

GROUP MANAGEMENT REPORT

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STRATEGY AND ACTION

The year 2009 has shown that we have found the right strategic answers to the changing market environment and that we have achieved the revenue target of € 1 billion we set ourselves.

The world markets for solar power products underwent an elementary structural change in the year under review. While the solar industry had previously been production-driven in order to overcome bottlenecks and to service the increasing demand, the market now turned from a sellers' to a buyers' market. The worldwide capacities rose by around 50 per cent while demand lagged behind. The result was a strong decline in prices. If manufacturers did not want to base their sales on price only at the expense of margins⁹ and quality, cost reductions and productivity increases also had to be achieved. In addition, competition had to be met head on strategically with factors such as design, product warranties and quality, service and closeness to the customer. → *The solar power market* • p. 073//

It is particularly in this turbulent market environment that our strategy has proved to be the correct one.

SOLARWORLD CORPORATE STRATEGY 2009/2010+

In line with our “BUILD A SOLARWORLD” vision, our strategy is based on the manufacture of products for decentralized power supply. The future belongs to the use of solar power technology on people's own roofs as this is feasible on an almost unlimited, worldwide basis. That is why our products are not complicated niche products but are instead geared to universal application in a large, worldwide market. They can be enhanced in their functionality and are therefore also easy to integrate into a decentralized combination of other supply units. This is SOLARWORLD's way to an independent, reliable and environmentally friendly energy supply.

Quality leader with a strong brand – this is the strategic course we already successfully adopted ten years ago. Our motto is to produce the products that we offer as a fully integrated solar technology group along the entire solar value chain. With respect to suppliers, we bank on quality and environmental standards that are in line with our group specifications.

Through consistent quality assurance from the wafer to the solar system, this is the way we offer our customers on all continents uniform quality and the brand promise: “Made by SOLARWORLD”. And that provides us with the necessary business flexibility to respond promptly and in a way that improves profit-



ability to any changes in market parameters. Take 2009 as an example: The increased global supply of wafers and a simultaneous decline in prices caused us to invest even more intensively in the group's own value creation. With enhanced module capacities in the solar core markets of Europe, North America, and Asia, we will again strengthen our engagement in the retail market from 2010 onwards and expand our global market position.

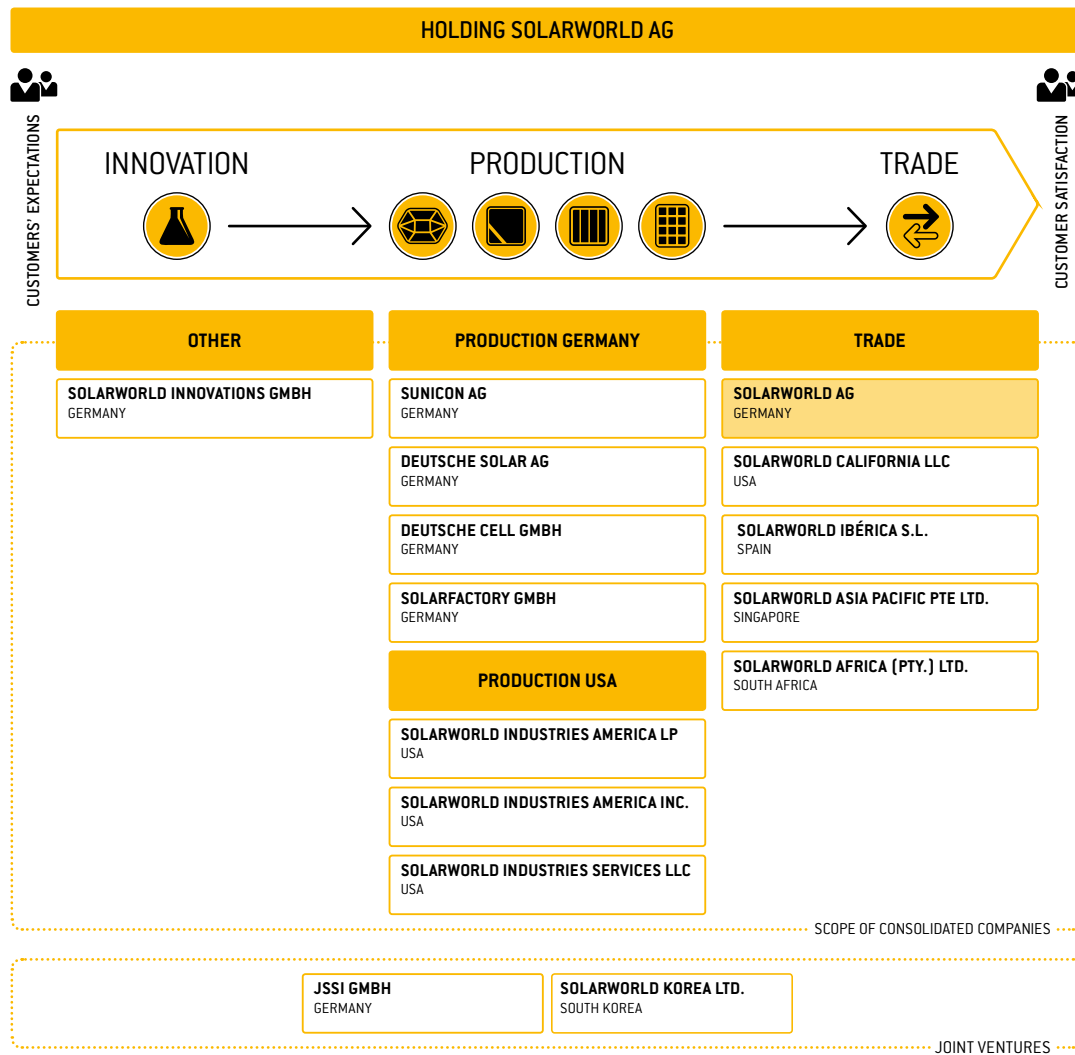
CORPORATE STRUCTURE 2010+. SOLARWORLD is among the largest solar groups worldwide and operates sites in the most important economic regions. Of strategic relevance to our investment decisions at the production sites are infrastructure factors that guarantee the high demands placed on process and product quality as well as with respect to environmental and social standards. The group's own production sites are therefore located in Freiberg, Germany, as well as in Hillsboro and Camarillo, USA. Here, we create employment at scientific and economic locations and thus cut our complexity costs. With the objective of strategically securing our logistic proximity to the important future market of Asia, we additionally expanded our global production network by adding another module production facility in the form of a joint venture⁹. Through the cooperation with our South Korean partner, we benefit from that company's cultural, regional and technical know-how in the complex Asian market. The sales offices of SOLARWORLD AG are located in the major solar growth regions. ➔ [Worldwide locations of the group](#) • p. 050 // 🌐 [World Map](#) //

The representation of our strategic management view is also reflected in the adjustment of the segmental structure of the group in the 2009 reporting period, during which regionally connected and fully integrated⁹ production and functional areas were pooled. 📄 [Segment structure and stages of the value chain](#) • p. 035 // ➔ [Segmental structure adjusted](#) • p. 049 //

CORPORATE TECHNOLOGY 2010+. Our group-wide and integrated production concept – applying across the value chain and across locations as it does – is based on the most advanced technology. Our objectives: to tap synergy and efficiency potentials throughout the group and to uniformly secure cost, quality, and environmentally relevant competitive advantages worldwide for the “solar module” as the end product. Research and development successes are being brought to bear from the raw material through to the system. For example, in 2009 an increase in cell efficiency and reduction of the wafer thickness helped to cut silicon consumption per watt peak.

Our internal minimum target for 2009 was to compensate for the reduction pursuant to the German Renewable Energy Sources Act (EEG)⁹ on an annual average by way of technical progress in the internal cost structure. We attained this target in the year under review. With the additional reduction step as at July 1st, 2010, the necessary progress in photovoltaic⁹ efficiency is to be accelerated at the the will of the legislator. ➔ [EEG amended](#) • p. 136 // The resulting feed-in tariff reduction cannot be compensated for immediately to that extent by cost reductions in 2010. Nevertheless, SOLARWORLD will redouble its efforts to cut costs. Processes and technologies relating to the expansion steps completed in 2009 and planned for 2010, which have meanwhile once again been improved, will favor SOLARWORLD's technical progress and will again clearly improve cost structures. The factor of size will lead to economies of scale and cost effects via numbers of units and shipments that will provide a competitive edge.

07 SEGMENT STRUCTURE AND STAGES OF THE VALUE CHAIN



In this way we will shoulder the pressure of additional cuts of feed-in tariffs in the lead market of Germany. On balance we will offer our customers a sophisticated supply of standardized solar power products of the SOLARWORLD brand.

CORPORATE BRAND 2010+. Our brand is one of our most important corporate assets. It enables us to obtain a competitive price for our quality products and to grow in a sustainable fashion. In contrast to established industries, the young solar industry continues to be subject to higher technological, economic and political risks. With an increasing supply, customers tend to look towards quality parameters like yields, stability and longevity. In the capital market, investors also “demand” additional security in order to compensate for the risks. A strong brand not only communicates appropriate product properties to the customer, it also reduces the risk involved in purchasing a solar power plant that constitutes an investment of more than 25 years.

The quality promise that we support with our “Corporate Technology” is additionally backed up by our strong sales function. The SOLARWORLD sales motto is: To be close to, and grow with the customer. However, we will still have to continue to invest in logistics processes in 2010 in order to be able to handle the increased volumes, and especially to cope with the temporary demand peaks caused by funding deadlines in the interest of our customers. Through investments in our brand communication, we will carry this comprehensive quality promise to potential customers and thus secure our worldwide market shares.

STRATEGIC FINANCING 2009/2010+

We will only be able to continue to reach our objective of expanding the SOLARWORLD market position worldwide successfully and, in so doing, push ahead the use of solar energy, if we manage to continuously make our business activities more efficient and secure our financial requirements through healthy business development. That is why we strive to cover the constant capital needs required for our rapid growth rate largely from our ongoing operations. Our “Corporate Technology” will strengthen our productivity and secure quality – our brand strategy “Corporate Brand” will generate reliable revenues by means of competitive prices.

The financing of the group is handled centrally through SOLARWORLD AG. In order to guarantee favorable financing of the group’s growth, the financing structure of the Holding is strengthened through profit and loss transfer agreements with the German wholly owned subsidiaries. In this way, the profits and losses of the subsidiaries go directly to SOLARWORLD AG. This also includes the control of liquidity and raising loans for the financing of corporate expansion. Also, our shareholder-oriented dividend policy that results from the stock corporation’s profit is placed on a group-wide foundation by this means.

The goal of our financing policy is to have an appropriate liquidity reserve at all times in order to provide the group with the necessary financial flexibility for any required growth steps, to limit financial policy risks, and also to optimize capital costs by way of an adequate capital structure. In addition to the financial requirements that we cover from the operating cash flow, we also make use of different financing instruments depending on the market situation – thus in 2010 we also used the bond market. In this context SOLARWORLD AG benefits from the strong position on the capital market that it has enjoyed since its IPO.



This stable capital structure permits us to grow under our own steam, constantly and with a sense of proportion. ➔ [Scheduled financing measures](#) • p. 146// From today's viewpoint, we are striving for a sound equity ratio⁹ in the region of 40 per cent. Even at a time of rapid economic change SOLARWORLD is capable of securing short and medium term investment projects through its careful financing.

MAJOR BUSINESS EVENTS IN 2009

- ➔ **MARKET POSITION MAINTAINED.** Worldwide we upped our 2009 market share to five (previous year: four) per cent. At the same time we succeeded in reaching our revenue target in spite of the industry-wide drop in prices. Constant cost cutting measures along the individual production stages as well as the procurement situation for major raw materials that was optimized in 2009 have admittedly contributed to a sound result, but were not able to compensate completely for the market-induced price declines. ➔ [Earnings situation](#) • p. 097//
- ➔ **STRATEGIC FOCUS ON BRAND CAMPAIGN.** Pursuant to our strategy, we increased investments in our brand awareness almost fivefold – to about € 10 million. ➔ [Brand investments stepped up – demand effects for our group and our customers](#) • p. 086//
- ➔ **PRODUCTION CAPACITY FULLY UTILIZED.** While many competitors were forced to cut their production and introduce short-time work we increased production to meet the strong demand for SOLARWORLD products at capacity limit. ➔ [Effects of general conditions on development in 2009](#) • p. 079//
- ➔ **INTERNATIONAL PRODUCTION NETWORK EXTENDED.** In line with the market development we placed the investment emphasis in 2009 on the retail business and decided to rapidly expand the group's module production. In this way we will increase capacities from the current 500 MW to 1,250 MW by the end of 2011. The investments, the financing and the infrastructure expansion were initiated in 2009. At the German location of Freiberg we upped our wafer production as planned from 250 MW to 750 MW. ➔ [Facts: Worldwide production capacities](#) • p. 079//
- ➔ **GROWTH FINANCIALLY SECURED.** In order to be able to implement our investment plans, we raised a syndicated credit (€ 200 million) in 2009 and prepared to issue a Eurobond (€ 400 million). We placed this bond successfully on the capital market in January 2010 and as a result, we secured the financial flexibility for further growth right at the beginning of the year. ➔ [Scheduled investments](#) • p. 146//
- ➔ **INFRASTRUCTURE CREATED TO PROMOTE OUR INNOVATIVE STRENGTH.** We strengthened the infrastructure of our international research campus in 2009. The cell and module lab was almost completed and began its development work in the first quarter of 2010. As a result, we consider that our innovative strength has been increased significantly. ➔ [SolarWorld Innovations – Group development “from lab to fab”](#) • p. 091//



