from the reversal of impairment losses on receivables.

11. OTHER OPERATING EXPENSES

€ '000	2012	2011
Expense from foreign currency translation	20,159	19,739
Other miscellaneous expenses	17,877	13,121
	38,036	32,860

Other miscellaneous operating expenses include expenses for a voluntary severance program amounting to €5.1 million and expenses for additions to impairment losses on receivables.

12. BENEFITS TO EMPLOYEES AND TEMPORARY EMPLOYEES

	2012	2011
Wages and salaries	254,460	232,741
Expenses for temporary employees	31,933	42,895
Social security contribution and welfare payments	45,960	38,150
	332,353	313,786

In 2012, voluntary contributions to private pensions amounted to €1.7 million (2011: €1.3 million).

The average number of employees in the Group amounted to:

	2012	2011
Research and Development	973	867
Production and Service	3,140	2,631
Sales and Administration	1,119	1,108
	5,232	4,606
Apprentices and interns	431	444
Temporary employees	1,055	1,316
	6,718	6,366

13. FINANCIAL RESULT

	2012	2011
Interest income	4,593	6,486
Other financial income	235	106
Income from interest derivatives	0	43
Financial income	4,828	6,635
Interest expenses	1,074	944
Other financial expenses	398	1,572
Expenses from interest derivatives	298	463
Interest portion from valuation of provisions	304	389
Financial expenses	2,074	3,368
Financial result	2,754	3,267

Total interest income from financial assets not classified as at fair value through profit or loss amounted to €4.6 million (2011: €6.5 million) in the fiscal year. Interest expenses from

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financial liabilities not classified as at fair value through profit or loss amounted to €1.1 million (2011: €0.9 million). The effect of changes in interest rates have had no significant influence on consolidated profits.

14. INCOME TAX EXPENSES

Income taxes paid or payable and deferred taxes are recognized as income taxes. Income taxes comprise trade tax, corporation tax, and the solidarity surcharge in Germany, and the corresponding income taxes abroad, and are broken down as follows:

€ '000	2012	2011
Current income tax		
for current fiscal year	26,215	78,411
for previous years	-443	-1,516
Deferred taxes		
from temporary differences	4,279	-5,916
from tax loss carryforwards	-414	6,516
Income taxes	29,637	77,495

Expected income tax expense that would result from applying the tax rate of the parent company SMA Solar Technology AG to the IFRS consolidated result before taxes can be reconciled as follows to income taxes shown in the income statement:

€ '000	2012	2011
Consolidated earnings before income taxes	104,742	243,549
Tax rate of the parent company	30.3%	30.3%
Expected income taxes	31,738	73,796
Differences related to differing tax rates domestic and abroad	-1,265	-302
Effects due to changes in tax rates	-38	57
Tax-free income	-1,614	-12
Non-deductible expenses	1,372	557
Taxes relating to previous years	1,247	2,618
Other tax effects	1,803	781
Actual income taxes	29,637	77,495
Effective Group tax rate	28.3%	31.8%

The corporation tax rate of 15% and the solidarity surcharge rate of 5.5% are to be applied for corporations based in Germany. In addition, domestic companies and partnerships are subject to trade tax, which is influenced by assessment rates specific to the particular municipality. The average trade tax rate to be applied at the level of the parent company remains 14.5%. The overall tax rate of the Group's parent company is thus 30.3% (2011: 30.3%).

The effects of deviations between the relevant tax rates at the level of the domestic and foreign Group subsidiaries and the tax rate at the level of the Group's parent company are shown in the reconciliation statement under tax-rate-related deviations in Germany and abroad.

No deferred taxes were formed aside for the undistributed profits of foreign subsidiaries, including accrued currency translation differences, since this income and these translation differences are either not subject to corresponding taxation or must not be distributed in the foreseeable future.

As at December 31, 2012, there were current income tax receivables amounting to €11.3 million (2011: €6.8 million) and current income tax liabilities of €0.7 million (2011: €37.0 million).

The deferred tax assets and deferred tax liabilities were recorded directly in equity at €-0.12 million (2011: €0.02 million). Deferred tax assets and liabilities are distributed across the following items:

€ '000	12/31/2012		12/31/2011	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Intangible assets	186	-13,168	184	-10,740
Fixed assets	1,777	-3,473	864	-3,981
Financial assets	0	-3	0	-3
Inventories	2,031	-757	4,142	-1,140
Other assets	1,291	-1,989	1,016	-1,057
Other provisions	8,735	-1,188	13,599	-716
Other liabilities	10,369	-975	6,123	-732
Loss carryforwards	795	0	381	0
	25,184	-21,553	26,309	-18,369
thereof non-current	8,722	-17,832	10,869	-15,440

Deferred tax assets are recorded fully and regarded as fully realizable, since a sufficient amount of taxable income is expected in the future.

15. EARNINGS PER SHARE

Earnings per share are calculated by dividing the consolidated earnings attributable to the shareholders by the weighted average of ordinary shares in circulation during the period. The number of shares in the fiscal year 2012 amounted to 34.7 million, as in the previous year.

The consolidated earnings attributable to the shareholders are the consolidated net profit after tax. Since there are no shares held by the Company on the reporting date or any other special cases, the number of ordinary shares issued equates to the number of shares in circulation.

The calculation of earnings in relation to the weighted average number of shares in accordance with IAS 33 yields earnings of €2.16 per share for the period from January 1, 2012 to December 31, 2012 with an average weighted number of shares of 34.7 million, and earnings of €4.79 per share for the period from January 1, 2011 to December 31, 2011 with an average weighted number of shares of 34.7 million.

At the reporting date, there are no options or conversion options as at the reporting date. Therefore, there are no diluting effects so that the diluted and undiluted basic earnings per share are the same.

Pursuant to the German Stock Corporation Act, the distributable dividend is based on the net profit, which is recorded in the Annual Financial Statements of SMA Solar Technology AG prepared according to the provisions of the German Commercial Code and the Stock Corporation Act.

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16. INTANGIBLE ASSETS

Intangible assets evolved as follows in the fiscal years under review:

€ '000	Goodwill	Development projects	Licenses	Software	Intangible assets in progress	Prepayments	Total
Acquisition costs							
01/01/2012	311	29,937	3	27,508	20,023	617	78,399
Changes in currency	0	341	0	5	0	0	346
Additions from acquisitions	0	0	0	0	0	0	0
Additions	0	5,788	0	-945	22,458	3	27,304
Disposals	0	0	0	54	0	3	57
Transfers	0	11,757	221	5,615	-17,536	-57	0
12/31/2012	311	47,823	224	32,129	24,945	560	105,992
Amortization							
01/01/2012	0	6,681	3	14,915	0	0	21,599
Changes in currency	0	57	0	3	0	0	60
Additions from acquisitions	0	0	0	0	0	0	0
Additions	0	10,475	22	6,398	758	0	17,653
Disposals	0	0	0	55	0	0	55
Transfers	0	0	2	-2	0	0	0
12/31/2012	0	17,213	27	21,259	758	0	39,257
Net value 12/31/2012	311	23,256	0	12,593	20,023	617	56,800
Net value 12/31/2011	311	30,610	197	10,870	24,187	560	66,735
Acquisition costs							
01/01/2011	0	17,001	3	17,996	3,921	1,000	39,922
Changes in currency		-473	0	0	0	0	-473
Additions from acquisitions	311	8,815	0	78	0	0	9,204
Additions	0	0	0	11,181	16,133	0	27,310
Disposals	0	0	0	89	0	0	89
Transfers	0	4,597	0	-1,658	-31	-383	2,525
12/31/2011	311	29,937	3	27,508	20,023	617	78,399
Amortization							
01/01/2011	0	1,074	3	9,603	0	0	10,680
Changes in currency	0	-8	0	4	0	0	-4
Additions from acquisitions	0			76	0	0	76
Additions	0	5,599	0	5,314	0	0	10,913
Disposals	0	0	0	0	0	0	0
12/31/2011	0	6,681	3	14,915	0	0	21,599
Net value 12/31/2010	0	15,927	0	8,393	3,921	1,000	29,242
Net value 12/31/2011	311	23,256	0	12,593	20,023	617	56,800

In relation to development projects, amortization of intangible assets is posted in the income statement under cost of sales. Amortization of development projects and intangible assets in progress includes an impairment loss of €1.8 million due to changed sales forecasts (relates to the Medium Power Solutions segment). Amortization of

software is allocated to the functional areas dependent on use. The goodwill is the result of the first-time consolidation of dtw Sp. z o.o. in the Consolidated Financial Statements of SMA as of August 1, 2011. €21.4 million of the additions of intangible assets in progress relates to development projects.