08 TARGET ACHIEVEMENT 2009 AND TARGETS 2010+

	TARGETS 2009+	ACTUAL 2009	TARGETS 2010+
FINANCE	<ul style="list-style-type: none"> • Revenue target: Above previous year's level at € 1 billion as the next stage (Premise: Stabilizing macroeconomic development) • Profit or loss result: Depending on which price reduction must and can be compensated for on the cost side • Shareholder participation in corporate success 	<ul style="list-style-type: none"> ☑ Revenue: € 1.01 billion (previous year: € 0.9bn) ☑ EBIT⁹: € 151.8 million (previous year: € 263.3m) // Market-induced price reductions caused increased pressure on margins in 2009. ☑ Dividend⁹: € 0.16/Share (dividend proposal to Annual General Meeting 2010) 	<ul style="list-style-type: none"> • Revenue target: Sustainable exceeding of the previous year's revenue level of € 1 billion (premise: further recovery of the overall economic development combined with growth of the solar market, which will be materially influenced by the pending legal framework on the core market Germany). • Profit or loss target: Depending on the level of price depression on the cost side that has to – and can be – absorbed. • Participation of our shareholders in the success of the company
CUSTOMERS	<ul style="list-style-type: none"> • Further development of the SOLARWORLD brand • Renewed increase in customer satisfaction • Expansion of international sales also on new markets and in business fields with emphasis on the US market and rural electrification • Foreign quota: Stabilization at previous year's level 	<ul style="list-style-type: none"> ☑ Brand awareness in Germany increased: <ul style="list-style-type: none"> • Unaided: 2009: 5.8 per cent; 2009/2010: 7.1 per cent • Aided: 2009: 17 per cent; 2009/2010: 24.9 per cent <i>Source: EuPD Research/Brandmonitor</i> • In 2009 the following factors were identified for the first time in our annual customer survey: <ul style="list-style-type: none"> • Satisfaction with service: 87.6 per cent "very good" and "good" • Satisfaction with product quality: 99.8 per cent "very good" or "good" • Satisfaction with SOLARWORLD in general: 85.4 per cent "very satisfied" or "satisfied" ☑ Market-induced priority Germany, expansion of German sales team: + 62 per cent • Below previous year at 29 (previous year: 54) per cent. Reason: Market-induced, doubled demand in Germany with slight stagnation on international markets 	<ul style="list-style-type: none"> • Further development of the SOLARWORLD brand • Renewed increase in customer satisfaction • Expansion of international sales also on new markets and in business fields with emphasis on the US market and rural electrification • Foreign quota: Above previous year's level

	TARGETS 2009+	ACTUAL 2009	TARGETS 2010+
PROCESSES	<ul style="list-style-type: none"> • Minimum target: Compensating for EEG reduction on annual average by way of internal cost reductions (in €/Wp) • ISO 14001 certification⁹ of US production locations (earliest 2010) • Capacity expansion to meet rising world demand: <ul style="list-style-type: none"> • Wafers: 1,000 MW year-end capacity • Cells: 450 MW year-end capacity • Modules: 450 MW year-end capacity 	<ul style="list-style-type: none"> ☑ Production costs cut through technical progress and economies of scale⁹ in line with EEG reduction as at 1 January 2009. ☑ on schedule • Market-induced adjustment of targets during the year (rise in module demand) from planned wafer expansion towards expansion of production capacities for modules: <ul style="list-style-type: none"> • Wafers: 900 MW • Cells: 450 MW • Modules: 500 MW 	<ul style="list-style-type: none"> • Minimum target: Compensating for EEG reduction as at 1 January 2010 (9 per cent roof systems; 11 per cent free field systems) via internal cost reduction (in €/Wp) // further 16 per cent planned as at 1 July 2010 not immediately and completely feasible on the cost side in 2010 • ISO 14001 certification of all remaining locations including South Korea • ISO 9001 certification in South Korea • Capacity expansion 2010/2011 to meet rising world demand: <ul style="list-style-type: none"> • Wafers: 1,250 MW • Cells: 750 MW • Modules: 1,250 MW
EMPLOYEES	<ul style="list-style-type: none"> • Gain and retain qualified skilled and management staff : <ul style="list-style-type: none"> • Employment increase by around 25 per cent • Strengthening employer attractiveness by Employer Branding • Group-wide executive and talent development • Completion of code of ethics and code of conduct and communication to employees 	<ul style="list-style-type: none"> • 175 new jobs created/ + ten per cent, growth was secured by headcount, parallel investment in process optimization ☑ Germany: Study “Great Place to Work” 2009 – 55th (previous year: 57th) place/ Graduate barometer 15th place ☑ Group-wide executive and talent development • Postponed to 2010/Internal coordination process not yet completed 	<ul style="list-style-type: none"> • Employment expansion by about 10 per cent • Continuation • Emphasis on group-wide executive development • After approval by the works council the codes will be officially introduced and communicated and included in in-company training and further education
SOCIETY	<ul style="list-style-type: none"> • Taking into account the interests of stakeholder⁹ groups: Voluntary disclosure of sustainability reporting in accordance with GRI, Carbon Disclosure Project⁹ • Work on further ISO certifications⁹ (US sites) • Continuation: <ul style="list-style-type: none"> • Implement awareness-building measures regarding climate and resources protection • Promote research: Expand cooperation with universities and scientific institutes • Contribute to regional development via Solar2World projects (not-for-profit) 	<ul style="list-style-type: none"> ☑ Plus signature of Global Compact⁹ ☑ Achieved ☑ Information via inserts, target group mailings, school projects, cultural sponsoring for protection of species, etc. ☑ Research cooperations 2009: 25 (previous year: 21) ☑ Project scope: 114 (previous year: 53) kWp 	<ul style="list-style-type: none"> • Taking into account the interests of stakeholder groups: voluntary disclosure of sustainability reporting in accordance with GRI, Carbon Disclosure Project as well as Global Compact • ISO certifications (remaining sites, including South Korea) • Continuation: <ul style="list-style-type: none"> • Implement awareness-building measures regarding climate and resources protection • Promote research: Expand cooperation with universities and scientific institutes • Contribute to regional development via Solar2World projects (not-for-profit)

☑ = Target achievement 100 per cent

CORPORATE MANAGEMENT AND CONTROL

SUSTAINABLE MANAGEMENT AND CONTROL

REGULARLY VERIFY STRATEGIC TARGETS. The Internal Control System (ICS) of SOLARWORLD includes organizational safety measures (carried out through the management systems mentioned below), control (by the departments, group-wide through Controlling) as well as examination (internal audit).

The group strategy, which is directly derived from our [➔ Vision • p. 002//](#), as well as the resulting group targets are determined by the SOLARWORLD Management Board. The verification, control and further development of these strategic targets are implemented in the course of the year in regular strategy meetings attended by the Management Board as well as the Managing Directors and Board Members of the subsidiaries. The divisional targets are derived from the decisions of the management bodies.

Steering and control take place via Group Controlling, which coordinates the alignment and activities of all divisions in the SOLARWORLD Group and reports them to the Management Board. The success factor of corporate transparency takes on strategic importance in view of the growing challenges faced by a group operating in the international market.

The operating units of the SOLARWORLD Group that are defined for control purposes coincide with the reportable operating segments of “Production Germany”, “Production USA”, “Trade” and “Other”.

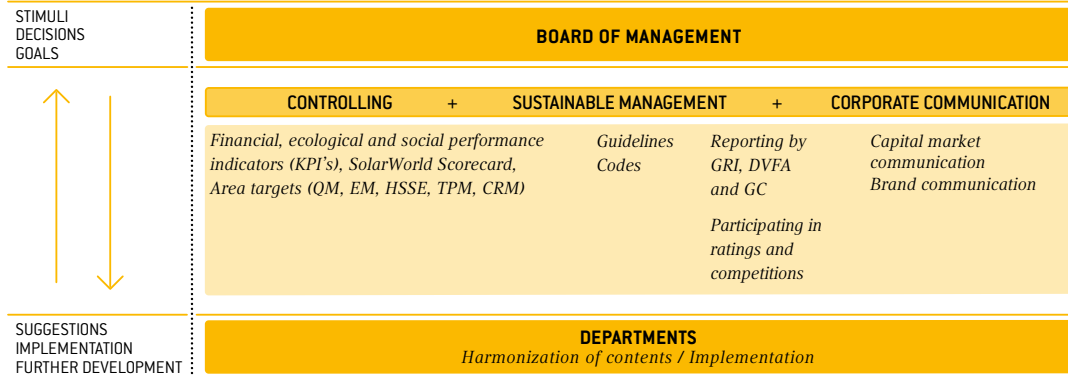
[➔ Segment structure adjusted • p. 049//](#)

The target/actual check and reporting of the primary group indicators such as revenue and EBIT [Ⓜ Selected corporate indicators • Cover//](#) to the Management Board within the time stipulated ensure that developments are identified early, appropriate measures are initiated, and targets are adjusted to the changing market and company developments. The control indicator “Revenue” initially reflects sales and price development while EBIT⁹ indicates the development of profitability. In 2009 the control process was determined by these indicators in the sense that price and marketing measures constituted the strategic response to market and sales developments. We achieved stabilization of EBIT by way of economies of scale and volume effects as well as through constant improvement of cost structures in terms of production, trade and procurement. While revenue is the most important indicator in the “Trade” segment, production output is the most important control variable in the “Production” segment.

INCLUDING ECOLOGICAL AND SOCIAL ASPECTS. In the year under review the indicator-based control instrument, the SOLARWORLD Scorecard, was further developed and the combining of data from the various group divisions was pushed ahead. The SOLARWORLD Scorecard belongs to the category of Sustainability Balanced Scorecards (SBSC)⁹; this type of scorecard includes not only economic objectives (such as the financial control indicators of revenues, EBIT) but also ecological and social aspects (such as the non-financial control indicators of customer satisfaction, employee identification, CO_{2eq}, etc.). We decided in favor of



09 ORGANIZATIONAL INTEGRATION OF SUSTAINABILITY MANAGEMENT IN THE SOLARWORLD GROUP 2009+



GRI, DVFA, GC • cf. Glossary page 261 // QM, UM, HSSE, TPM, CRM • cf. Acronym index page 268 //

Status: 2009

this approach because sustainability⁹ is an integral component of the SOLARWORLD group strategy. To this end, group-wide top level objectives, performance drivers⁹, measures and indicators were defined in close coordination with the functional departments.

The framework for our sustainable group control is provided by the SOLARWORLD values as well as by our guidelines. [\[1\] www.solarworld.de/sustainability/](http://www.solarworld.de/sustainability/) They are designed to provide all employees of the SOLARWORLD Group with guidance. The group-wide Code of Conduct, which still was subject to internal examination by the works council at the end of 2009, shall additionally provide actual behavioral recommendations after 2010.

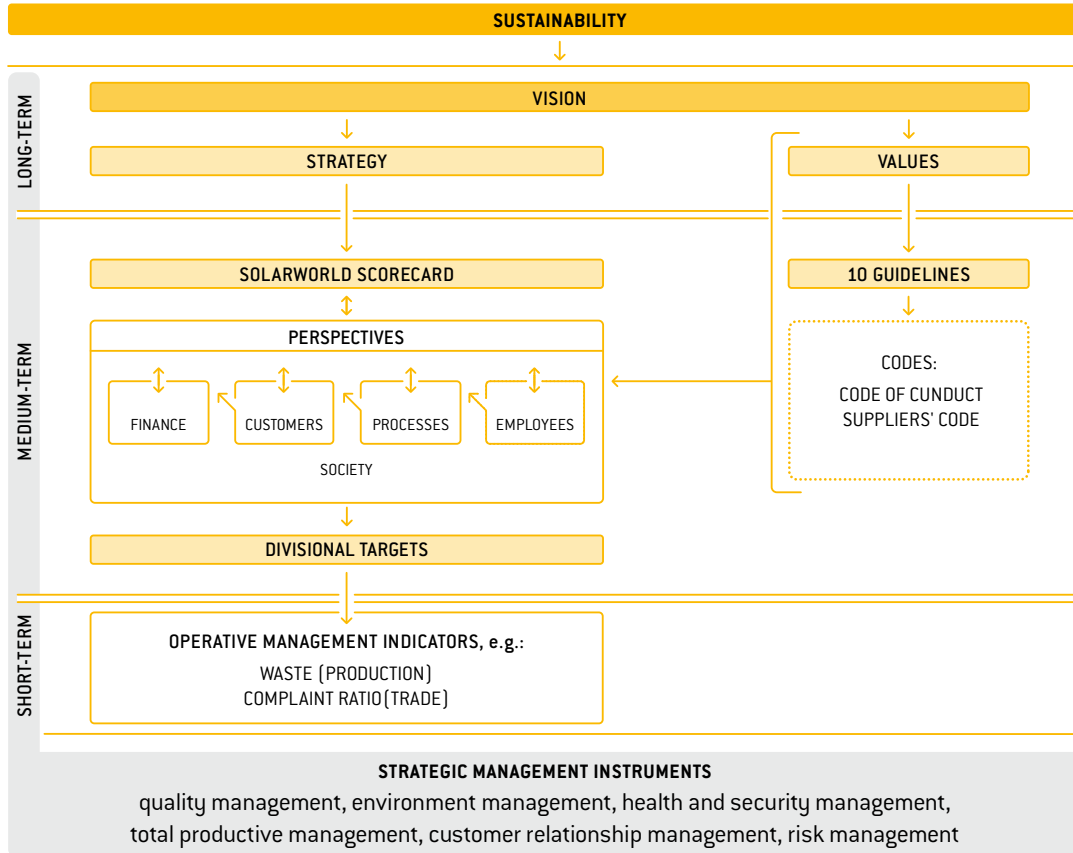
The SOLARWORLD Scorecard contains five perspectives that build directly upon one another: Finance, Customers, Processes, Employees and Society. The cascade-type interlinking of these perspectives guarantees that the causal effects of the individual factors on long-term success will be taken into consideration. In the transition between the perspectives, it is shown how the identified strategic targets and performance drivers of the respective top-level perspectives can be attained. Thus, in the future after the complete implementation of the SOLARWORLD Scorecard we will include all the factors mentioned in our economic corporate management by way of cause-and-effect chains.

Core indicators cannot always be unmistakably assigned to a particular segment. There are cross-segment aspects such as employee satisfaction, financial performance, resources consumption and social commitment. On the other hand, many indicators such as the satisfaction of module and systems customers can be clearly assigned to a particular segment ("Trade").



⑩ SUSTAINABLE CORPORATE MANAGEMENT

As of 2009



The SOLARWORLD Scorecard brings together indicators of the various management instruments. This makes possible a target/actual comparison of financial and non-financial control indicators. In some parts we already managed the company in 2009 according to the goals and indicators of the Scorecard.

⑩ Target achievement 2009 and targets 2010+ • p. 038 //

EARLY OPERATING INDICATORS – METRICS WITH AN EARLY WARNING CHARACTER. The definition of early indicators depends on the timeframe of the top-level objective under consideration. If we have long-term corporate success in mind, the performance drivers⁹ of the SOLARWORLD Scorecard are our early indicators. In general, internally we speak of early indicators in the case of parameters that are promptly and regularly recorded in the context of the following management systems, and which therefore form the basis for the short-term social policy decisions concerning the control of future developments. There is a large range

of these. In the following, we present examples of selected early indicators for the segments, “Production Germany”, “Production USA” and “Trade”.

“Production Germany” and “Production USA” segments:

- In production we continuously record the average output of production (MW/day) and use this as an early indicator for productivity.
- The reject rate must be viewed in direct connection with the previously mentioned indicator. It is also checked continuously in order to enable immediate action if deviating values are observed.

“Trade” segment:

- Product quality benchmarks are early indicators of our competitiveness, i.e. comparative tests, also together with customers. Thus, tests are conducted in an FMEA (Fault Possibility and Influence Analysis) mode with pilot customers and measures are being tested in practice.
 - As a medium-term early indicator for our quality claim as well as for the quality of our logistics, we use the rate of customer complaints. As a result of the continuous recording of these data we can correct any deviations and take appropriate counter-measures. Thus, the rate of customer complaints increased slightly in 2009 compared to the previous year. External demand peaks in the fourth quarter led to short-term bottlenecks both in logistics processes and in the availability of some components: We immediately initiated an analysis in the quality assurance area.
 - Early indicators concerning customer satisfaction that are measured annually among wholesalers and specialist partners are explicit customer statements and implicit moods that are reflected after talks and/or special events (meetings, discussion rounds).
 - Early indicators for market trends are also generated on the one hand by personal contacts with specialist partners – for example on the occasion of the annual training of partners – or on the other hand by systematic surveys (interviews). These refer, for example, to product lifecycles or new product versions such as the black module.
-

INTERLINKING OF MANAGEMENT TOOLS

Total Productive Management (TPM)⁹ – SOLARWORLD Scorecard: perspectives processes and customers – increases process effectiveness by identifying “best practice” examples (e.g. set-up workshops) and translating them into group-wide process standards. TPM covers not only Production but also Technical Service, Logistics and the IT Department. The objective is to make the working areas leaner and to avoid losses. In the process, internal target values serve as guide figures for cost reduction and efficiency improvement. This continuous improvement forms the very basis for further innovations. One of the target indicators is the identification of “Overall Equipment Efficiency”, which is the product of (machine) availability, performance/efficiency and quality. At the Freiberg location the TPM Cup has been awarded since 2009. It backs up our ideas and innovation management at the site. → [*Managing ideas with the company suggestion system* • p. 109](#)// In the course of our growth in the USA we also intensified our local TPM. The 2009 results confirm that TPM leads to cost reductions. In the year under review, for example, we succeeded in saving a double digit million euro amount through specific TPM projects.

Customer Relationship Management (CRM)⁹ – SOLARWORLD Scorecard: perspective customers – is designed to guarantee the best possible service for our customers. To this end we have to respond to customer needs specifically. For example, in 2009, SOLARWORLD introduced the black module in its product range at the request of customers because, for certain customer groups, visual appeal plays a crucial role. © [*Innovation targets and priorities 2009* • p. 092](#)//

Quality Management (QM)⁹ – SOLARWORLD Scorecard: perspectives customers and processes – ensures the quality of our processes and products by way of defined standards. We define quality on the basis of the demands of our customers. The top-level control variable is the degree of customer satisfaction. In addition, we also permanently check the product quality of our external suppliers within the context of our quality management system. By way of regular audit and evaluation procedures we guarantee the stable and high quality of the products and merchandise of our suppliers. → [*Critical selection of suppliers pays off – supplier capital* • p. 080](#)// Almost all SOLARWORLD sites worked according to quality standard ISO 9001 in the year under review. At our US production site Hillsboro we are striving for certification in the first half of the year 2010.

Environmental Management (EM)⁹ – SOLARWORLD Scorecard: perspectives processes and society – continuously improves our resources utilization. Environmental policy is therefore an integral part of our quality policy. With our integrated quality and environmental management we counteract the risks in the process chain and guarantee group-wide quality, process, and environmental standards with according gains in efficiency. Target agreements and measures derived from these are stipulated annually. In this process we set ourselves internal reduction targets for energy consumption as well as for waste, waste water and CO_{2eq} emissions⁹ in order to increase our eco-efficiency. Our targets exceed the legal requirements. Since the target values serve internal control purposes, they are not disclosed, but the performance achieved is reported annually.

This is how we again identified our annual CO₂ balance in 2009: According to provisional estimates the greenhouse gas emissions (GHG)⁹ in 2009 increased in line with production growth by 44.6 per cent to 139,300 (previous year: 96,300) tCO_{2eq}. We were able to improve our average emission intensity, i.e. emissions per produced Watt peak: They dropped to 164.5 (previous year: 175.8) gCO_{2eq}/Wp. During the average module life span of 25 years it is possible to save some 4.6 million (previous year: 3.1) million tCO_{2eq} with the modules sold by us in 2009. This will help avoid costs for environmental damage amounting to € 318.9 million (previous year: € 219.7m). If you compare the CO_{2eq} emissions avoided by our modules with the CO_{2eq} emissions caused by our company the result is a positive CO_{2eq} balance for SOLARWORLD. The emissions avoided continue to exceed the emissions caused by a factor of 33. ☉ [Report on sustainable corporate management](#) • p. 213//

Within the framework of environmental management, concrete measures are planned and implemented at the individual locations. In addition, we expedited preparations for the introduction of the certification according to ISO 14001⁹ in the USA in 2009. In 2010 SOLARWORLD will have group-wide certifications in accordance with both ISO 9001 and ISO 14001.

Internal environmental audits and annual identification of the indicators serve to check the efficiency of the measures and the degree of target achievement. In addition, the Environmental Management Officers report to management on the basis of an internal target/actual comparison.

External environmental communication is handled by Investor Relations in the context of our sustainability reporting in accordance with the Global Reporting Initiative (GRI)⁹ and through publication of the data in the annual Carbon Disclosure Project (CDP)⁹. An internal environmental reporting system as well as audit reports and regular management reports ensure that all management levels in the SOLARWORLD Group are well informed. Our environmental reporting system includes a multi-faceted statistics network concerning waste, emissions, waste water and power statistics as well as auxiliary material and consumables statistics. At this point we would like to refer you to the presentation of the ecological performance indicators in the ☉ [Report on sustainable corporate management](#) • p. 213//.

By means of our **Health and Safety Management** – SOLARWORLD Scorecard: perspectives processes and employees – we create safe working conditions for our employees and support them in protecting their health. In 2009 meetings of the occupational safety committees, occupational health screenings, hazard analyses as well as occupational safety and protection seminars were conducted on a regular, group-wide basis. All group companies have their own Safety Officer available. In addition, we employ special safety engineers at the production companies.

Group-wide, health and safety management is rapidly merging. As a result of interaction of the new and older locations, the system is being further developed and standardized. In data collection, differing definitions may occur due to varying general legal conditions. These differences are disclosed in the indicator section of the GRI Report. ☉ [Report on sustainable corporate management](#) • p. 213//



Risk Management⁹ – SOLARWORLD Scorecard: all perspectives – is a tool that covers all business areas. We record risks group-wide in all departments. Deviations from early indicators show the existence of short- to medium-term risks. By way of the Scorecard performance drivers⁹, we can identify the long-term risks.

➔ [Opportunity and risk management system](#) • p. 114//

Internal Auditing is carried out by an independent staff department attached to the Management Board's Finance unit. The object of the audit is to determine the effectiveness of the Internal Control System (ICS). In addition to being oriented towards the past in the form of the (Re-)Assurance⁹, the Internal Audit also has a consultative and directional function in that it also examines the degree to which our processes make sense.

In addition to the management tools mentioned we prepared the SOLARWORLD Code of Conduct in the year under review and completed it in a version ready for approval. The contents were developed in a group-wide exchange with colleagues. Furthermore, legal compatibility with German and US law was verified. The Code constitutes a voluntary, group-wide behavioral standard regulating our activities in areas where no economic or legal framework conditions have been formulated or where the existing ones are insufficient from the SOLARWORLD point of view. The Code of Conduct is therefore binding on a group-wide basis. It is based on applicable national and international law. At the end of the year under review the Code of Conduct was submitted to the Freiberg works council for general approval.

On the interlinking of our management tools please also see the [Ⓐ Sustainable corporate management](#) • p. 042//



BUSINESS AND GENERAL CONDITIONS

BUSINESS FIELDS // ORGANIZATION STRUCTURE

GROUP STRUCTURE AND SEGMENTS

BUSINESS FIELDS UNCHANGED. The SOLARWORLD Group is one of the world leaders in the production of crystalline solar power technology. The emphasis of our business activity is on the production and international distribution of solar power applications and systems for roof installation through to large-scale⁹ solar plants. We operate both in the area of on-grid⁹ (grid-coupled) and off-grid⁹ (stand-alone) technology. SOLARWORLD AG and its subsidiaries are involved in research, development, production and distribution at all stages of the solar value chain⁹. The materials cycle is completed by our group's internal recycling facility.

ORGANIZATION STRUCTURE FOCUSED ON SYNERGIES. SOLARWORLD AG emerged from the sole proprietorship, Frank H. Asbeck, Ingenieurbüro für Industrieanlagen, founded in 1988. Entry as a joint stock company based on German law in the trade register of the local court in Bonn under the number HRB 8319 took place on 26 March 1999. → *Chronicle • cover inside*// SOLARWORLD AG is listed in the Prime Standard⁹ of the Frankfurt Stock Exchange (TecDAX)⁹ in Germany.

SOLARWORLD AG IS THE PARENT COMPANY OF THE SOLARWORLD GROUP. As the holding company it provides in addition to sales central services for the group. These include service, steering and control functions in the areas of Corporate Business Management (strategic group development, M&A⁹), Finance, Controlling, Investor Relations, Corporate Communications⁹ and Marketing. The coordination of production planning and controlling as well as investment planning is also performed centrally by SOLARWORLD AG on behalf of the subsidiaries. Sustainability Management⁹ as well as Internal Audit are, as staff functions, directly subordinated to the group Management Board, which in turn performs the task of managing the entire group.

In order to benefit from group-wide synergies⁹ and economies of scale⁹ we pooled our procurement function centrally at DEUTSCHE SOLAR AG at our German production location of Freiberg. From there, procurement and purchasing are controlled for the entire group. Our research and raw materials activities are also pooled there in subsidiaries such as SOLARWORLD INNOVATIONS GMBH and SUNICON AG.



The company's processes are supported by standard systems employed throughout the group. IT therefore has the entrepreneurial task of using the funds available to SOLARWORLD efficiently for the operational procedures and, in doing so, to secure and optimize the control of our business processes also, and especially, during growth processes.