17. FIXED ASSETS

Fixed assets evolved as follows in the fiscal year 2012:

€ '000	Land and buildings incl. buildings on third-party property	Technical equipment and machinery	Other equip- ment, fixtures and furniture	Prepayments and assets under construction	Total
Acquisition costs					
01/01/2012	181,246	52,267	150,516	74,615	458,644
Changes in currency	-305	47	-199	11	-446
Additions from acquisitions	0	0	0	0	0
Additions	13,727	2,185	2,625	54,369	72,906
Disposals	6,773	389	5,685	998	13,845
Transfers	78,004	10,917	28,586	-117,507	0
12/31/2012	265,899	65,027	175,843	10,490	517,259
Depreciation					
01/01/2012	21,805	16,804	59,103	0	97,712
Changes in currency	-89	32	-108	0	-165
Additions from acquisitions	0	0	0	0	0
Additions	15,799	5,157	31,314	0	52,270
Disposals	5,589	278	3,800	0	9,667
Transfers	42	-12	-30	0	0
12/31/2012	31,968	21,705	86,479	0	140,152
Net value 12/31/2011	159,441	35,463	91,413	74,615	360,932
Net value 12/31/2012	233,931	43,322	89,364	10,490	377,107

The additions to land and buildings are in particular attributable to the construction of the Service Center at Sandershäuser Berg as well as office buildings, the expansion and renovation of existing office buildings and leasehold alterations and improvements.

Investments of €1.7 million were made for the expansion of the infrastructure of our subsidiaries in the USA.

Of the financial liabilities, approx. €30.8 million (2011: €32.6 million) are secured by mortgage liens.

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Fixed assets evolved as follows in the fiscal year 2011:

€ '000	Land and buildings incl. buildings on third-party property	Technical equipment and machinery	Other equip- ment, fixtures and furniture	Prepayments and assets under construction	Total
Acquisition costs					
01/01/2011	125,932	46,299	116,714	42,369	331,314
Changes in currency	572	-71	352	32	885
Additions from acquisitions	157	2,905	925	230	4,217
Additions	21,373	838	3,233	107,459	132,903
Disposals	77	498	6,840	735	8,150
Transfers	33,289	2,794	36,132	-74,740	-2,525
12/31/2011	181,246	52,267	150,516	74,615	458,644
Depreciation					
01/01/2011	11,752	11,593	39,462	0	62,807
Changes in currency	128	-18	166	0	276
Additions from acquisitions	15	1,027	371	0	1,413
Additions	9,984	4,627	24,857	0	39,468
Disposals	74	425	5,753	0	6,252
Transfers	0	0	0	0	0
12/31/2011	21,805	16,804	59,103	0	97,712
Net value 12/31/2010	114,180	34,706	77,252	42,369	268,507
Net value 12/31/2011	159,441	35,463	91,413	74,615	360,932

18. INVENTORIES

Inventories of the SMA Group were made up as follows:

€ '000	12/31/2012	12/31/2011
Raw materials, consumables and supplies	128,390	179,831
Unfinished goods, work in progress	27,211	31,472
Finished goods and goods for resale	64,998	44,326
Prepayments	770	773
221,369	256,402	

Inventories are measured at the lower value of acquisition or production costs and net realizable value. The increase in finished goods and goods for resale is largely the result of the targeted increase in delivery capacity in individual markets. The impairment on inventories, included under expenses as production costs, amounts to €26.3 million (2011: €8.1 million).

19. TRADE RECEIVABLES AND OTHER RECEIVABLES

Trade receivables are non-interest-bearing and are usually due between 30 and 90 days. No significant extensions to payment terms were granted in the reporting period.

The other receivables mainly comprise prepaid expenses and other receivables due from tax authorities which were not overdue at the reporting date.

The ageing structure of trade receivables was as follows on the reporting dates:

€ '000	Book values	Neither overdue nor impaired	Overdue, but not impaired			
			<30 days	30 to 60 days	60 to 90 days	> 90 days
2012	119,288	101,965	10,596	2,957	863	2,907
2011	141,101	98,641	18,336	12,786	4,298	6,449

As at December 31, 2012, value adjustments with a nominal value of €11.6 million (2011: €9.8 million) were carried out on trade receivables.

The value adjustment account evolved as follows:

€ '000	Individual value correction	Value correction on portfolio basis	Total
As of 01/01/2011	1,034	133	1,167
Additions with effect on the expenses (net)	6,981	2,103	9,084
Usage	-75	0	-75
Release	-447	0	-447
Exchange rate difference	53	11	64
As of 12/31/2011	7,546	2,247	9,793
Additions with effect on the expenses (net)	7,205	136	7,341
Usage	-2,017	0	-2,017
Release	-2,189	-1,287	-3,476
Exchange rate difference	-3	-11	-14
As of 12/31/2012	10,542	1,085	11,627

Apart from this, there was no need to carry out value adjustments on the other receivables and financial assets. The maximum non-payment risk corresponds to the carrying amount disclosed in the balance sheet.

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20. OTHER FINANCIAL ASSETS

As at December 31, 2012, other current financial assets include in particular financial assets, time deposits with a term to maturity of over three months and accrued interest totaling €246.7 million (2011: €80.0 million). The other non-current financial assets primarily include financial assets of €48.8 million (2011: €55.6 million) and a rent deposit for buildings in the USA amounting to USD 2.5 million (2011: USD 2.5 million).

21. CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash in hand as well as bank balances, checks, payments in transit and deposits with an original term to maturity of less than three months. Bank balances bear interest at variable interest rates applicable to deposits subject to call.

As at December 31, 2012, the Group had unused credit lines amounting to €24.0 million (2011: €22.0 million) in respect of which all the conditions for using them had been fulfilled. The credit lines have been provided on an "until further notice" basis.

22. SHAREHOLDERS' EQUITY

The change in equity, including currency translation effects not shown in the income statement, is presented in the statement of changes in equity.

Shares in SMA AG are no-par-value bearer shares.

Furthermore, and following a resolution adopted by the Annual General Meeting on May 27, 2010, the Managing Board, in the period up to May 26, 2015, is entitled to acquire its own shares up to a value of 10% of the existing capital stock at the time the resolution is adopted by the Annual General Meeting and to dispose of shares acquired in this way with the consent of the Supervisory Board by means other than through the stock exchange or an offer made to all the shareholders provided the shares are sold in return

for cash at a price that does not fall significantly below the stock exchange price of shares in the Company issued under the same terms or the shares are sold in return for in-kind contributions or they are offered in return for shares held by persons that either had or have an employment relationship with the Company or with one of its affiliated companies or members of bodies in companies that depend on the Company. Furthermore, if the Managing Board sells its own shares by offering them to all the shareholders with the consent of the Supervisory Board, the Managing Board is entitled to exclude the shareholders' right of subscription for fractions. In addition, the Managing Board is entitled to cancel any shares it has acquired after obtaining the consent of the Supervisory Board.

The Managing Board is entitled, with the consent of the Supervisory Board, to exclude shareholders' statutory subscription rights in the following cases: in the case of capital increases in return for contributions in kind to grant shares for the purpose of acquiring companies, parts of companies or investments in companies; for the purpose of issuing shares to employees of the Company and companies affiliated with the Company as set out in Sections 15 ff. of the German Stock Corporation Act (AktG); to exclude possible fractions from the subscription right; in the case of capital increases in return for cash contributions if the issue amount of the new shares does not fall significantly below (as set out in Section 203 (1) and (2), and section 186 (3), sentence 4 AktG) the market price of shares of the same class and terms that are already listed at the time the Managing Board sets the final issue amount and the pro-rata amount of the issued capital attributable to the new shares, in respect of which the subscription right is excluded, does not exceed 10% of the issued capital available at the time the new shares are issued.

The Managing Board is entitled, with the consent of the Supervisory Board, to determine the further details of the relevant capital increases and their implementation including the content of the share rights and the conditions of the share issue.

On May 22, 2012, the Annual General Meeting of SMA Solar Technology AG passed a resolution to distribute a dividend for the fiscal year 2011 amounting to €1.30 per qualifying bearer share (2010: €3.00).

At the next Annual General Meeting, the Managing Board will propose that a dividend of €0.60 per qualifying bearer share be distributed. This corresponds to a dividend payout ratio of 27.7%.

The objective of capital management is to maintain SMA's financial substance and ensure the necessary flexibility.

The equity ratio is used to measure the financial security of SMA. This is the ratio of equity shown in the consolidated balance sheet to total assets. Accordingly, the financing structure is characterized by a conservative capital structure dominated by internal financing. As of the reporting date, the equity ratio is 61.8% (2011: 57.4%). External financing occurs almost exclusively through liabilities arising from operative business.

23. PROVISIONS

Provisions account for all discernible risks from pending transactions and all contingent liabilities at the balance sheet date and break down as follows:

€ '000	Warranties	Other obligations deriving from sales transactions	Other	Total
As of January 1, 2012	149,470	3,412	23,880	176,762
Additions	69,000	0	14,288	83,288
Usage	39,477	0	1,990	41,467
Release	328	3,412	11,918	15,658
Compounding	222	0	82	304
Changes in currency	368	0	167	536
As of December 31, 2012	178,519	0	24,175	202,694
Current in 2012	80,482	0	9,397	89,879
Non-current in 2012	98,037	0	14,778	112,815
	178,519	0	24,175	202,694
Current in 2011	50,812	3,412	14,036	68,260
Non-current in 2011	98,658	0	9,844	108,502
	149,470	3,412	23,880	176,762

Warranty provisions consist of general warranty obligations (periods of between five and ten years) for the various product areas within the Group. In addition, provisions are set aside for individual cases, which are expected to be used the following year. The increase is the result, in particular, of risk provisioning because of additional work to purchased components used in various product families and the scheduled additions to general warranty provisions because of the increase in sales. In connection with the warranty claims, there are expected reimbursement claims of €5.0 million.

In fiscal year 2011, other obligations deriving from sales transactions included various claims made. By December 31, 2012, there are no pending claims. The risks from acceptance obligations shown under other provisions have reduced because of changes in market potential. In addition, other provisions include obligations for the severance program agreed by the Managing Board and works council, for restoration obligations, long-service anniversaries, death benefits, partial retirement and service-related benefits. SMA expects that these provisions will normally affect cash within the next 12 months to 20 years.

24. FINANCIAL LIABILITIES

€ '000	12/31/2012	12/31/2011
Liabilities towards credit institutions	34,515	32,617
Derivative financial liabilities	1,048	1,277
Finance lease liabilities	0	1
	35,563	33,895

The liabilities due to credit institutions were incurred for the financing of SMA Immo properties and an SMA AG PV plant and have an average time to maturity of 11 years.

Derivative financial liabilities consist of interest rate derivatives related to the financing of SMA Immo.

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25. TRADE PAYABLES

Trade payables are non-interest-bearing and are normally due within 30 and 90 days.

26. OTHER FINANCIAL LIABILITIES

€ '000	12/31/2012	12/31/2011
Liabilities Human Resources department	43,001	64,261
Liabilities Sales department	11,900	9,753
Other	3,070	3,094
	57,970	77,108
Current	55,892	75,030
Non-current	2,078	2,078
	57,970	77,108

Liabilities in the Human Resources area contain obligations towards employees regarding performance-based bonuses, positive vacation and flexitime balances as well as variable salary components and contributions to the worker's compensation association. The reduction of this amount is due to a lower profitability in the current fiscal year. The liabilities in the Sales area primarily contain liabilities towards customers from advance payments received and bonus agreements.

27. OTHER LIABILITIES

€ '000	12/31/2012	12/31/2011
Accrual item for extended guarantees	92,952	78,992
Liabilities from prepayments received	18,023	44,262
Liabilities due to tax authorities	4,507	1,364
Liabilities from subsidies received	1,204	1,327
Other	175	147
	116,861	126,092
Current	22,439	45,399
Non-current	94,422	80,693
	116,861	126,092

The accrual item for extended warranties includes liabilities from chargeable guarantee extensions granted for products in the Medium Power Solutions segment. The main items included in the liabilities towards tax authorities are tax liabilities from payroll accounting. The liabilities from subsidies received relate to taxable government grants from funds of the common-task program "Improvement of the Regional Economic Structure" (EU GA), granted as investment subsidies. The total amount of retransfer of government grants is stated under other operating income.

28. ADDITIONAL DISCLOSURES RELATING TO FINANCIAL INSTRUMENTS

€ '000	Assessment category according to IAS 39	12/31/2012		12/31/2011	
		Market value	Book value	Market value	Book value
Assets					
Cash and cash equivalents	LaR	185,299	185,299	371,101	371,101
Trade receivables	LaR	119,288	119,288	141,101	141,101
Other financial investments	AfS	75	75	75	75
Other financial assets		308,464	308,471	143,741	144,013
of which debentures	AfS	49,729	49,729	50,608	50,608
of which institutional mutual funds	FAHfT	49,298	49,298	49,410	49,410
of which debentures	HtM	5,410	5,417	25,284	25,556
of which other	LaR	203,331	203,331	18,306	18,306
of which derivatives that do not qualify for hedge accounting	FAHfT	696	696	133	133
Liabilities					
Trade payables	FLAC	72,691	72,691	115,760	115,760
Financial liabilities		35,563	35,563	33,895	33,895
of which liabilities towards credit institutions	FLAC	34,515	34,515	32,617	32,617
of which under finance leases	n/a	0	0	1	1
of which derivatives that do not qualify for hedge accounting	FLHfT	1,048	1,048	1,277	1,277
Other financial liabilities	FLAC	57,970	57,970	77,108	77,108
Of which summarized by categories according to IAS 39:					
Loans and Receivables	LaR	507,918	507,918	530,508	530,508
Financial Liabilities Measured at Amortized Cost	FLAC	165,176	165,176	225,485	225,485
Financial Assets Held for Trading	FAHfT	49,994	49,994	49,543	49,543
Financial Liabilities Held for Trading	FLHfT	1,048	1,048	1,277	1,277
Financial Assets Held to Maturity	HtM	5,410	5,417	25,284	25,556
Available for Sale Financial Assets	AfS	49,804	49,804	50,683	50,683

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Cash and cash equivalents and trade receivables have mainly short terms to maturity. Accordingly, their carrying amounts on the reporting date are almost identical to their fair value.

The fair values of other non-current receivables correspond to the present values of the payments related to the assets while taking into account current interest parameters, which reflect market- and partner-related changes to conditions and expectations.

The item "other financial investments" relates to investments not included in the scope of consolidation. However, since no active market exists for these investments and a reliable measurement of their fair value was not possible, measurement on the relevant reporting dates was effected at amortized cost.

The fair value for held-to-maturity investments is determined with the help of prices listed on active markets. Impairment on held-to-maturity investments is not necessary, as there is no lasting impairment.

Trade payables and other current financial liabilities normally have short terms to maturity; the recognized values are almost identical to the fair values.

Fair values of liabilities under leases and other non-current financial liabilities are determined by referring to the present values of the payments associated with the debts.

Derivative financial instruments are used to hedge against currency risks arising from operative business. These include currency futures and options. In principle, these instruments are only used for hedging purposes. As is the case with all financial instruments, they are recognized at fair value upon initial recognition. The fair values are also relevant for subsequent measurements. The fair value of traded derivative financial instruments is identical to the market value. This value may be positive or negative. The measurement of forward transactions is based on the market value. 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 requirements.

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

2012	Level 1	Level 2	Level 3	Total
Financial assets, measured at fair value				
Debentures	49,729	-	-	49,729
Institutional mutual funds	49,298	-	-	49,298
Derivative financial instruments	-	696	-	696
Financial liabilities, measured at fair value				
Derivative financial instruments	-	1,048	-	1,048
2011				
Financial assets, measured at fair value				
Debentures	50,608	-	-	50,608
Institutional mutual funds	49,410	-	-	49,410
Derivative financial instruments	-	133	-	133
Financial liabilities, measured at fair value				
Derivative financial instruments	-	1,277	-	1,277

The levels of the fair value hierarchy and their application to our assets and liabilities are described below:

Level 1: Quoted prices for identical assets or liabilities in active markets

Level 2: Inputs other than quoted prices that are observable directly (e.g. prices) or indirectly (e.g. derived from prices)

Level 3: Inputs that are not based on observable market data for assets and liabilities

The net results 2012 for financial instruments are as follows:

	From interest	From subsequent measurement		From disposal	Net result
		Foreign currency translation	Value adjustment		
€ '000					
Loans and Receivables (LaR)	1,899	357	-3,865	-291	-1,900
Financial Liabilities Measured at Amortized Cost (FLAC)	-1,074	0	0	0	-1,074
Financial Assets Held for Trading (FAHft)	1,285	-909	-44	-824	-492
Financial Liabilities Held for Trading (FLHft)	0	0	-298	0	-298
Held to Maturity (HtM)	383	0	0	0	383
Available for Sale (AfS)	1,026	0	-75	0	951
Total	3,519	-552	-4,282	-1,115	-2,430

Interests from financial instruments are shown in the financial result. The SMA Group recognizes other components of the net result in other operating expenses and other operating income.

The net results 2011 for financial instruments are as follows:

	From interest	From subsequent measurement		From disposal	Net result
		Foreign currency translation	Value adjustment		
€ '000					
Loans and Receivables (LaR)	2,252	4,096	-8,637	-52	-2,341
Financial Liabilities Measured at Amortized Cost (FLAC)	-944	0	0	0	-944
Financial Assets Held for Trading (FAHft)	1,557	133	-574	-2,971	-1,855
Financial Liabilities Held for Trading (FLHft)	0	0	-339	-81	-420
Held to Maturity (HtM)	549	0	0	0	549
Available for Sale (AfS)	2,128	0	-804	0	1,324
Total	5,542	4,229	-10,354	-3,104	-3,687

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In detail, the nominal payment obligations of financial liabilities are as follows:

€ '000	Book values	Total	< 1 year	1 to 3 years	4 to 5 years	> 5 years
2012						
Trade liabilities	72,691	72,691	72,691	0	0	0
Financial liabilities	35,563	43,521	4,928	7,589	7,394	23,610
from liabilities towards credit institutions	34,515	42,473	3,880	7,589	7,394	23,610
from finance lease agreements	0	0	0	0	0	0
from derivatives that do not qualify for hedge accounting	1,048	1,048	1,048	0	0	0
Other financial liabilities	57,970	57,970	57,970	0	0	0
2011						
Trade payables	115,760	115,760	115,760	0	0	0
Financial liabilities	33,895	42,467	4,359	6,729	6,533	24,846
from liabilities towards credit institutions	32,617	41,189	3,081	6,729	6,533	24,846
from finance lease agreements	1	1	1	0	0	0
from derivatives that do not qualify for hedge accounting	1,277	1,277	1,277	0	0	0
Other financial liabilities	77,108	77,108	77,108	0	0	0

29. OBLIGATIONS UNDER LEASES AND OTHER FINANCIAL OBLIGATIONS

The obligations of the SMA Group under operating leases relate mainly to buildings and, to a minor extent, to plant and office equipment. Expenses recognized through profit and loss amounted to €27.3 million (2011: €20.0 million) in the year under review.