LEGAL GROUP STRUCTURE CHANGED. At the cut-off date (31 December 2009) the SOLARWORLD Group consisted of 25 (previous year: 28) companies. In the year under review the legal group structure was changed as follows:

- As at 1 January 2009 we repositioned our US companies in terms of company law and tax law as well as with reference to their respective fields of activity. By this means we pooled our US business in SOLARWORLD INDUSTRIES AMERICA INC. (previously: SOLARWORLD PROPERTIES INC.) as an operating parent company in a subgroup, thus creating a tax unit in the USA at the same time.
- According to the separation and takeover agreement of 7 April 2009 and the resolutions passed at the Annual General Meetings of the two legal entities, the SolarMaterial division was separated from DEUTSCHE SOLAR AG with retrospective effect as of 1 January 2009 and transferred to SUNICON AG.
- As a wholly owned subsidiary of SOLARWORLD CALIFORNIA LLC, we established SOLARWORLD POWER PROJECTS INC. on 29 April 2009. The company, which is located in Camarillo, California, will be in charge of the development of large-scale projects in the USA, an important market for the future.
- A name change was introduced for JOINT SOLAR SILICON VERWALTUNGS GMBH. The company located in Freiberg was renamed JSSI GMBH at a shareholders' meeting on 5 February 2009.
- Through a share purchase and transfer agreement of 15 July 2009 we took over 100 per cent of our previous joint venture company, SCHEUTEN SOLARWORLD SOLICIUM GMBH. The company is now operated under the name of SOLARWORLD SOLICIUM GMBH.
- In order to accelerate expansion of our Korean joint venture in the expanding Asian solar market, SOLARWORLD increased its share in SOLARWORLD KOREA LTD. in the third quarter of the year in the context of a capital increase of € 13.9 million to 76.5 (previously: 50) per cent. Within one year our joint venture⁹ partner has the right to buy 26.5 per cent of the shares held by SOLARWORLD so that, within a short period of time, equal ownership can be re-established. → *Group structure modified • p. 112//*
- We also established SOLARPARK M.E. LTD. as a joint venture together with our partner, SolarPark Engineering Ltd., Seoul, South Korea. It designs and builds manufacturing plants for module production. The company, in which SOLARWORLD holds a 50 per cent stake, was consolidated at equity⁹ as of 1 January 2009 for the first time.
- In December 2009 we sold our 35 per cent stake in GÄLLIVARE PHOTOVOLTAIC AB.



With the exception of the changes mentioned above there were no other modifications of our legal group structure. ⁽⁶⁾ [Notes/SolarWorld Group as of 31 December 2009](#) • p. 161//

In addition, we established a liaison office in Grenoble, France, on 15 September 2009. ⁽⁷⁾ www.solarworld-france.com// The local employees will render technical support for ENERGYROOF® products, for which there is a particularly high demand. They will also train installers and distributors.

SEGMENT STRUCTURE ADJUSTED. With IFRS' 8 "Operating Segments" coming into force, an adjustment to group segment reporting was introduced in 2009, which now exclusively follows the management point of view and thus focuses on the "solar module" end product on the production and on the trade side. ⁽⁸⁾ [Notes/Basic principles, accounting policies](#) • p. 156// As of 31 December 2009 the operational business was split into four segments that will take global business activities as well as the SOLARWORLD Group organization into account. Instead of the previous segments, there are now four operating segments, "Production Germany", "Production USA", "Trade" and "Other", which reflect the strategic orientation as well as the predominant internal organization, reporting and control structure. ⁽⁹⁾ [Segment structure and stages of the value chain](#) • p. 035//

In the production field the segments include regionally coherent and fully integrated production activities in Germany as well as in the USA (segments "Production Germany" and "Production USA"). The goal we pursue is to tap synergy and efficiency potentials right across the entire value chain and, in doing so, to gain competitive advantages for the end product, i.e. "solar module". The "Trade" operating segment ultimately includes the worldwide distribution of solar modules. Wafer sales to external customers have been placed in the "Production Germany" segment. In the "Other" business segment we have combined different business activities of the group whose financial influence is not, not yet, or no longer crucial to the assets, finance and earnings situation of the group. The comparative figures for the previous year were adjusted in line with the new segment structure.

WORLDWIDE LOCATIONS OF THE GROUP

PRESENT ON ALL IMPORTANT SOLAR MARKETS. For years SOLARWORLD AG has been operating a target-oriented location strategy, thanks to which we are present on the most important solar core markets. In all, the group has 13 (previous year: 13) sites (including three permanent establishments, joint ventures⁹ and the holding company). 🌐 [World Map](#)//

Our main production sites are in Germany and the USA – the two markets which, according to expert calculations, already account for more than 50 per cent of the worldwide solar market today and can also be expected to grow in the future. In addition, further production capacities are available to us in the important future market of Asia at a production site in South Korea, which is jointly operated with our joint venture partner. Apart from the good growth prospects in these markets ➔ [The future solar power market • p. 135](#)// these locations offer us optimum framework conditions for meeting the high SOLARWORLD quality and environmental standards worldwide: a very good infrastructure on the spot, a large number of competent skilled staff, regional political support for renewable energies⁹, a long tradition of silicon processing and/or the semiconductor industry, synergies⁹ with regional research establishments as well as a broad spectrum of suppliers.

Our broadly based international sales function is handled by our sales offices in Germany, in the USA, in Singapore, South Africa, and Spain. Due to our presence on the most important solar sales markets we can respond particularly flexibly to short-term developments and also save long transport routes. In this way we accelerate the strategic distribution of our products worldwide.

IMPORTANT PRODUCTS, SERVICES AND BUSINESS PROCESSES

OFFERING AN EXTENSIVE AND BROAD ASSORTMENT. SOLARWORLD AG concentrates exclusively on mono⁹- and poly-crystalline⁹ solar power applications. The central business activities of the group are the distribution of modules to the specialist trade and the sale of wafers to the international solar cell industry. In addition, SOLARWORLD offers systems solutions from ready-to-assembly solar kits for private roofs through to large-scale solar power plants for on-grid⁹ and off-grid⁹ power supply systems.

Above and beyond its product portfolio from raw materials through to turn-key systems, the group also offers recycling⁹ as a service to external customers. 🌐 [World Map](#)//



MARKET POSITION // INFLUENCING FACTORS

COMPETITIVE POSITION AND MAIN SALES MARKETS

POSITION MAINTAINED IN TOUGHER COMPETITION. In the year under review competitive pressure on the international solar market rose significantly. It was mainly Chinese competitors who put pressure on the entire industry with their very low product prices. Due to their substantially lower personnel and energy costs as well as their lower interest rates for credits, they were able to produce at much lower overall costs than European manufacturers, for example. Average prices for solar modules dropped by about one third industry-wide in 2009 and pushed down margins⁹ at the same time so that many solar companies made losses. Crystalline solar power technology – which is what SOLARWORLD has specialized in – holds a position of market dominance with a market share of some 80 per cent in the total solar market.

Based on its strategic alignment, SOLARWORLD was able to stand its ground successfully in the tougher competitive environment. → [Strategy and action](#) • p. 033// → [Sales strategy proves its worth](#) • p. 082// Despite declining margins we managed to generate a sound result. → [Revenues and earnings development](#) • p. 097// In the year under review we succeeded in increasing our market shares. → [Market position maintained](#) • p. 037//

The solar wafer market – our second most important sales activity – was also characterized by declining prices and increasing competitive pressure in 2009. Thanks to our integrated production strategy, in contrast to competitors, we were able to upgrade wafer volumes that had not been called off into our own solar cells and modules and place them on the market. Some 50 per cent of our SOLSIX® brand wafers were sold to external customers in 2009 while the rest went into our own production.

Our growth on the main sales markets in 2009 closely mirrored the market development. In the year under review we therefore succeeded in increasing our share of group-wide revenue (wafer, module and solar kit business) in Germany to 71 (previous year: 46) per cent. The second strongest sales region for SOLARWORLD was the rest of Europe, with a share of 18 (previous year: 33) per cent, followed by Asia with a share in total group revenue of 7 (previous year: 12) per cent, and the USA with a share of 3 (previous year: 8) per cent.

LEGAL AND ECONOMIC INFLUENCING FACTORS

FUNDING MEASURES DRIVE INDUSTRY DEVELOPMENT. In the year 2009 the international solar industry got significantly closer to grid parity⁹, i.e. the point in time when solar power is less expensive than the price of domestic electricity. The main reason for this was the significant price reduction concerning solar power products in the year under review. Grid parity will probably be reached on the most important solar markets within the next five years. Due to this development as well as the global increase in energy demand and the simultaneously growing scarcity of fossil fuels, solar power will increasingly become an interest-



ing energy alternative worldwide. Presently, however, the solar industry still depends on funding measures in most countries. They are an important driver for the development of this industry of the future.

With its Renewable Energy Sources Act (EEG)⁹, Germany plays a pioneering role internationally in the design of funding conditions: As a result the share of renewable energies in the power mix on this market rose to 16 (previous year: 15) per cent in 2009. Solar power covered about 1.0 (previous year: 0.7) per cent of the German electricity demand. The feed-in tariff⁹ for solar power fixed by the EEG for a period of 20 years offers plant operators the necessary security to plan their investments in a solar plant over the long term. The German EEG is one of the so-called minimum price systems, currently the most important and most successful funding instruments for solar power. They create investment security for end customers and offer an important innovation stimulus to industry in the form of the pre-determined reduction of tariffs. If minimum price systems are additionally coupled to market growth it is possible to respond swiftly to current market developments. For example, the German government approved a special reduction of the compensation for solar power at the beginning of 2010 in order to adjust the feed-in tariffs to price development on the market. ➔ *EEG amended • p. 136*// These funding mechanisms are employed in all important European solar markets such as Germany, Italy, France, the Czech Republic, Belgium, Greece, and Spain.

Another type of promotion for renewable energies comes in the form of tax credits and investment grants that are given as an initial investment in a solar power plant. Such mechanisms have the advantage that end customers get special relief during this capital-intensive phase. Unlike the minimum price systems, however, these funding measures do not offer any innovation incentives for the solar industry to provide their modules not only at lower prices but also with an optimized output. The output capacity that a solar plant delivers over many years is not taken into consideration in this type of funding. Many countries such as the USA, France, or Greece use these funding mechanisms as supplementary incentives at regional level and combine them with others.

CREDIT PROGRAMS ARE GAINING IN IMPORTANCE. In addition to the funding mechanisms just described the granting of credits has become an important factor in the development of the solar power market in the year under review. The persistently tense situation on the financial market makes it difficult for investors to raise the necessary external financing, above all in the field of large-scale projects. Countries like Germany, where there are guaranteed credits such as the program for renewable energies⁹ offered by the Reconstruction Loan Corporation (KfW), were less affected by this phenomenon. For this reason, the USA for example approved a new program for financing solar power projects with borrowed funds at the end of 2009. ➔ *Promotion programs take effect • p. 137*//



STATEMENT ON THE CORPORATE GOVERNANCE OF THE COMPANY

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CORPORATE GOVERNANCE WITHIN SOLARWORLD

STAKEHOLDERS INTEGRATED INTO DIALOGUE. We interpret Corporate Governance⁹ as responsible management and control of the company geared to the long-term and sustainable creation of value. In comparison with the “old economy”, we are a fairly young company in the middle of a dynamic market process. Our management philosophy does not exclusively follow the principle of being faster in and closer to the market – it also takes into consideration the interests of our investors, business partners, employees and the public. It is additionally based on the need to continuously confirm the trust placed in us by all stakeholder⁹ groups, and to further develop Corporate Governance within the group. In doing so SOLARWORLD AG is guided by the German Corporate Governance Code (GCGC)⁹.

According to section 4.1.1 GCGC the interests of our shareholders, our employees and other groups associated with the company are taken care of by the Board of Management in managing the company. To this end we included a new contact form on our homepage in the year under review. [\[1\] www.solarworld.de/stakeholders](http://www.solarworld.de/stakeholders)// For more information on our dialogue with our stakeholders, please go to [☉ Report on sustainable corporate management • p. 213//](#).