Other financial obligations arose primarily from tenancy agreements and operating leases for buildings, office containers, plant and office equipment concluded by the Group as the lessee. The terms to maturity of future payments to the end of the minimum term of the agreements are as follows:

€ '000	12/31/2012	12/31/2011
Maturity of less than 1 year	13,846	16,883
Maturity of 1 to 5 years	38,661	40,769
Maturity of more than 5 years	19,111	24,716
71,618	82,368	

On the reporting date, there were no obligations from finance leasing in the SMA Group.

In addition, there were financial obligations towards third parties under the order commitment for investment orders placed amounting to €7.2 million (2011: €50.3 million). There are financial obligations for intangible assets amounting to €3.0 million (2011: €1.2 million). The other financial obligations were within the framework customary for the business.

30. CONTINGENCIES

As at December 31, 2012, there were no changes compared to the previous year (€0.05 million).

NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS SMA GROUP

The liquid funds shown in the Consolidated Statement of Cash Flows correspond to the balance sheet item "Cash and cash equivalents."

31. NET CASH FLOW FROM OPERATING ACTIVITIES

The gross cash flow of €165.8 million (2011: €240.7 million) reflects the operating income prior to commitment of funds.

Net cash flow from operating activities in fiscal 2012 amounted to €116.1 million (2011: €238.9 million). The decrease is mainly attributable to the year-on-year reduced gross cash flow (€122.8 million).

The change in net working capital is the result of the reduction of trade receivables by €20.9 million to €119.3 million (2011: €141.1 million), among other things. Within stock value, various effects caused changes in inventories. Inventories of raw materials, consumables and supplies and unfinished goods and work in progress were reduced considerably by targeted changes to the logistics strategy in the reporting period. An opposing effect can be identified in finished goods. SMA increased inventories of Sunny Central inverters due to project prefabrication and of string inverters in order to increase delivery capacity in individual markets. The change to inventories relevant to the Statement of Cash Flows amounted to €8.8 million. Furthermore, a €43.1 million decrease in trade payables relevant to the Statement of Cash Flows occurred.

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32. NET CASH FLOW FROM INVESTING ACTIVITIES

Net cash flow from investing activities increased in fiscal 2012 to €-260.1 million compared to the previous year's figure of €-129.1 million. The outflow of funds for investments in fixed assets and intangible assets fell to €100.2 million (2011: €161.3 million).

Pursuant to IAS 7.17, monetary investments with a term to maturity of more than three months are allocated to the net cash flow from investing activities.

33. NET CASH FLOW FROM FINANCING ACTIVITIES

In fiscal 2012, net cash flow from financing activities included the dividend payment of SMA Solar Technology AG amounting to €45.1 million (2011: €104.1 million).

The balance of financial liabilities increased slightly in the 2012 fiscal year. In the previous year, SMA continued to use the favorable interest rate environment in order to arrange long-term real estate loans selectively.

34. CASH AND CASH EQUIVALENTS

Cash and cash equivalents amounting to €185.3 million (2011: €371.1 million) include cash in hand, bank balances and short-term deposits with an original term to maturity of less than three months. Together with the time deposits with a term to maturity of more than three months and other financial assets, this results in financial resources amounting to €480.8 million (2011: €506.7 million). On the reporting date, the Group had unused credit lines amounting to €24.0 million (2011: €22.0 million). As in the previous year, no cash amounts were drawn using the current account credit limit in the year under review.

OTHER DISCLOSURES

35. EVENTS AFTER THE BALANCE SHEET DATE

Effective from January 1, 2013, the Group acquired a majority shareholding of 72.5% in Jiangsu Zeversolar New Energy Co., Ltd. There were no further significant events on or after the reporting date other than those presented in or recognizable from the statements in the Consolidated Management Report and the Notes to the Consolidated Financial Statements.

36. RELATED PARTY DISCLOSURES

According to the definition contained in IAS 24, related parties are persons responsible for planning, controlling and monitoring the company's activities. Accordingly, related parties include the members of the Managing Board and the Supervisory Board of SMA Solar Technology AG as well as their close relatives. The restructuring of SMA as of January 1, 2012 extended the group of related parties by the management of the divisions and their close relatives.

In the year under review, the following persons were members of the Managing Board of SMA Solar Technology AG:

Jürgen Dolle, Dipl.-Soz.Päd.
Chief Human Resources and Operating Officer

Roland Grebe, Dipl.-Ing.
Chief Technology Officer

Lydia Sommer,
Chief Financial, Legal and Compliance Officer
(since November 1, 2012)

Pierre-Pascal Urbon, Dipl.-Kfm.
Chief Executive Officer and Strategy Officer
(until October 31, 2012 Chief Financial Officer)

Marko Werner, Dipl.-Ing.
Chief Sales Officer

The management of the divisions of the SMA Group comprised:

Patrik Baumstark (OGS)

Jon Ivar Ekker (OGS)

Jeanette Klockgether (PPS)

Günther König (PPS)

Rainer Krug (MPS)

Christian Langen (MPS) (until April 24, 2012)

Rolf Merte (MPS)

Souleymane Niang (Service)

Jürgen Reinert (PPS)

Andreas Schmidt (MPS)

Volker Wachenfeld (OGS)

Michael Wengeler (PPS)

In the year under review, the following persons were members of the Supervisory Board of SMA Solar Technology AG:

Günther Cramer, Dipl.-Ing.
Chairman of the Foundation Managing Board
(Chairman)

Dr. Erik Ehrentraut,
Enterprise Consultant (Deputy Chairman)

Peter Drews, Dipl.-Ing.
Chairman of the Foundation Managing Board

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Reiner Wettlaufer, Dipl.-Ing.
Chairman of the Foundation Managing Board

Prof. (em.) Dr. Werner Kleinkauf
University Professor

Dr. Winfried Hoffmann
Consultant

Dr. Günther Häckl
Employee Representative

Johannes Häde, Dipl.-Ing.
Employee Representative

Mirko Zeidler
Employee Representative

Joachim Schlosser
Employee Representative

Ullrich Meßmer
Trade Union Secretary

Alexander Naujoks
Trade Union Secretary

Remuneration of key management members of the Group, which must be disclosed under IAS 24, includes remuneration of the active Managing Board, the division management and the Supervisory Board.

Total compensation of the members of the active Managing Board and the division management in the year under review, including compensation for their tasks in subsidiaries, amounted to €4.4 million, of which €0.9 million is attributable to variable salary components (2011: €2.6 million, of which €0.5 million in variable salary components, not including division management in both cases). The total compensation of the members of the Supervisory Board in the year under review amounted to €0.4 million (2011: €0.5 million). This figure includes variable salary components amounting to €0.2 million (2011: €0.3 million). The remuneration paid to the members of the Managing and Supervisory Boards is shown in detail in a separate remuneration report in line with the criteria of the German Corporate Governance Code. The complete Remuneration Report is included in the Consolidated Management Report. ■

Members of the Supervisory Board hold the following positions in statutory supervisory boards and similar controlling bodies of commercial enterprises:

Günther Cramer, Dipl.-Ing.
Member of the Supervisory Board
of EnBW Energie Baden-Württemberg AG

Dr. Erik Ehrentraut
Member of the Supervisory Board
of Interpane Glas Industrie AG

Prof. (em.) Dr.-Ing. Werner Kleinkauf
Member of the Supervisory Board
of Seeger Engineering AG

Dr. Winfried Hoffmann
Member of the Supervisory Board
of Solar-Fabrik AG

Furthermore, a related party of particular importance as defined in IAS 24 is team-time GmbH. SMA Solar Technology AG concluded an employee allocation agreement with team-time GmbH regulating the allocation of temporary employees. Its only shareholder and managing director is the wife of a member of the Managing Board. A fairness opinion was solicited to review the amounts set down in the conditions of the current agreement. The contract was terminated by team time on December 31, 2012. Business worth €32.0 million (2011: €47.1 million) was conducted within the framework of this agreement in fiscal year 2012. As at December 31, 2012, liabilities towards team-time GmbH amounted to €0.8 million (2011: €2.5 million).

Other related parties are the Günther Cramer Foundation, Peter Drews Foundation and Reiner Wettlaufer Foundation, which together established the SMA Stiftungsverbund gGmbH. No transactions requiring disclosure under IAS 24 were made in the reporting period.

37. OBJECTIVES AND METHODS CONCERNING FINANCIAL RISK MANAGEMENT

Financial risk management is integrated into the Group-wide hedging policy. Deliberate treatment of potential risks and sound control as well as successful management of such risks when they occur are supported by an accompanying information and communication policy as well as by the further education and training of employees. The principle underlying the Group's hedging policy in the financial field is to protect against significant price, currency and interest risks by means of contracts and hedging transactions to an economically reasonable extent.