For successful corporate management and control we rely on the close and trustful cooperation of the Board of Management and the Supervisory Board. [☞ Report by the Supervisory Board 2009 • p. 022//](#)

CORPORATE GOVERNANCE REPORT 2009

AGAIN AN UNRESTRICTED DECLARATION OF COMPLIANCE FROM THE BOARD OF MANAGEMENT AND SUPERVISORY BOARD. As has already been the case since 2002, the Board of Management and the Supervisory Board issued a declaration of compliance⁹ in the year under review. This is in absolute agreement with the recommendations made in the GCGC version dated 18 June 2009 as published on 5 August 2009. Pursuant to paragraph 161 German Stock Corporation Act (AktG), the declaration was made permanently available on our Internet homepage. [\[1\] www.solarworld.de/investorrelations/compliancedeclaration](http://www.solarworld.de/investorrelations/compliancedeclaration)//

Part of our philosophy concerning Corporate Governance also involves the responsible handling of risks. The Board of Management performs its duty of care by way of appropriate risk management and internal risk controlling. It regularly informs the Supervisory Board about existing risks and their development. [☞ Opportunity and risk management system • p. 114//](#)

MANAGEMENT AND CONTROL UNCHANGED IN 2009. As a German stock corporation, SOLARWORLD AG has a dual management and control structure with a separation in personnel between the management and the control/monitoring functions. The Board of Management manages the company in line with the pertinent legislation (paragraphs 77, 78 AktG), Articles of Association (paragraphs 5, 6) and Rules of Procedure un-

der its own responsibility and develops the appropriate strategic direction. It is appointed by the Supervisory Board. This, according to paragraphs 95 (1), 96 (1), 101 (1) AktG, is composed of shareholder representatives and is elected by the Annual General Meeting (AGM), which is, however, not obliged to comply with the election proposal. The legal basis for the work of the Supervisory Board of SOLARWORLD AG is formed by the Articles of Association and the Rules of Procedure. The Supervisory Board appoints and supervises the Board of Management and advises it on fundamental decisions. → [Notes/Members of the Management and the Supervisory Boards • p. 207//](#)

The Board of Management of SOLARWORLD AG as well as its respective responsibilities have remained unchanged in the course of fiscal year 2009. The Board of Management continues to consist of the following four members: → [Photo of Board of Management • p. 014//](#)

→ **Frank H. Asbeck** (Chairman and Chief Executive Officer),

As founder of the company, he is responsible for corporate development, public relations and also energy and corporate policy

Initial appointment: 1999

End of current appointment period: 9 January 2014

→ **Frank Henn** (Chief Sales Officer),

Responsible for the coordination of national and international sales

Initial appointment: 2004

End of current appointment period: 31 May 2013

→ **Boris Klebensberger** (Chief Operating Officer)

Responsible for the QM⁹ and EM⁹ areas as well as for production management and controlling; also in charge of control of the producing subsidiaries as well as Research and Development

Initial appointment: 2001

End of current appointment period: 23 September 2011

→ **Philipp Koecke** (Chief Financial Officer)

Responsible for the areas Controlling, Investor Relations/Corporate Communications, IT, HR, Accounting, Group Accounting and Internal Audit

Initial appointment: 2003

End of current appointment period: 30 April 2012



The composition of the Supervisory Board also remained unchanged in the year under review with the Board continuing to consist of three members: ➔ [Photo of Supervisory Board](#) • p. 020 //

- ➔ **Dr. Claus Recktenwald** (Chairman of the Supervisory Board)
- ➔ **Dr. Georg Gansen** (Deputy Chairman of the Supervisory Board)
- ➔ **Dr. Alexander von Bossel** (Member of the Supervisory Board)

Taking into consideration the functions of the Chairman of the Supervisory Board in two cases that count double, Dr. Recktenwald holds a total of eight mandates, with the currently permissible total number of mandates being ten. Dr. Gansen has four mandates, and Dr. von Bossel holds two mandates. The Supervisory Board reports on its activities in fiscal year 2009 in the present Annual Group Report. ➔ [Report by the Supervisory Board](#) • p. 022 // There, you will also find further information on implementation of the GCGC. As the Supervisory Board of SOLARWORLD AG continues to be made up of three members the instructions in section 5.3 concerning the formation of committees do not apply. Furthermore, the entire Supervisory Board deals with Management Board matters including the compensation system, and performs the required examination and supervisory tasks. In this context the cap ruling on severance pay as per section 1.2.3 will also be observed. The age limit to be imposed according to section 5.1.1 GCGC is not applied to the SOLARWORLD Board of Management due to its age structure.

TRANSPARENCY GUARANTEED VIS-À-VIS SHAREHOLDERS AND THE PUBLIC. Our goal is to inform all our target groups transparently and promptly in keeping with the principle of equal treatment. All our information is communicated on the Internet in a freely accessible way. www.solarworld.de // The Investor Relations section of the SOLARWORLD Internet page was revised and given a clearer structure in early 2009. By this means, we ensure a high degree of user friendliness in German and English, pursuant to section 6.8 GCGC. ➔ [Investor Relations work improved](#) • p. 067 //

AT THE ANNUAL GENERAL MEETING OUR SHAREHOLDERS MAY EXERCISE THEIR RIGHTS AND CAST THEIR VOTES. For shareholders who are unable to attend the AGM personally, the possibility exists to exercise voting rights through a personally selected proxy or an authorized representative of our company who will act on their instructions. The selected proxy or representative will also be accessible to our shareholders during the AGM. All information concerning the AGM can be downloaded from our website at an early point in time. Pursuant to paragraph 3 (2) of our Articles of Association, information such as invitations to the AGM may also be communicated to shareholders by way of electronic media. Pursuant to the new version of the law on implementation of the shareholder directive (ARUG) of 30 July 2009, the Board of Management and the Supervisory Board will propose appropriate changes to the Articles of Association to the AGM.



CAPITAL MARKET LAW AND COMPLIANCE DUTIES CONSTANTLY REVIEWED. Adhering to and implementing the capital market laws and disclosure rules designed to strengthen investor protection (compliance⁹) is one of the important management functions of the Board of Management. It is performed by a central Compliance Office that is attached to the office of the Chief Financial Officer. An external legal clearing office examines group-wide facts with respect to their ad-hoc relevance. With regard to the legal ban on insider trading pursuant to paragraph 14 of the German Securities Trading Act (Wertpapierhandelsgesetz = WpHG), members of the Board of Management and employees for whom access to insider information is indispensable, as well as service providers and project participants, are listed in an Insider Register.

In 2009 there were six voting rights notifications pursuant to paragraphs 21, 26 WpHG for exceeding or falling short of the voting rights thresholds defined by law. ➔ *[The shareholder structure of SolarWorld AG changed as of 31 December 2009 • p. 066](#)* // The share ownership on the part of members of the SOLARWORLD AG Board of Management amounted to a total sum of 25 per cent of the shares issued as at 31 December 2009. The members of the Supervisory Board did not hold any shares in the company. Pursuant to paragraphs 15a WpHG, members of the Board of Management and the Supervisory Board as well as persons closely related to them are legally obliged to disclose the acquisition and sale of SOLARWORLD AG shares or financial instruments derived from them if the value of the transactions conducted within one calendar year exceeds the sum of € 5,000. No such transactions were disclosed to SOLARWORLD AG in the course of the year under review. An annual document pursuant to the Securities Prospectus Act (WpPG) provides information on all publications that occurred in the year 2009 on our Internet page subsequent to publication of the Annual Financial Statements on 25 March 2010. www.solarworld.de/investorrelations/jaehrl-dokument//

REMUNERATION REPORT

With this remuneration report, the Supervisory Board and the Management Board of SOLARWORLD AG again comply with the recommendations of the German Corporate Governance Code (GCGC)⁹ in its most recent version of 18 June 2009. While section 3.10 of the GCGC requires a Corporate Governance report, which is included in this Annual report under a separate headline and, incidentally, is also covered in the Report by the Supervisory Board, section 4.2.5 of the GCGC requires an explanation concerning the remuneration system for Management Board members, including disclosure of individualized remuneration, and section 5.4.6 requires that the remuneration for members of the Supervisory Board be reported individually in the Corporate Governance Report, broken down by components, including remuneration paid and benefits extended for services provided individually, in particular advisory and agency services.

MANAGEMENT BOARD REMUNERATION. The annual Management Board remuneration agreed with all Management Board members and determined in terms of its structure by the Supervisory Board of SOLARWORLD AG consists of fixed and variable components. It is based on paragraph 87 of the German Stock Corporation Act, according to which total remuneration for an individual Management Board member must be commensurate with his tasks and the situation of the company. It also meets the require-



ments of the GCGC and reflects special features of the company in the context of the group, as well as the individual performance in the HR and functional areas, taking the relevant environment into account. The financial situation of the SOLARWORLD Group is also taken into consideration. The financial situation, in turn, determines the profit distribution possibilities which form the basis for the variable components of Management Board remuneration.

The Management Board remuneration also meets the requirements of the German Act on the Appropriateness of Management Board Remuneration, adopted by the federal parliament on 18 June 2009. Account is taken both of the individual performance of a Board member and the customary remuneration in the sector as well as sustainable corporate development. The new deductible for Management Board members of at least 10 per cent of the respective loss and at least 150 per cent of the fixed annual remuneration was already agreed as of 1 January 2010 for D&O insurance policies. Other than that, the SOLARWORLD AG Management Board remuneration was determined by the principles already applying prior to the German Act on the Appropriateness of Management Board Remuneration coming into force.

As fringe benefits, D&O insurance costs are paid for all Management Board members, who are also provided with the use of an upper mid-range company car. Furthermore, all work-related out-of-pocket costs, expenditure and expenses are refunded pursuant to paragraph 670 of the German Civil Code. In addition, the Management Board members in charge of Finance (CFO), Operations (COO), and Sales (CSO), receive grants towards their health insurance. The Chairman of the Management Board (CEO) also receives remuneration as the Supervisory Board chairman of DEUTSCHE SOLAR AG and SUNICON AG.

In the event of premature termination of service contracts, Management Board contracts do not contain any severance pay agreements. The severance pay cap recommended in the latest version of the GCGC dated 6 June 2008 has been taken into account with regard to new appointments made since then. In the follow-up contracts for the COO, the CEO and the CFO, this was already implemented with effect from 1 September 2008, 10 January 2009, and 1 May 2009, respectively.

There are no separate pension entitlements. Management Board members are therefore also allowed to convert part of their remuneration into company pension schemes.

The fixed annual remuneration for Management Board members is payable in twelve monthly installments at the end of each month. In addition, every Management Board member receives a variable, performance-related special payment that is equivalent to an individually negotiated euro amount per cent and share of the dividend distributed to shareholders. This amount is paid within four weeks of the AGM at which the underlying dividend⁹ distribution was approved. The individualization of Management Board remuneration presented below relates, on the one hand, to fixed remuneration due and paid in 2009. On the other hand, it also covers variable remuneration relating to fiscal year 2009 which, however, can only fall due after the next Annual General Meeting and depends on approval of the profit appropriation proposal submitted by management, according to which 16 eurocents are to be distributed per share.

Variable remuneration has been capped so that a Management Board member must not be paid more than a multiple of the fixed remuneration previously agreed with the Supervisory Board per fiscal year. For the CFO and the CSO, the cap is three times the fixed amount (the variable component amounts to up to 200 per cent of the fixed remuneration), and for the CEO and COO, it is four times the fixed amount (the variable component may not exceed 300 per cent of the fixed remuneration).

At the Annual General Meeting of 20 May 2009, our shareholders signaled where they see the appropriate level of management salaries in Germany. In accordance with a proposal concerning a resolution to cap Management Board remuneration, it was resolved that the remuneration for a Management Board member be capped at 20 times the average pay in the SOLARWORLD Group. The calculation is based on gross wages and salaries in each completed fiscal year, divided by the headcount at year-end. This regulation will apply with immediate effect until an AGM decides otherwise. It is based on a Board request in accordance with paragraph 119 (2) of the German Stock Corporation Act. This was required to justify the AGM's competence. At the end of the day, it therefore ultimately constitutes a self-commitment by the incumbent Board implemented with the consent of the Supervisory Board, and is to be taken into account in future employment contracts. Remuneration components affected are the variable and fixed part of the respective annual income. The only components not affected are inventors' compensation, compensation for Supervisory Board mandates and other sideline payments or payments in kind. In accordance with section 4.2.2, the level and structure of remuneration are continually reviewed by the Supervisory Board. In addition, they are discussed at an annual meeting dealing with Board matters and agreed upon and updated in agreement with each Board member.



⑪ MANAGEMENT BOARD REMUNERATION // IN €

	Non-performance-related		Performance-related	Total
	Fixed	Other remuneration	Variable	
Frank H. Asbeck CEO	280,843.32		810,000.00*	[1,090,843.32]
				988,146.00 Capping of the management remuneration pursuant to a resolution passed by the AGM on 20 May 2009
		29,500.00 (Supervisory Board remuneration, DEUTSCHE SOLAR AG, incl. attendance fees of € 4,500.00) 17,400.00 (Supervisory Board remuneration, SUNICON AG, incl. attendance fees of € 2,400.00)		46,900.00
Previous year	280,843.32	29,500.00 (Supervisory Board DEUTSCHE SOLAR AG incl. attendance fees of € 4,500.00) 17,000.00 (Supervisory Board remuneration, SUNICON AG, incl. attendance fees of € 2,000.00)	810,000.00	1,137,343.32
Philipp Koecke CFO	162,821.04	3,205.20 (grants towards health insurance)	256,000.00*	422,026.24
Previous year	136,154.40	2,576.16 (grants towards health insurance)	240,000.00	378,730.56
Boris Klebensberger COO	262,407.64	2,692.71 (grants towards health insurance) 2,994.26 (inventor's compensation)	560,000.00*	828,094.61
Previous year	174,423.32	31,515.64 (Management Board, DEUTSCHE SOLAR AG), 2,379.90 (grants towards health insurance) 2,329.64 (inventor's compensation)	559,599.99**	770,248.49**
Frank Henn CSO	174,337.47	3,583.14 (grants towards health insurance)	256,000.00*	433,920.61
Previous year	174,337.43	3,375.00 (grants towards health insurance)	240,000.00	417,712.43
Total	880,409.47	59,690.31	1,882,000.00*	2,719,087.46
Previous year	765,758.47	88,676.34	1,849,599.99**	2,704,034.80**

* Resolution on profit appropriation, Annual General Meeting 2010

**The previous year's amounts for Boris Klebensberger have changed: In 2009, arrears of variable remuneration in the amount of € 34,599.99 were paid for 2008.

SUPERVISORY BOARD REMUNERATION. The AGM of SOLARWORLD AG on 25 May 2005 resolved on Supervisory Board remuneration consisting of a fixed component, performance-related special remuneration, fringe benefits and the reimbursement of expenses. This resolution took effect as of 1 January 2005 and was to apply for subsequent years unless a resolution to the contrary was passed by another AGM for the future.

In accordance with paragraph 113 (1) of the German Stock Corporation Act, Supervisory Board remuneration must be appropriate in relation to the tasks of the Supervisory Board members and the position of the company. The SOLARWORLD AG AGM also resolved that the company would pay the premiums for appropriate insurance cover against the legal liability resulting from Supervisory Board activities (D&O insurance). Since the Supervisory Board also follows the GCGC recommendation of also applying the deductible that is mandatory only for the Management Board to the Supervisory Board, the terms and conditions of the relevant D&O insurance will be adjusted accordingly as of 1 July 2010.

Accordingly, members of the Supervisory Board receive annual remuneration of € 17,500.00 respectively; the vice chairman of the Supervisory Board receives one and a half times that amount, i.e. € 26,250.00, and the chairman of the Supervisory Board receives twice that amount, i.e. € 35,000.00, plus, in each case, value-added tax if applicable. This remuneration was paid in 2010 retroactively for fiscal year 2009. In addition, each member of the Supervisory Board received a lump sum allowance of € 250.00 each to cover expenses per meeting and AGM attendance, which in 2009 was triggered eight times and added up to a total of € 2,000.00, again plus value-added tax if invoiced, which, however, the company was able to deduct as input tax. In addition, every member of the Supervisory Board received and receives performance-related special remuneration, originally determined as € 150.00 per dividend cent with capital stock consisting of 6,350,000 shares, subject to the proviso that the basic amount shall rise in line with an increase in the number of shares. As the number of shares rose from 6,350,000 to 111,720,000, a multiplier of 17.5937 applies to this fiscal year, triggering a basic amount of € 2,639.055. If the next AGM resolves on a dividend⁹ of 16 eurocents per share, the variable special remuneration will be € 42,224.80 (previous year: € 39,585.83) per Supervisory Board member. However, at its meeting on 6 August 2007, the SOLARWORLD AG Supervisory Board submitted a “Self-Commitment Declaration” entailing a partial renunciation. It is linked to the agreements made with the Management Board members on variable remuneration and reads as follows: “As long as the resolution of the AGM of 25 May 2005 applies to the remuneration of the Supervisory Board, the Supervisory Board members accept that variable remuneration due to them be capped to double the fixed annual remuneration due to them. Consequently, even if due to special results for the year and/or a further increase in the relevant number of shares, more than double the fixed annual remuneration could be claimed as variable special remuneration, the total amount paid per fiscal year will not exceed three times the fixed annual remuneration. The Supervisory Board thus agrees to (and among itself) the cap regulation provided for in section 4.2.3, penultimate paragraph of the German Corporate Governance Code.”



The performance-related special remuneration is also paid plus value-added tax if applicable. Payment is due after the close of the AGM that resolved on the underlying dividend distribution. The variable remuneration shown in the following list for 2009 will therefore only fall due and be paid when the AGM approves the dividend proposed by the Management Board and Supervisory Board.

With regard to the disclosure recommended in the last paragraph of section 5.4.6 of the GCGC, it is pointed out that the chairman of the Supervisory Board of SOLARWORLD AG is a partner in the law firm of Schmitz Knoth Rechtsanwälte. Essentially via other partners and employees of the law firm, this firm provides legal advice and representation services to the SOLARWORLD Group as well as international coordination services that are necessary in this context.

Concerning the provision of services for SOLARWORLD AG in 2009 – the year under review – the law firm of Schmitz Knoth Rechtsanwälte charged € 469,244.87, excluding VAT and tax-free expenses. For the 2009 service period, subsidiaries incurred additional attorney's fees, which amounted to € 124,312.20 for DEUTSCHE SOLAR AG, € 11,754.60 for DEUTSCHE CELL GMBH, € 5,538.07 for SOLAR FACTORY GMBH, € 2,059.20 for SOLARWORLD INDUSTRIES DEUTSCHLAND GMBH, € 15,446.60 for SUNICON AG and € 44,283.20 for SOLARWORLD INNOVATIONS GMBH. All individual items and the total of € 672,638.74 (previous year: € 591,301.76) paid by the group were approved by the Supervisory Board of SOLARWORLD AG, a resolution on commissioning the relevant work was adopted, and the necessity and appropriateness of the work were confirmed at the meeting on 15 March 2010, which was convened to adopt the annual accounts.

In conclusion, it is stated that the Supervisory Board members Dr. Claus Recktenwald and Dr. Georg Gansen are concurrently and respectively Deputy Chairmen of the Supervisory Board of DEUTSCHE SOLAR AG. Frank H. Asbeck, CEO of SOLARWORLD AG, is chairman of that Supervisory Board. Remuneration for the Supervisory Board of DEUTSCHE SOLAR AG was increased to an annual amount of € 25,000.00 at the AGM of 6 December 2007. That amount also applied to each Supervisory Board member in 2009, plus an attendance fee of € 750,00 per meeting reported in the list provided below. With six meetings charged in 2009, the total amount per Supervisory Board member was € 29,500.00 net, which will only fall due and be paid upon completion of the fiscal year, as is the case with all other remuneration for Supervisory Board members.

Dr Claus Recktenwald, Dr. Georg Gansen and Frank H. Asbeck are also members of the Supervisory Board of SUNICON AG. The company's AGM on 18 December 2008 resolved on Supervisory Board remuneration of € 15,000.00 net per Supervisory Board member, to apply to fiscal year 2008 for the first time and not payable until 1 January 2009, as is the attendance fee of € 400.00. With five meetings charged, the total amount per Supervisory Board member will be € 17,000.00, plus value-added tax.

⑫ SUPERVISORY BOARD REMUNERATION // IN €

		Non-performance-related			Performance-related	Total
		Fixed annual remuneration	Attendance fee	Other remuneration	Variable special remuneration	
Dr Claus Recktenwald Chairman	For 2009, paid in 2010	35,000.00	2,000.00	29,500.00 (Supervisory Board remuneration, DEUTSCHE SOLAR AG, incl. attendance fees of € 4,500.00) 17,400.00 (Supervisory Board remuneration, SUNICON AG, incl. attendance fees of € 2,400.00)	42,224.88*	126,124.88*
	For 2008, paid in 2009	35,000.00	2,500.00	29,500.00 (Supervisory Board remuneration, DEUTSCHE SOLAR AG, incl. attendance fees of € 4,500.00) 17,000.00 (Supervisory Board remuneration, SUNICON AG, incl. attendance fees of € 2,000.00)	39,585.83	123,585.83
Dr Georg Gansen Deputy Chairman	For 2009, paid in 2010	26,250.00	1,750.00	29,500.00 (Supervisory Board remuneration, DEUTSCHE SOLAR AG, incl. attendance fees of € 4,500.00) 17,400.00 (Supervisory Board remuneration, SUNICON AG, incl. attendance fees of € 2,400.00)	42,224.88*	117,124.88*
	For 2008, paid in 2009	26,250.00	2,500.00	29,500.00 (Supervisory Board remuneration, DEUTSCHE SOLAR AG, incl. attendance fees of € 4,500.00) 17,000.00 (Supervisory Board remuneration, SUNICON AG, incl. attendance fees of € 2,000.00)	39,585.83	114,835.83
Dr. Alexander von Bossel Member	For 2009, paid in 2010	17,500.00	2,000.00		35,000.00*	54,500.00*
	For 2008, paid in 2009	17,500.00	2,500.00		35,000.00	55,000.00
Total	For 2009, paid in 2010	78,750.00	5,750.00	93,800.00	119,449.76*	297,749.76*
Previous year	For 2008, paid in 2009	78,750.00	7,500.00	93,000.00	114,171.66	293,421.66

* Resolution on profit appropriation, Annual General Meeting 2010

BUSINESS DEVELOPMENT 2009

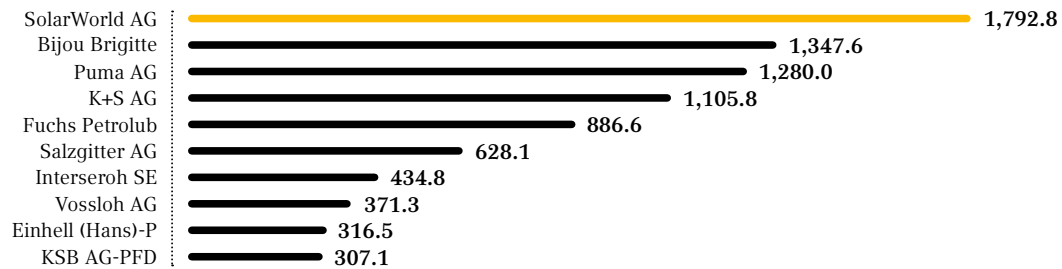
STOCK 2009

HISTORICAL PRICE DEVELOPMENT OF SOLARWORLD STOCK

POSITIVE DEVELOPMENT SINCE IPO. On 8 November 2009 SOLARWORLD celebrated its tenth stock exchange anniversary. Since the IPO until the cut-off date 31 December 2009, a stock price increase of 1,683 per cent was recorded. This means that the SOLARWORLD stock showed the best performance of all listed German companies in the Prime and General Standard in the last ten years. By comparison, the DAX generated growth of only 19 per cent in the same period.

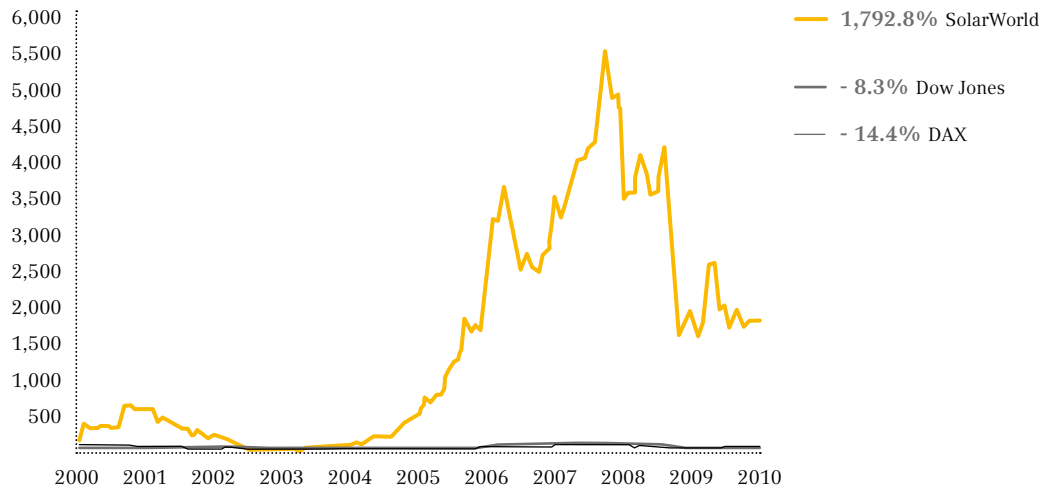
⑬ PERFORMANCE OF THE TEN BEST GERMAN STOCKS // IN PER CENT

Period: 31 December 1999 to 31 December 2009, Source: Bloomberg, Handelsblatt, 2010



⑭ PERFORMANCE OF SOLARWORLD STOCK IN THE LAST TEN YEARS // IN PER CENT

in comparison to DAX and DowJones*, Source: Xetra, 2010



* The TecDAX was not launched until 2003 as the successor to the Nemax Index. It can therefore not be used as a comparative index for the last ten years.

The issue price of our stock amounted to € 13.75 in 1999. By way of several capital increases from the company's own funds through conversion of part of the revenue reserves created at the time, the capital stock⁹ of the company increased through the issue of bonus shares. As a result, the number of shares increased by a factor of 16 to the current total of 111.72 million units, while the stock price was respectively divided by a factor of 16. Corrected for these effects, the actual issue price of the SOLARWORLD stock amounted to € 0.86. On 31 December 2009, the stock price was € 15.33.

Our positive development in the capital market reflects the successful corporate growth achieved by SOLARWORLD. Thus, our revenues went up from € 5.4 million in 1999 to € 1.01 billion in the year under review. This is equivalent to a growth rate of more than 18,603 per cent within a period of ten years. Our EBIT⁹ also showed a multiple increase from € 0.07 million in the year 1999 to € 151.8 million in 2009.

➔ *Chronicle • cover inside*// Our shareholders have consistently participated in the success of the company: The dividend distribution rose from € 1.3 million in the year 2000 to € 16.8 million in the year under review.

CAPITAL MARKET DEVELOPMENT 2009

MORE STABLE DEVELOPMENT IN SECOND HALF OF 2009. Capital markets were still impacted by the financial crisis during the first half of 2009. Along with growing stabilization of the economy in the second half of the year and the positive forecasts for an economic recovery in 2010, the future expectations of investors also

improved so that they invested again more readily. Consequently, the DAX rose in spite of a strong decline in the first quarter by a total of 22 (previous year: -40) per cent and reached a value of 5,957 points on the 31 December 2009 cut-off date. The TecDAX⁹ technology index increased even more substantially by 64 (previous year: -50) per cent ending the year 2009 at 818 (31 December 2008: 483) points. The Dow Jones Industrial Index, the most important international lead index, gained 20 (previous year: -34) per cent in the fiscal year, achieving 10,549 (31 December 2008: 8,668) points at the end of the year. The sustainable stock indices also recovered over the course of the year. The ÖkoDAX⁹ grew by 15 (previous year: -62) per cent to 314 points and the Dow Jones Sustainability Index went up by 32 (previous year: -45) per cent to 1,011 points.