The financial instruments of the Group relate primarily to trade receivables as well as cash resulting directly from operating activities. In addition, there is a particular amount of trade payables that also arise from operating activities. The Group also uses derivative financial instruments as part of exchange rate hedging. The Group's main risks in relation to financial instruments are interest-based cash flow risks as well as liquidity, currency and credit risks. The strategies and procedures for controlling individual types of risks, which have been defined in the context of the Group's overall hedging policy, are presented below:

Interest Risk

Interest rate risks within the SMA Group mainly arise in the case of financial liabilities and non-current portions of certain provisions. Interest on the aforementioned liabilities is not paid by the contracting party and is therefore discounted at the interest rate usual in the market, which means that there is no separate control of the interest risk. The variable interest-bearing portion of existing financial liabilities is secured through an interest rate swap. This ensures interest rates are hedged in the long term and allows financing costs to be reliably calculated over the contract's term.

Foreign Currency Risk

As a globally active company, the SMA Group is exposed to both transaction-related and translation-related foreign currency risks.

SMA assesses risks from an economical point of view. From an economical point of view, foreign currency risks arise in the form of direct transaction risks that derive from any (current or planned) receivable or payable denominated in a foreign currency and the resulting payment flow. The SMA Group's intense business activity in North America means that foreign currency risks mainly arise in US dollars or Canadian dollars. In view of the fact that a large portion of the added value attributable to the North American companies is generated locally and sales in the local currency are balanced by expenditure in the local currency, the operative foreign currency risk in the SMA Group is limited. An intra-Group guideline ensures that SMA companies report their foreign currency risks to the Corporate Treasury. The remaining Group-wide risk is hedged by the Corporate Treasury through the use of currency derivatives concluded externally with banks. Forward exchange transactions are the most commonly used method in this case. The use of options as part of the hedging strategy is also envisaged.

Translation risks mainly occur when the assets and liabilities of subsidiaries denominated in a foreign currency are converted to the parent company's domestic currency when preparing the Consolidated Financial Statements. Translation risks are not included within the scope of the active control of foreign currency risks.

Items denominated in foreign currencies, and the development of the exchange rate of those currencies, are monitored continuously and the risks are hedged, provided this is economically reasonable. The risks from hedging transactions in themselves are limited to the possibility that opportunities of better price performance cannot be realized.

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In order to present market risks, IFRS 7 requires sensitivity analyses, which show the effects of hypothetical changes in relevant risk variables on earnings and equity. Currency risks are caused by financial instruments that are denominated in a currency other than the functional currency and which are of a monetary nature; exchange-rate-related differences from the translation of Financial Statements into the Group currency are not taken into account. The US dollar is deemed to be a relevant risk variable. The currency sensitivity analysis is based on original financial instruments in the form of receivables. Through the use of hedging transactions (derivatives), which are designed to hedge the underlying transaction, the opposing effects that accompany changes in the exchange rate of the dollar are evened out. Accordingly, exchange rate changes have no impact on equity and minor effects on earnings if hedging transactions are made.

An increase of 5% in the euro with respect to the US dollar on December 31, 2012 would have led to a positive change in the currency derivatives of €0.8 million (2011: €2.2 million). A decrease of 5% in the euro with respect to the US dollar on December 31, 2012 would have led to a reduction in the value of the currency derivatives of €0.9 million (2011: €2.5 million). An increase of 5% in the euro with respect to the Canadian dollar on December 31, 2012 would have led to a positive change in the corresponding derivatives of €0.4 million. In comparison, a decrease of 5% in the euro would have resulted in impairment of €0.5 million. The accumulated result of differences in exchange rates and exchange hedging in the fiscal year amounts to €1.4 million (2011: €-5.3 million).

Pursuant to IFRS, currency risks affect monetary financial instruments that are denominated in a foreign currency, i.e. in a currency other than the functional currency. This means that the foreign currency is the relevant risk variable. Translation-related risks are not taken into account. Since the individual Group companies mainly conduct their operative business in their own functional currency, we regard the risk from exchange rate fluctuations resulting from our ongoing business activity as insignificant.

Credit Risk

For all deliveries to customers, collateral is requested depending on the volume of the respective transaction and the specific customer and country risk. Data from the previous business relationship, including payment practices and credit rating information, are also used to avoid non-payment. In addition, the Group performs a customer credit check, which is based on certain financial key ratios. By the timely setting of a credit limit or by suspension of orders, the Group avoids being exposed to a significant risk of non-payment. The maximum non-payment risk is limited to the carrying amount disclosed in section 19. There are no major concentrations of non-payment risks within the Group.

In respect of all the Group's other financial assets such as cash and cash equivalents, available-for-sale financial investments and derivative financial instruments, the maximum credit risk, should the counterparty fail to pay, corresponds to the carrying amount of these instruments.

Liquidity Risk

The Company uses financial planning tools for the early detection of future liquidity requirements. Under current plans, it is expected that financial requirements will be covered within a time horizon that can be reliably planned. Insurance contracts are concluded to hedge against the financial consequences of possible liability risks and damage claims, insofar as this is reasonable and possible. The cover provided by such contracts is reviewed and adapted regularly.

Capital Management

The strategic objective of capital management within the SMA Group is to ensure financial flexibility and independence in order to make rapid use of the opportunities in a photovoltaics market characterized by strong growth. Profitable employment of the capital is measured through regular monitoring of net working capital. Within the SMA Group, net working capital is defined as the sum of inventories and trade receivables less trade payables. In order to be able to usefully measure relative capital consumption even in the event of strong corporate growth, net working capital is expressed in relation to sales. Through debtor management, which ensures that receivables are collected in good time, the linkage of the evolution of inventories to sales as well as a constant dividend policy, the Company creates the requirements for its objectives in terms of financial flexibility and independence. In accordance with our intra-Group guidelines, the net working capital ratio determined in this way has to be below 21%. In the year under review, the equity ratio of the SMA Group was 61.8% (2011: 57.4%) and the Net Working Capital ratio was 18.3% (2011: 16.8%).

38. AUDITOR FEES

The fees paid to the auditor and recorded as an expense in the year under review break down as follows:

€ '000	2012	2011
Financial statement auditing	339	187
Other audit-related services	17	14
Other services	17	7
	372	208

The cost of financial statement auditing comprises the fees for the audit of the Consolidated Financial Statements as well as for the audit of the Financial Statements of SMA Solar Technology AG and its domestic subsidiaries, provided they are obliged to perform an audit pursuant to Section 316 of the German Commercial Code. The fees for audit-related services and other audit work include expenses for the review of the Interim Consolidated Financial Statements. The fees for other services contain expenses for agreed single auditing and consulting activities, which were performed during the reporting year.

39. DECLARATION ON THE GERMAN CORPORATE GOVERNANCE CODE IN ACCORDANCE WITH SECTION 161 AKTG

The declaration required under Section 161 AktG on the recommendations issued by the Government Commission German Corporate Governance Code was given by the Managing Board and the Supervisory Board on December 5, 2012 and made permanently available to shareholders on the website: www.SMA.de. 

40. CONSOLIDATED FINANCIAL STATEMENTS

As the ultimate parent company, SMA Solar Technology AG prepares Consolidated Financial Statements for the largest scope of consolidation as at December 31, 2012, which are filed with the operator of the Electronic Federal Gazette and subsequently published in the Electronic Federal Gazette.

Niestetal, February 22, 2013

SMA Solar Technology AG
The Managing Board

Jürgen Dolle Roland Grebe Lydia Sommer

Pierre-Pascal Urban Marko Werner

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RESPONSIBILITY STATEMENT

We assure to the best of our knowledge that, in accordance with the applicable accounting standards, the Consolidated Financial Statements give a fair view of the net assets, financial position and results of operations of the Group and that the Consolidated Management Report gives a fair view of the course of business including the results of operations and the Group's position and describes the fundamental opportunities and risks of the probable development of the Group.

Niestetal, February 22, 2013

SMA Solar Technology AG
The Managing Board

Jürgen Dolle Roland Grebe Lydia Sommer
Pierre-Pascal Urbon Marko Werner

AUDITORS' REPORT

(TRANSLATION – THE GERMAN TEXT IS AUTHORITATIVE)

"We have audited the Consolidated Financial Statements prepared by SMA Solar Technology AG, Niestetal, - comprising the statement of comprehensive income, the balance sheet, the statements of cash flows, the statement of changes in equity and the Notes to the Consolidated Financial Statements – and the Consolidated Management Report for the business year from January 1, 2012 to December 31, 2012. The preparation of the Consolidated Financial Statements and the Consolidated Management Report in accordance with IFRS, as adopted by the European Union (EU), and the additional requirements of German commercial law pursuant to Section 315a (1) HGB ("German Commercial Code") are the responsibility of the parent company's management. Our responsibility is to express an opinion on the Consolidated Financial Statements and on the Consolidated Management Report based on our audit.

We conducted our audit of the Consolidated Financial Statements in accordance with Section 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer. Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the Consolidated Financial Statements in accordance with the applicable financial reporting framework and in the Consolidated Management Report are detected with reasonable assurance. Knowledge of the business activity and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related Internal Control System and the evidence supporting the disclosures in the Consolidated Financial Statements and the Consolidated Management

Report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the Annual Financial Statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the Consolidated Financial Statements and the Consolidated Management Report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the Consolidated Financial Statements of SMA Solar Technology AG, Niestetal, comply with IFRS, as adopted by the EU, the additional requirements of German commercial law pursuant to Section 315a (1) HGB, and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The Consolidated Management Report is consistent with the Consolidated Financial Statements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development."

Hanover, February 22, 2013

Deloitte & Touche GmbH
Wirtschaftsprüfungsgesellschaft

(Scharpenberg) Wirtschaftsprüfer (German Public Auditor)	(Schwibinger) Wirtschaftsprüfer (German Public Auditor)
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REPORT OF THE SUPERVISORY BOARD

Dear shareholders,

The Supervisory Board continuously monitored and regularly advised the Managing Board with regard to the management of the Company during the fiscal year 2012 in accordance with the law, the Articles of Incorporation and the Rules of Procedure. The Supervisory Board was involved early on in all decisions of fundamental importance for SMA. The Managing Board kept the Supervisory Board regularly, promptly and comprehensively informed by means of written and oral reports about all strategy issues relevant to the company, the market and competitive situation, business developments, the Company and the Group's position, turnover and results of operations, the proposed business policies and other important questions concerning corporate planning, in particular financial, investment, production and personnel planning and strategic plans, as well as about significant transactions. Any deviations in the actual evolution of events with respect to previously reported objectives were illustrated by indicating the reasons.

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

Consultations of the Supervisory Board

All important business transactions were discussed during the fiscal year in six regular meetings and two extraordinary meetings of the Supervisory Board together with the Managing Board. At these meetings, the Supervisory Board, after examination and deliberation, adopted the necessary resolutions in accordance with the law, the Articles of Incorporation and the Rules of Procedure. At five of the eight meetings, all of the members of the Supervisory Board were present. One Supervisory Board member did not attend one meeting, another member did not attend two meetings.

In order to prepare for the meetings, the Supervisory Board received written reports from the Managing Board on a regular basis and in time. At each meeting, the subject matter of the deliberations was current business developments, the evolution of markets of particular importance for the SMA Group and corporate planning. Members of the Managing Board participated in all meetings of the Supervisory Board and the Audit Committee. For some agenda items, the Supervisory Board sat without the Managing Board.

At its meeting on February 22, 2012, the Supervisory Board dealt predominantly with the provisional balance sheet and the income statement and discussed the possible appropriation of profit for 2011. In addition, the Supervisory Board dealt with the Corporate Governance Report and the Report of the Supervisory Board reproduced in the Annual Report 2011, and the Human Resources Report 2011.

At the meeting on March 13, 2012, the Supervisory Board acknowledged the Annual Financial Statements 2011 and approved the Consolidated Financial Statements 2011. It also dealt with the proposal for the selection of the auditor of the Financial Statements and the Consolidated Financial Statements for 2012 and the extension of the appointment of Pierre-Pascal Urbon as a member of the Managing Board to September 30, 2017. In addition, the Supervisory Board passed the proposal to the Annual General Meeting on profit



appropriation for 2011, the Report of the Supervisory Board and the Corporate Governance Report and discussed the agenda and invitation for the Annual General Meeting on May 22, 2012. The Supervisory Board also addressed the potential foundation of new subsidiaries at home and abroad.

On May 21, 2012, the Supervisory Board discussions focused in particular on the report of the Managing Board on product quality, ethical principles, corporate social responsibility and sustainability, but also on the development of business in 2012 so far.

In a meeting of the Supervisory Board directly following the Annual General Meeting on May 22, 2012, the audit mandate was granted to the auditor for 2012.

On August 27, 2012, the course of the 2012 fiscal year so far and the company's strategy were discussed, the Managing Board presented foreign activities and product innovations and reported on product quality. In addition, the Supervisory Board made a review of the list of resolutions requiring consent, which are defined in the Rules of

Procedure of the Managing Board. The Supervisory Board approved the reassignment of business in the Managing Board and the conclusion of a consulting contract with the Supervisory Board Member Dr. Winfried Hoffmann. The Supervisory Board also discussed the strategy presented by the Managing Board, which accounts for a changed market environment. In particular, the Supervisory Board discussed the strategy for retaining innovation leadership, increasing productivity, and internationalization. In this respect, ideas for tapping into the Chinese market were discussed intensively with the Managing Board.

In its extraordinary meeting on October 17, 2012, the Managing Board stated how it intends to counter the effects of the generally difficult state of the photovoltaic market on the company by handling strategic development projects more intensively, upping sales efforts in all markets, increasing productivity and making the company organization more compact. The Supervisory Board discussed the planned course of action. It expressed its approval of the objectives set by the Managing Board. The Supervisory Board also appointed Mrs. Lydia Sommer as member of the company's

Managing Board responsible for Finance, Legal and Compliance with effect from November 1, 2012 to October 31, 2017. Finally, the Managing Board reported to the Supervisory Board about the course of the 2012 fiscal year up to that point and the outlook for the 2013 fiscal year.

In its meeting on December 5, 2012 and after detailed strategy discussion, the Supervisory Board approved the budget for the 2013 fiscal year presented by the Managing Board. The Managing Board reported to the Supervisory Board on the status of implemented and planned cost reduction measures, including personnel adjustments. The Supervisory Board discussed the measures presented in detail. The Supervisory Board also reviewed the Managing Board remuneration system and the appropriateness of the remuneration of the Managing Board and specified key points for remuneration in the 2013 fiscal year. In accordance with the Presidial Committee's proposal, the Supervisory Board resolved to amend the targets for its composition determined in 2011 as described in item 6 of the agenda. A presentation of the objectives and the status of their implementation is found in the Corporate Governance Report 2012 (included in the Annual Report on page 15 et seqq.).  In addition, the Managing Board and the Supervisory Board adopted a new Declaration of Conformity pursuant to Section 161 (1) sentence 1 of the German Stock Corporation Act (AktG) in order to comply with the recommendations of the German Corporate Governance Code. The Supervisory Board also approved a new schedule of responsibilities for the Managing Board.

In its extraordinary meeting on December 13, 2012, the Supervisory Board addressed the strategy for tapping into the Chinese market and, after detailed discussion, approved the acquisition of a majority shareholding in Jiangsu Zeversolar New Energy Company Limited based in Suzhou, China, which was planned for this purpose.

At the meeting held on February 13, 2013, the Supervisory Board discussed the drafts of the Corporate Governance Report and of the Report of the Supervisory Board, and dealt with the preliminary financial statements for 2012. In addition, it received information on the status of the structural changes and current market development. Finally, the Supervisory Board discussed the results of a self-review regarding the efficiency of its work.

Committee Meetings

In order to improve the efficiency of the work carried out by the Supervisory Board, the Supervisory Board maintains four permanent committees: A Presidial Committee, an Audit Committee, a Nomination Committee and a Mediation Committee. You will find the names of the persons appointed to these committees on our website www.IR.SMA.de  as well as in the Corporate Governance Report 2012 (included in the Annual Report on page 15 et seqq.). 

The committees prepare the topics and resolutions to be dealt with by the full Supervisory Board and, within the framework of the competences transferred to them, they resolve on those matters they have been assigned to deal with instead of the Supervisory Board. The content of the committee meetings is reported by the committees' chairmen at the following meeting of the full Supervisory Board. All members of the Supervisory Board receive the minutes on the content and resolutions of the committees.

The Presidial Committee met four times in 2012.

In its meeting on March 12, 2012, the Committee resolved to recommend to the Supervisory Board that the appointment of Mr. Pierre-Pascal Urbon as a member of the Managing Board be extended for an additional five years. The Committee also dealt with possible agenda items for the Annual General Meeting on May 22, 2012.

In the two meetings on April 20, 2012 and September 18, 2012, the Presidial Committee discussed proposals for an additional Managing Board member and held interviews with candidates. Finally the Presidial Committee recommended that the Supervisory Board appoint Mrs. Lydia Sommer as member of the Managing Board responsible for Finance, Legal and Compliance.

In its meeting on December 4, 2012, the Presidial Committee discussed in detail the Managing Board's salary progression in years past and the Managing Board's salary situation in the years to come as it is likely to develop based on current medium-term planning. After detailed discussion of target figures and monetary amounts, the Presidial Committee resolved to submit its proposals to the entire Supervisory Board for discussion and evaluation. The Presidial Committee also discussed the possibility of converting the present



See also Corporate Governance Report page 15 et seqq.



See also IR-Website www.IR.SMA.de



See also Corporate Governance Report page 15 et seqq.

system of Supervisory Board remuneration into one of fixed remuneration and resolved to review the remuneration system in 2013. In addition, the Presidial Committee prepared recommendations to the Supervisory Board for a new Declaration of Conformity to the German Corporate Governance Code pursuant to Section 161 of the German Stock Corporation Act (AktG) and passed a recommendation to the Supervisory Board to change the targets for the composition of the Supervisory Board.

The Audit Committee convened seven times in 2012, three times via telephone conference.

On February 21, 2012, the Audit Committee discussed the annual report on the fiscal year 2011 by the Internal Auditing department and took a report regarding the progress of the financial audit from the auditor. The Committee also discussed the possible appropriation of profits for 2011 and passed a resolution on the proposal for the selection of the auditor to be adopted by the Supervisory Board.