SOLAR STOCKS STILL UNDER PRESSURE. This generally positive development was, however, not reflected in the performance of solar stocks. Discussions about rising competitive pressure within the solar industry as well as the declining price level impacted negatively on solar stocks. The pressure for consolidation in the industry caused several competitors to incur losses. The trust of investors – above all in European solar manufacturers – declined. The World Solar Energy Index (SOLEX)⁹ that only lists wafer, cell and module manufacturers lost five (previous year: -68) per cent in the course of the year and closed at 549 points. In contrast to this the Photon Photovoltaic Share Index (PPVX)⁹ rose in the same period by eleven (previous year: -69) per cent. This contradictory development is mainly attributable to the fact that the PPVX also lists machine makers and several Asian companies of the solar industry. The former were able to benefit from the capacity increase in the industry and the latter from strong price competition, making it possible for them to penetrate the European and the US markets. → *Supply exceeds demand* • p. 073//

DEVELOPMENT OF THE SOLARWORLD STOCK 2009

STOCK INFLUENCED BY MARKET VOLATILITY. In spite of positive business development, our stock was not able to completely avoid the volatility of solar stocks in general. The SOLARWORLD stock (WKN: 510840) listed in the Prime Standard⁹ of the Frankfurt Stock Exchange (TecDAX) lost two (previous year: - 64) per cent. On the cut-off date (31 December 2009) it closed at € 15.33. The highest price of our stock in the reporting period was € 23.78, the lowest was € 12.24. Our price-earnings ratio (P/E ratio) at the cut-off date amounted to 28.9 (31 December 2008: 11.4). (15) *Development of the SolarWorld stock in comparison with the DAX and TecDAX* • p. 069//

Measured by the market capitalization⁹ of all technology stocks and as a function of the trading volume in free float, we reached fourth place respectively in the TecDAX at the end of the 2009 reporting period (previous year: third place in market capitalization, second place in trading volume). On the whole, SOLARWORLD achieved a trading volume in free float of € 6.4 billion (previous year: € 10.6b). The average daily trading volume in units in the year under review amounted to 1.5 (previous year: 1.6) million units. On 31 December 2009 our market capitalization was almost unchanged at around € 1.7 billion. In addition to being quoted on the TecDAX the SOLARWORLD stock is also listed in several international and national indices. (18) *Indices in which SolarWorld is listed, 2009* • p. 069//

SHAREHOLDERS AND COMMUNICATIONS

THE SHAREHOLDER STRUCTURE OF SOLARWORLD AG CHANGED AS OF 31 DECEMBER 2009. The capital stock⁹ of the company is split into 111,720,000 no par value bearer shares with an imputed nominal value of € 1. Notifications pursuant to paragraph 21 Sec. 1 Sent. 1 WpHG from the shareholders to the company as well as to the Federal Office of Financial Services Supervision (BaFin) concerning the number of voting shares were issued in the year under review and were appropriately reported on the company's homepage. In comparison with 31 December 2008, BlackRock Inc. and DWS Investment GmbH increased their shares to 3.44 (previous year: 2.82) per cent, and 5.31 (previous year: 4.93) per cent, respectively. [⑳ Shareholder structure as at 31 December 2009 • p. 069//](#)

AUTHORIZATION FOR A SHARE BUY-BACK NOT EXERCISED. The AGM on 20 May 2009 again passed a resolution to authorize the company to acquire treasury stock pursuant to paragraph 71 (1) No. 8 AktG in the amount of ten per cent of the capital stock of the company. In the year under review no use was made of this authorization. The authorization to acquire treasury stock is limited to the close of business of 20 November 2010.

AGM 2009 APPROVES CAP ON MANAGEMENT BOARD SALARIES AND DIVIDENDS. Our AGM 2009, which took place in Bonn, was attended by some 1,300 shareholders. This means that 47.05 (previous year: 51.57) per cent of the voting capital was represented. For fiscal year 2008 the AGM approved the distribution of a dividend⁹ for the ninth year in succession. The profit share rose to € 0.15 (previous year: € 0.14) per share and thus increased for the fifth year in succession. [⑲ Dividend and distribution • p. 069//](#) Some 22 per cent of the balance sheet profits from the individual financial statement of SOLARWORLD AG as of 31 December 2008 were distributed. The largest part of the balance sheet profits of the stock corporation was allocated to revenue reserves. In doing so we strengthened the capital base of the SOLARWORLD Group and secured the financial flexibility for further investment projects. The dividend was paid out on 22 May 2009. Our shareholders will also receive a share of the profits of the company in the future. [➔ Future dividend and distribution • p. 145//](#)

The AGM also complied with the proposal of the Supervisory Board and the Board of Management under agenda item 10 and approved a cap on Management Board salaries with a majority of 99.98 per cent. [➔ Management Board remuneration • p. 056//](#)

The AGM also approved all other items on the agenda with a large majority. The Board of Management and the Supervisory Board were discharged with 99.87 and 99.35 per cent respectively – evidence of shareholders' satisfaction with the corporate management of SOLARWORLD AG. [⑲ www.solarworld.de/hv2010//](http://www.solarworld.de/hv2010//)



INVESTOR RELATIONS WORK IMPROVED. In the year under review SOLARWORLD intensified contacts with international investors in Europe and in the USA. Overall, we presented our company at 28 (previous year: 30) Road Shows, Equity Fora, Conferences and Investor Days such as the 24th European Photovoltaic Solar Energy Conference and Exhibition in Hamburg, Germany, or at Solar Power International in Anaheim, USA.

The Investor Relations section on our homepage www.solarworld.de/investor-relations// was revised in early 2009 and given a more easy-to-read structure. This is designed to offer more user-friendliness to our shareholders and other interested parties. All previously published financial reports can be downloaded from our website as PDF files. The 2008 Annual Group Report is available in an online version. In addition to the 2009 interim reports, there are so-called Quick Quarter overviews that summarize the most important facts and figures. In this way we make it easier for our stakeholders⁹ to look for specific information and to put it together individually. For the first time, we published the financial calendar for fiscal year 2010 together with the interim report for the third quarter of 2009. As a result, important dates such as the Annual General Meeting or the publication dates of our financial reports can be planned well ahead of time.

In our communication we also include ecological and social topics. Thus, SOLARWORLD AG is the only company in the solar industry to publish an integrated Sustainability Report within the reporting framework of the Global Reporting Initiative (GRI)⁹. Furthermore, SOLARWORLD was a pioneer in already applying the core performance indicators for environment, social affairs and corporate management (ESG = Environmental, Social, Governance) of the Deutsche Vereinigung für Finanzanalyse und Asset Management (DVFA) in its 2008 report. Through disclosure of these additional reporting requirements, SOLARWORLD plays a pioneering role in sustainability reporting among all listed companies. ☉ *Report on sustainable corporate management/Key indicators of DVFA* • p. 221// In the year under review SOLARWORLD again received accolades for the quality and transparency of its market communication. In the yearly “Best Annual Report 2009” competition run by Manager Magazin, the SOLARWORLD annual report was, as in the previous year, awarded second prize in the TecDAX⁹ category.

In 2009 we also participated in the Carbon Disclosure Project (CDP)⁹. www.cdproject.net// In the context of this project SOLARWORLD discloses its greenhouse gas emissions⁹ as well as its strategy to reduce these emissions for institutional investors. ☉ *Report on sustainable corporate management* • p. 213// The CDP is one of the largest joint international initiatives of the financial sector and the most comprehensive emission register of company-related GHG emissions worldwide. SOLARWORLD has been participating in this project on a voluntary basis since its introduction in Germany in 2005.



SOLARWORLD REPRESENTED AS TOP STOCK IN SUSTAINABILITY FUNDS. Our increased transparency in sustainability reporting has been recognized by the capital market. The Internet platform [\[1\] www.nachhaltiges-investment.org.de//](http://www.nachhaltiges-investment.org.de/) which publishes an overview of all sustainability funds licensed in the German-speaking region lists the SOLARWORLD stock in the year 2009 as a Top 10 investment in more than 15 funds and 14 indices. To us, this capital market sector constitutes an important segment of investors that gains in importance every year. In 2009 alone 31 funds with a total volume of roughly € 790 million were newly launched in the German-speaking region. The sustainable fund volume in Germany, Austria, and Switzerland increased from € 19 to 30 billion in 2009.

TAKEOVER DIRECTIVE LAW

The information pursuant to paragraph 315 (4) No. 1 and No. 3 HGB (the composition of subscribed capital and participation in capital) can be obtained from the previous paragraphs.

The provisions concerning the appointment and dismissal of Management Board members as well as amendments to the Articles of Association (paragraph 315 (4) No. 6 HGB) result from the German Stock Corporation Act.

Regarding the powers of the Management Board (paragraph 315 (4) No. 7 HGB), reference is made to the Stock Corporation Act. Furthermore, the following applies:

In the AGM on 24 May 2006 the Board of Management was authorized to increase the capital stock⁹ with the approval of the Supervisory Board by a total of € 5.5 million until 31 December 2010.

In the AGM on 24 May 2007 the Board of Management was authorized to increase the capital stock with the approval of the Supervisory Board by a total of € 20.9 million until 31 December 2011.

In the AGM on 21 May 2008 the Board of Management was authorized to increase the capital stock with the approval of the Supervisory Board by a total of € 27.9 million until 31 December 2012.

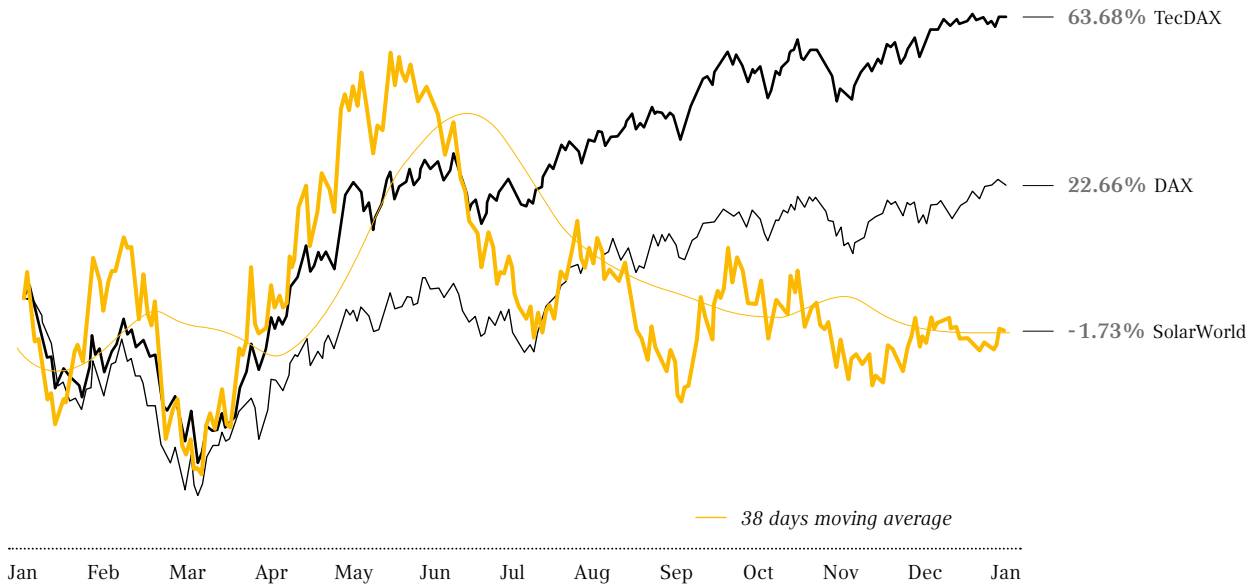
As of the cut-off date there were financial liabilities amounting to € 697 million (converted) for which creditors can demand early repayment in the event of a change of control (paragraph 315 (4) No. 8 HGB). A change of control shall be deemed to occur if and when one party (with the exception of Frank H. Asbeck, members of his family or companies controlled by any of the aforementioned parties) directly or indirectly holds more than 50 per cent of the voting rights for the shares issued or acquires the possibility to nominate or to elect the majority of Supervisory Board members or to cause such a nomination or election to take place.

With regard to paragraph 315 (4) Nos. 2, 4, 5 and 9, no information is required.