On March 12, 2012, the Audit Committee discussed the draft of the financial statements report and of the consolidated financial statement report in the presence of the auditor. Its discussions included the main points and findings as well as the monitoring of the quality and independence of the financial statements audit. In addition, the proposal for the election of the auditor for the fiscal year 2012 was discussed and a recommendation was made to the Supervisory Board on the appropriation of profit for 2011. Furthermore, the Audit Committee discussed the Risk Report and opportunities for the fiscal year 2011 and was given a presentation on the development of the risk management system.

At its meeting on August 27, 2012, the Audit Committee dealt with the Half-Yearly Reports prepared by the Internal Auditing department and risk management.

At its last meeting in the fiscal year on December 4, 2012, the head of Compliance presented the Compliance Report

2012. The Audit Committee then discussed the report in detail and acknowledged the work done so far. In addition, the financial audit plans for the fiscal year 2012 were presented to the Audit Committee by the auditor. Moreover, the audit plans of the Internal Auditing department for the fiscal year 2013 were presented to it by the head of the Internal Auditing department, and risk categories and thresholds were explained. The Audit Committee, together with the auditor, also discussed the effectiveness of the Internal Control System (ICS), the Risk Management System and the Internal Auditing System. Subsequently, the Audit Committee discussed the budget proposal for the fiscal year 2013.

In addition, the Audit Committee discussed the relevant Quarterly and Half-Yearly Financial Reports with the Managing Board in three telephone conferences on May 7, 2012, August 3, 2012, and November 5, 2012.

The Nomination Committee and Mediation Committee were not convened in 2012.

Corporate Governance

During 2012, the Supervisory Board dealt on many occasions with the content of the German Corporate Governance Code, particularly with the changes to the Code in May 2012. In December 2012, the Supervisory Board and the Managing Board delivered a Declaration of Conformity pursuant to Section 161 of the German Stock Corporation Act (AktG) in order to comply with the recommendations of the German Corporate Governance Code. Two deviations were declared. The joint report issued by the Supervisory Board and the Managing Board on compliance with the rules of the German Corporate Governance Code pursuant to clause 3.10 of the Code (Corporate Governance Report) has been made permanently available on our website www.IR.SMA.de  and is mentioned additionally on pages 15 et seqq.  of the Annual Report. This is also where you will find statements on conflicts of interest and how they are handled.

Annual Financial Statements and Consolidated Financial Statements

The Annual Financial Statements prepared by the Managing Board as at December 31, 2012 and the Management Report for the fiscal year 2012 as well as the Consolidated Financial Statements as at December 31, 2012 and the Consolidated Management Report for the fiscal year 2012 were audited by the auditing firm Deloitte & Touche GmbH, Hanover. The Supervisory Board granted the audit assignment in accordance with the resolution adopted by the General Meeting on May 22, 2012. Prior to submitting the corresponding proposal to the General Meeting regarding the appointment of the auditors, the Supervisory Board had obtained the auditor's certificate of independence pursuant to clause 7.2.1 of the German Corporate Governance Code. The Supervisory Board also monitored the independence of the auditor. In addition, it dealt with the assignment of orders to the auditor for non-audit-related services.

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

The reporting documents and the Managing Board's proposal on the appropriation of profits as well as the audit reports were made available to the Supervisory Board in good time. These were first discussed by the Audit Committee at its meetings on February 12 and March 4, 2013 together with the auditors and then by the Supervisory Board at its meeting on March 5, 2013, on each occasion also in the presence of the auditor's representatives. The auditor's representatives reported on the findings of the audit and provided detailed explanations of the assets, financial position and results of operations of the Company and the Group. The questions posed by the Supervisory Board were answered and the reporting documents were reviewed in detail together with the auditor's representatives and discussed and examined by the Supervisory Board. The

Supervisory Board raised no objections after concluding its examination. Thereafter, the findings of the audit were approved. Accordingly, the Supervisory Board approved the Financial Statements prepared by the Managing Board and the related Management Reports for fiscal year 2012 at its meeting convened to adopt the accounts on March 5, 2013. Hence the Company's Annual Financial Statements have been approved as set out in Section 172 of the German Stock Corporation Act (AktG).

Finally, at its meeting held on March 5, the Supervisory Board approved the Managing Board's proposal on the appropriation of the balance sheet profit. In this respect, the Supervisory Board discussed the Company's liquidity situation, the financing of planned investments and estimated business development. In doing so, the Supervisory Board came to the conclusion that the proposal was in the interests of the Company and the shareholders.

According to the Supervisory Board, SMA has performed well under drastically changed market and competitive conditions. The adaptation of the corporate strategy to this new situation is warmly welcomed. By concentrating on the development of new product platforms, tapping into the market for solar diesel hybrid products, expanding after-sales services and enlarging the international presence, particularly in China, Japan and the USA, the Managing Board has introduced the steps necessary for SMA's future success. For this purpose, SMA's internal organization was adjusted at the right time and, in particular, the optimization of costs was tackled in a systematic manner. The Managing Board presented all measures to the Supervisory Board transparently and in good time.

The Supervisory Board thanks the Managing Board and all employees for their outstanding work and great dedication in the last fiscal year.

Niestetal, March 5, 2013

The Supervisory Board

Günther Cramer
Chairman

ANNUAL FINANCIAL STATEMENTS

SMA SOLAR TECHNOLOGY AG – INCOME STATEMENT IN ACCORDANCE WITH THE GERMAN COMMERCIAL CODE (HGB)*

€ '000	2012	2011
Sales	1,177,409	1,489,611
Increase or decrease in finished goods and work in progress	10,242	-12,003
	1,187,651	1,477,608
Other own work capitalized	4,610	6,603
Other operating income	62,298	74,862
Material expenses	707,951	855,120
Personnel expenses	238,335	224,413
Amortization and depreciation of intangible and fixed assets	50,229	38,147
Other operating expenses	213,303	246,295
Financial result	28,004	4,138
Net operating income (loss)	72,745	199,236
Extraordinary net income (loss)	0	0
Taxes on income	7,522	65,618
Other taxes	253	399
Net income/net loss for the year	64,970	133,219
Accumulated income/losses brought forward	524,166	436,057
Profit available for distribution	589,136	569,276

* The complete Individual Financial Statements of SMA Solar Technology AG are available at www.SMA.de.

SMA SOLAR TECHNOLOGY AG – BALANCE SHEET IN ACCORDANCE WITH THE GERMAN COMMERCIAL CODE (HGB)*

Assets € '000	12/31/2012	12/31/2011
A. Fixed assets		
I. Intangible assets	19,563	18,474
II. Fixed assets	312,242	292,194
III. Financial assets	70,048	74,829
	401,853	385,497
B. Current assets		
I. Inventories	153,801	185,257
II. Receivables and other assets	134,913	174,566
III. Securities	103,184	118,824
IV. Cash and cash equivalents	338,383	330,500
	730,281	809,147
C. Prepaid expenses and deferred charges	522	612
	1,132,656	1,195,256

Shareholders' equity and liabilities € '000	12/31/2012	12/31/2011
A. Shareholders' equity		
I. Subscribed capital	34,700	34,700
II. Capital reserve	124,200	124,200
III. Retained earnings		
1. Statutory reserve	400	400
2. Other retained earnings	3,136	3,136
IV. Profit available for distribution	589,136	569,277
	751,572	731,713
B. Special account with reserve characteristics	337	425
C. Provisions	221,706	266,409
D. Trade payables	71,351	121,503
E. Accrued liabilities	87,690	75,206
	1,132,656	1,195,256

TECHNICAL GLOSSARY

AC (Alternating Current)

Mains-compliant current.

Average Selling Price (ASP)

Sales achieved through inverters (excl. Sunny Island and Sunny Backup) divided by the sold inverter output in watts.

BSW

Comprising over 800 solar energy companies, the German Solar Industry Association (Bundesverband Solarwirtschaft e. V. – BSW-Solar) represents the interests of the German solar energy sector.

Central inverter

Inverters for PV large-scale plants. These inverters are used with centralized design concepts.

Change-of-control clause

Provision in the employment contracts of board members or management providing a special termination right in case of a change of ownership or a change in majority shareholders, usually against payment of a firmly agreed compensation, continued payment of remuneration, often also a corresponding pension provision.

Commercial range

Photovoltaic inverters suitable for grid-connected photovoltaic systems with a performance range between 30 kW and 500 kW (SMA definition of the target group: tradespersons with supplementary revenue from PV systems).

Compliance

Legally compliant conduct.

Conversion efficiency

The conversion efficiency is a property of the solar inverter and describes how much of the incoming DC power is output as AC power. Top-of-the-line devices from SMA achieve conversion efficiency levels of more than 99%. By way of comparison, modern passenger car diesel engines offer efficiency levels of no more than 45%.

Corporate Governance

Procedures for managing and controlling companies in a manner that is responsible and aimed at long-term value creation.

DC (Direct Current)

Direct current must be converted to grid-compliant alternating current (AC) for the network supply.

EEG Apportionment

The EEG apportionment stipulates how subsidization costs resulting from renewable energy power generation are distributed among consumers. The apportionment is based on the difference between the revenues and expenditures which arise from consumption of EEG current generated by renewable energy sources.

EPIA

European Photovoltaic Industry Association.

German Renewable Energy Sources Act (EEG)

The Erneuerbare-Energien-Gesetz (EEG) is a law on the process of renewable energies with the aim of supporting the further development of technologies for the production of power from renewable sources.

Grid management

For decentralized generating plants, the participation in grid management means that they have to orientate themselves toward the current situation of the distribution grid with regard to the feed-in. It affects all solar plants feeding in at medium voltage level.

Grid parity

Grid parity exists when the production costs of power from a photovoltaic system are identical to the selling price for domestic power from the public supply network.

Industrial range

Photovoltaic inverters suitable for grid-connected photovoltaic systems with a power range > 500 kW (SMA definition of the target group: investors with the primary aim of selling energy).

Inverter

An inverter is an electrical device converting direct voltage into alternating voltage or direct into alternating current.

Island system

PV island systems are stand-alone power networks fed, for example, by the energy of a solar system; in other words, these systems are not connected to a power grid.

JET Certification

Japan Electrical Safety & Environment Technology Laboratories (JET) is an organization, founded in 1963, which is authorized by the government for the safety auditing and certification of products (comparable to the German VDE, TÜV, and the like).

kVA

Kilovolt ampere (unit of measure for electrical apparent power).

Life Cycle Costs (LCC)

The total costs of an inverter from acquisition via installation, commissioning and maintenance up to disposal.

Low voltage

Voltage range up to 1,000 V.

Medium voltage

Voltage range from 1,000 V to 60,000 V.

Multi-string inverter

Inverter that largely combines the advantages of multiple string inverters (separate MPP control of individual strings) and a central inverter (low performance-specific costs).

Off-grid applications

See "Island system".

Photovoltaics (PV)

Conversion of radiation energy – in particular solar energy – to electricity by means of photovoltaic cells.

Photovoltaic generator

The solar generator is the unit of electrically interconnected solar modules in a photovoltaic system. The solar modules are series-connected to form "strings". Strings of equal length can also be connected in parallel. This makes it possible to set the power, voltage and current of the solar generator to the required value. Larger solar generators are often divided into electrically independent sub-generators, which can also be differently aligned.

Power frequency

This describes the frequency of the alternating current in the public power grid, that is, the speed at which the polarity of the voltage oscillates. If more energy is drawn from the grid than is fed in, the line frequency decreases; if there is surplus generative capacity, it increases. To ensure that the power grid operates safely, the frequency must be maintained within narrow limits. In Europe, the target value is 50 Hz (= 100 polarity reversals per second).

Reactive power

Reactive power is a term from electronics that describes pulsating power with an alternating positive and negative sign. The positive and negative components of the power output cancel each other out, which yields an average value of zero. This is why it is also referred to as a power grid oscillation. The counterpart to reactive power is active power. In an AC grid, it likewise has a pulsating value, although this is generally positive. Only active power can be used to operate electrical consumers. The sum of active power and reactive power is called 'apparent power'. All electrical operating resources and the entire grid infrastructure must be designed in accordance with this. Apparent power arises if the voltage and current values, likewise pulsating, are out of phase, that is, they attain their maximum or minimum offset with regard to time. This phase displacement can have two directions and is practically unavoidable in the technical application of inverters, because almost every electronic component causes a degree of phase displacement in one direction or the other. Modern inverters are capable of compensating for the phase displacement within a grid, thereby eliminating the useless reactive power from the grid. Through a certain degree of phase displacement, they are also capable of lowering the grid voltage, which usually rises undesirably when active power is fed into the grid.

Residential range

Photovoltaic inverters suitable for grid-connected photovoltaic systems with a performance range between 1 kW and 30 kW (SMA definition of the target group: private PV system operators).

Silicon-carbide circuit breaker

Circuit breakers made of semiconductor materials are central components in inverters: The intelligent arrangement of multiple circuit breakers and their precision control converts direct current to alternating current. Silicon-carbide circuit breakers are characterized by their exceptionally low switching losses. In comparison with conventional silicon circuit breakers, therefore, silicon-carbide circuit breakers enable the development of inverters that are either faster-switching (smaller, lighter, cheaper) or more efficient.

Smart grid

Spatially distributed, networked electricity generators, electricity storage facilities and consumers in combination with a flexible grid infrastructure, which apart from energy also transports information. Inverters that function as flexible control elements in power electronic systems will play a decisive role here.

Solar Academy

SMA provides comprehensive training on the topic of solar technology in seminars specifically targeted to the needs of solar power professionals.

Specific sales price per watt

Sales price in euro divided by the rated power of each inverter type in watts.

String

Connection/interconnection of several solar modules.

String inverter

With string technology, the PV generator is divided into individual module areas, and each of these individual "strings" is assigned its own string inverter.

Switchgear

System in which electrical energy is distributed or transformed.

UL Certification

The Underwriters Laboratories (UL) is an organization founded in the U.S. in 1894 for the audit and certification of products and their safety (comparable to the German VDE, TÜV, and the like).

W, kW, MW, GW

Units for power:

1 kilowatt (kW) = 1,000 watts (W)

1 megawatt (MW) = 1,000 kilowatts

1 gigawatt (GW) = 1,000 megawatts

Wp

Abbreviation for Watt peak. Unit for the standardized rated power of a photovoltaic cell or a photovoltaic module under standard conditions.

Xetra

Exchange Electronic Trading: fully electronic trading system at the Frankfurt Securities Exchange (FWB) for the spot market. More than 90% of the shares traded in Germany are traded using the Xetra platform.

FINANCIAL GLOSSARY

EBIT

Earnings before interest and taxes.

EBITDA

Earnings before interest, taxes, depreciation and amortization.

EBIT margin

$$\frac{\text{Operating profit}}{\text{Sales}} \times 100$$

(the higher the percentage, the higher the earning power)

EBT

Earnings before taxes.

Equity ratio

Shows the share of equity in the total equity and liabilities.

Free cash flow

Operating cash flow minus investments plus negative investments in fixed and intangible assets. Free cash flow is important because it allows a company to pay dividends or to buy back shares. Therefore, free cash flow is a measure of how much cash can be paid to the shareholders of a company.

Gross cash flow

Shows the operating income prior to any commitment of funds. It is calculated by considering earnings before income tax and the financial result – plus interest received, depreciation and amortization, changes in other provisions, profit/loss from the disposal of fixed assets and other non-cash expenses/revenues less interest paid and income tax paid.

Gross profit on sales

Sales minus cost of sales.

IAS

International Accounting Standards; newer standards refer to the initials IFRS.

IASB

International Accounting Standards Board.

IFRIC

Interpretations of the International Financial Reporting Interpretations Committee on IAS/IFRS.

IFRS (International Financial Reporting Standards)

IFRS are international reporting standards defined by the IASB.

Net cash

Liquid funds and securities contained within working capital less interest-bearing financial liabilities.

Net cash flow from financing activities

Outflow/inflow of liquid funds from equity financing and debt financing.

Net cash flow from investing activities

Outflow/inflow of liquid funds from investments and disinvestments.

Net cash flow from operating activities

Outflow/inflow of liquid funds, unaffected by investments, disinvestments and financing activities.

Net working capital

Net working capital, i.e. the total amount of short-term, interest-free working capital (inventories plus trade receivables less trade payables).

Net working capital ratio

Net working capital in relation to net sales.

Operating profit (EBIT)

Earnings before interest and taxes.

Return on assets (after taxes)

The return on assets (after taxes) is the consolidated net profit divided by the averaged total assets of the reporting period (average of total assets at the beginning and end of the reporting period).

Return on equity (after taxes)

The return on equity (after taxes) is the consolidated net profit divided by the averaged total equity of the reporting period (average of total equity at the beginning and end of the reporting period).

Return on sales

Ratio of EBT to sales.

Disclaimer

The annual report, in particular the forecast report included in the management report, includes various forecasts and expectations as well as statements relating to the future development of the SMA Group and SMA Solar Technology AG. These statements are based on assumptions and estimates and may entail known and unknown risks and uncertainties. Actual development and results as well as the financial and asset situation may therefore differ substantially from the expectations and assumptions made. This may be due to market fluctuations, the development of world market prices for commodities, of financial markets and exchange rates, amendments to national and international legislation and provision or fundamental changes in the economic and political environment. SMA does not intend to and does not undertake an obligation to update or revise any forward-looking statements to adapt them to events or developments after the publication of this annual report.

FINANCIAL CALENDAR

03/27/2013	Publication of Annual Report SMA Group 2012 and Individual Financial Statement SMA Solar Technology AG 2012 Analyst Conference Call: 9:00 a.m. (CET)
03/27/2013	Press Conference on Annual Results
05/15/2013	Publication of Quarterly Financial Report: January to March 2013 Analyst Conference Call: 9:00 a.m. (CET)
05/23/2013	Annual General Meeting 2013, Kassel, Kongress Palais
06/20/2013	Capital Markets Day 2013, Munich
08/08/2013	Publication of Half-yearly Financial Report: January to June 2013 Analyst Conference Call: 9:00 a. m. (CET)
11/07/2013	Publication of Quarterly Financial Report: January to September 2013 Analyst Conference Call: 9:00 a. m. (CET)

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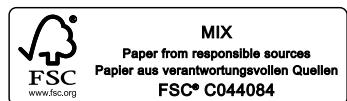
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