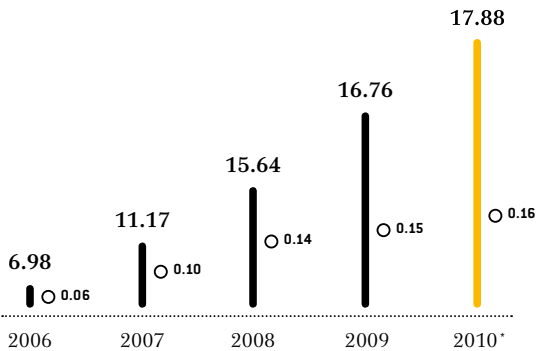


15 **DEVELOPMENT OF THE SOLARWORLD STOCK IN COMPARISON WITH THE DAX AND TECDAX**

Source: Xetra, 2010



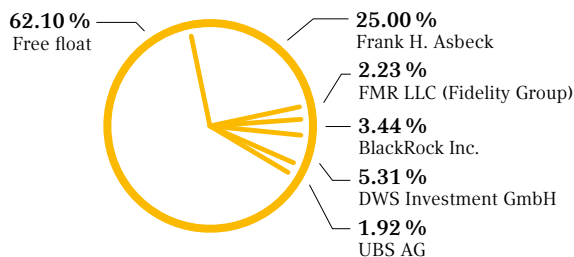
16 **DIVIDEND AND DISTRIBUTION**



○ Dividend per share in €**
 ■ Distribution in € million

* Dividend proposal to the AGM 2010
 ** Corrected for the issue of bonus shares 2006 (1:3) and 2007 (1:1)

17 **SHAREHOLDER STRUCTURE AS AT 31 DECEMBER 2009**



18 **INDICES IN WHICH SOLARWORLD IS LISTED 2009**

GERMANY
TecDAX // Technology companies
GEX // Owner-managed companies
HAFix // Owner-managed companies
DAXplus Family Index* // Owner-managed companies
ÖkoDAX // Renewable energies / Sustainability
DAX All Renewable Energies // Renewable energies
EUROPE
Dow Jones STOXX 600 // Industry
ERIX // Renewable energies / Sustainability
GLOBAL
NAI // Environment / Sustainability
Global Challenges Index (GCI) // Environment / Sustainability
DAXglobal Sarasin Sustainability Index // Environment / Sustainability
FTSE Environmental Opportunities All Share // Environment / Sustainability
DAXglobal Alternative Energy Index // Renewable energies / Sustainability
S&P Global Clean Energy Index // Renewable energies / Sustainability
WilderHill New Energy Global Innovation Index (NEX) // Renewable energies / Sustainability
Merill Lynch Renewable Energy // Renewable energies / Sustainability
RENixx // Renewable energies / Sustainability
PPVX // Solar / Sustainability
SOLEX // Solar / Sustainability
MAC Global Solar Energy Index // Solar / Sustainability
KLD Global Climate 100 SM Index // Climate change / Sustainability

* 2009 new

MARKET 2009

ECONOMIC ENVIRONMENT

DEVELOPMENT MORE STABLE IN SECOND HALF OF THE YEAR. In the year 2009 the global economy shrank for the first time since 1946. According to provisional figures of the Euroframe Group, a combination of leading European economic research institutes, the economic output in 2009 declined by one per cent. In the first half of the year both private consumption and gross investments declined significantly. Industry responded to this drop in demand by massively cutting back on production worldwide. World trade showed a strong decline and exports and imports were reduced substantially. On the whole, the international trading volume in 2009 dropped by 11.9 (previous year: +2.8) per cent. The high interest add-ons for loans granted as well as banks' increasing reluctance to grant credits in the first place exacerbated the negative economic situation.

Signs of stabilization could not be observed until the second half of 2009. The dramatic decline in world trade slowed down. Industrial production capacities were gradually increased again in order to service the slowly recovering demand. Interest rates in credit markets also normalized gradually and the investment propensity increased. In the third quarter of 2009 the economic output grew slightly but could not compensate for the negative development in the first half of the year. The low point of the recession was overcome in the fall, according to leading economic research institutes, but they still classify this recovery as unstable.

The economic development in our sales and production markets could not avoid being drawn into the negative trend of the international economy. All these markets showed declining economic development. ⁽¹⁹⁾ *Gross domestic product* // In addition to the economic development, the long, hard winter during early 2009 in Germany and in the rest of Europe impaired general building construction, which in turn had weakening effects on the assembly of solar modules at the beginning of the year.

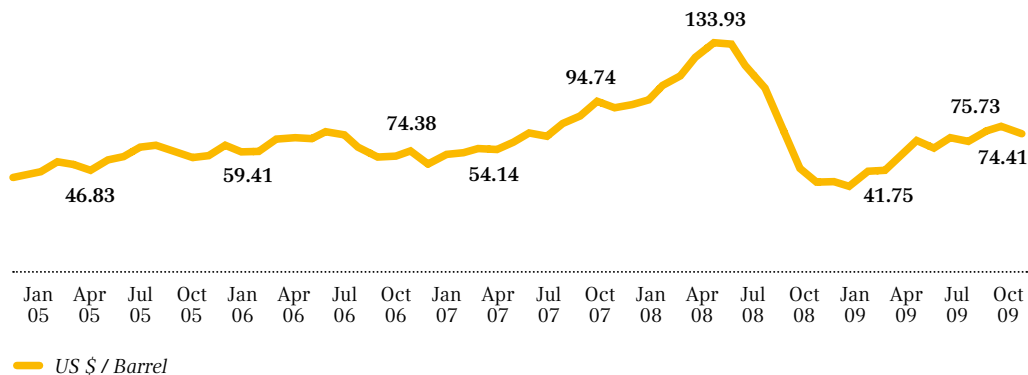
⁽¹⁹⁾ GROSS DOMESTIC PRODUCT // CHANGES VS. PREVIOUS YEAR IN PER CENT

Source: Euroframe, 2009; IfW, 2010

Country/Region	2008	2009
World	3.2	-1.0
EU 27	0.7	-4.1
Germany	1.0	-4.9
USA	0.4	-2.6
South Korea	2.2	-0.1

⑳ DEVELOPMENT OF THE AVERAGE OIL PRICE // WTI GRADE

Source: Mineral oil industry, 2010



THE WORLD ENERGY MARKET

OIL PRICE INCREASED IN THE COURSE OF YEAR. The world energy market reflects the declining development of the global economy. The recession produced a decline in the demand for oil, which in turn depressed the prices for oil on the global market. Consequently, the average oil price for West Texas Intermediate (WTI) grade in January 2009 reached its lowest level since 2005 at 41 US\$/barrel. Along with the recovery of the economic situation in the second half of the year, oil prices rose again. Thus, the average oil price (WTI) in 2009 went up by 80 per cent to 74 US\$/barrel in December (December 2008: 41 US\$/barrel).

ELECTRICITY DEMAND GROWING. Politicians and the public are becoming more and more aware that energy alternatives are needed in order to be able to guarantee long-term and at the same time environmentally compatible economic growth. In this context the electricity sector will play a fundamental role. Already today electricity has a share of 17.1 per cent in total energy consumption worldwide, according to the figures of the International Energy Agency (IEA). In the OECD⁹ countries this share even amounts to as much as 21.1 per cent. With the advancing industrialization of developing and threshold countries the worldwide share of electricity in total energy consumption will go up even further. Until the year 2030 the IEA forecasts an increase of 76 per cent in the demand for electricity; all in all, it is safe to assume that some 4,800 GW of power output will be newly installed worldwide.

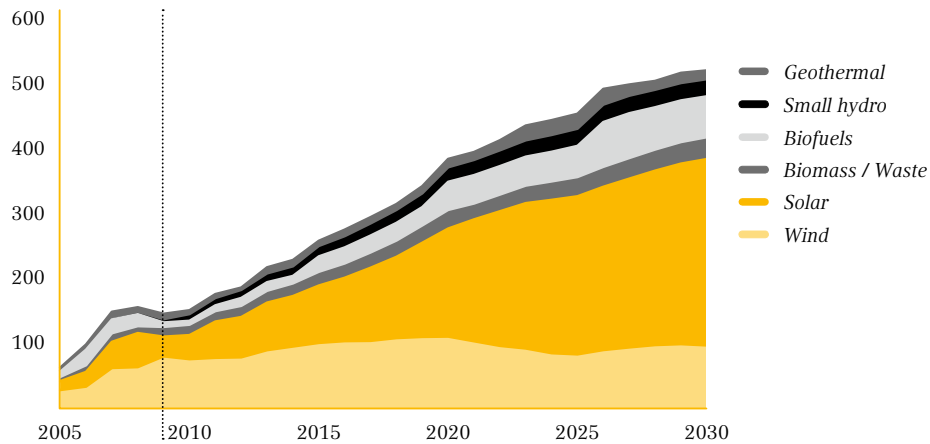
RENEWABLE ENERGIES GAINING IMPORTANCE. In the future, renewable energies must be one of the main pillars in power generation because, unlike fossil energy carriers, they are not limited resources. In addition, they constitute a climate-friendly alternative to the conventional energy supply due to their low carbon dioxide emissions. Today, already, the European Union has set itself a target to cover 20 per cent of its power supply with renewable energies by the year 2020. In the United States, the House of Representatives approved a law in 2009 that also stipulates a minimum share of renewable energies of 20 per cent

in the USA's power mix. This law still requires Senate approval. So far, 29 US federal states as well as Washington DC have determined minimum shares of renewable energies⁹ in the power mix. In addition, threshold countries such as China and India are recognizing the need to expand renewable energies: Thus, China wants to install 10 GWp of solar power by the year 2020. India's plans are even more ambitious with a planned solar power output of 20 GWp by the year 2020.

19 (previous year: 18) per cent of the required power was already generated by renewable energy in the year 2009. Economically, also, the importance of renewable energy is becoming more apparent every year. In 2009 total investments in this field amounted to some US\$ 145 billion, according to the figures of New Energy Finance. Admittedly, the investments were below the previous year (US\$ 155bn) due to the financial crisis and bottlenecks in the credit market, but towards the end of the year an increase in the investment level could be observed that was in line with the general economic development. While the investments amounted to only US\$ 19.3 billion in the first quarter of the year they already reached US\$ 27 billion in the fourth quarter. In this context solar energy occupies a central position:

② INVESTMENTS IN RENEWABLE ENERGIES BY SECTORS // IN BILLION US\$

Source: New Energy Finance, 2010



THE SOLAR POWER MARKET

DIFFERENTIATION CRITERIA BECOMING MORE IMPORTANT. In the year under review the solar power market underwent a fundamental structural change – away from a sellers’ market towards an end customers’ (or buyers’) market. For the first time, supply consistently exceeded the demand. This is why every customer had to be “fought for”. The quality and properties of the products as well as further differentiation criteria of the individual manufacturers turned out to be crucial. The prices for solar power products plummeted by about one third industry-wide in the year under review. In addition, influenced by the global recession, investments in the solar industry declined, just as in other renewable energy segments.

According to the figures of Bank Sarasin, the newly installed output capacity on the solar world market – after consistent growth in the last five years – sank slightly for the first time in 2009 by one per cent to 5.8 (previous year: 5.9) GW. The cumulative solar power output worldwide in the year under review amounted to 20.5 (previous year: 14.7) GW; this would be enough to supply around 20 million people with electricity (assumption: 1,000 kWh annual average power consumption per person).

SUPPLY EXCEEDS DEMAND. Due to the persistently difficult financing conditions, a shrinking economy and the hard winter in early 2009, demand in the solar market during the first half of the year tended to be very low-key. Many providers reduced their production capacities or introduced short-time work. The persistently low demand caused a price decline along the entire value chain⁹ from silicon via wafers and cells through to complete solar systems.

Consequently, the average prices for silicon – the most important raw material for the production of crystalline solar modules – dropped from 70 US\$/kg at the end of 2008 to 55 US\$/kg at the end of the year under review. The huge span between the spot⁹ market prices that reached record heights of more than 400 US\$/kg in 2008 and the contract prices (2008: 79 US\$/kg) dissolved almost completely in the year under review. The reason for this development was an increasing silicon supply versus weak demand. According to estimates by Bank Sarasin, the silicon capacities that are available to the solar industry rose in 2009 by 40 per cent to 67,000 (previous year: 48,000) tonnes.

With the removal of the bottleneck in pure silicon, the market for upgraded metallurgical silicon (UMG-Si) also collapsed. Last year this material was still traded as an alternative to the very expensive and hardly available solar grade silicon. Many new silicon producers therefore abandoned their projects in this field within the course of 2009. Alternative solar technologies such as thin film also suffered from the declining silicon price because their previous cost advantage over crystalline solar technologies was reduced. Of the 140 companies that were active in the thin film business in 2008 only about 70 providers survived in the year under review. While it is true that the share of thin film products in the solar market increased to 20 (previous year: 16) per cent, growth of this section of the solar market has slowed down. These alternative technologies are not expected to jeopardize the dominant market position that crystalline technologies have (some 80 per cent of the total solar market) over the short- to medium-term.

The global markets for solar products such as wafers, cells, and modules also underwent structural changes in the year under review. Production capacities increased significantly while the demand remained weak, as a result of which the surplus supply on the market rose, above all in the first half of 2009. Thus, according to the figures of Bank Sarasin the growth in solar cell production alone amounted to 56.7 per cent. In 2009, capacities rose worldwide to 10.5 (previous year: 6.7) GW. This development was driven mainly by the strongly expanding Chinese manufacturers, who have cost advantages over European producers in the form of lower wages, lower costs for energy, and less expensive real estate. In addition, they received low-cost credits from the state banks, which accelerated the growth of the companies. In order to penetrate the markets in Europe and the USA it was mainly Chinese manufacturers who offered their products at very low prices. This also put the margins⁹ of other manufacturers under pressure.

In particular, cell manufacturers who were tied to fixed wafer contract prices on the supply side and who were simultaneously confronted with substantially declining module prices on the buyers' side sustained very high margin losses. Many dropped into the red and had to reduce their growth rate substantially as they were no longer capable of covering their capital needs from the operating business. Combined with the difficult credit market environment, some competitors were forced to introduce short-time work or to sell shares of associated companies in order to be able to obtain capital. On the other hand, fully integrated⁹ manufacturers were better off.

On average, in 2009 it was possible to increase the degree of efficiency⁹ of crystalline cells to 17.0 (previous year: 16.5) per cent, according to the European Photovoltaic Industry Association (EPIA)⁹. According to information from Bank Sarasin, the industry also succeeded in reducing average silicon consumption to 8.2 (previous year: 8.6) g/Wp. Anyone who seeks long-term success in the solar market must consistently improve efficiency and cut costs in the future in order to compensate for declining prices as well as possible.

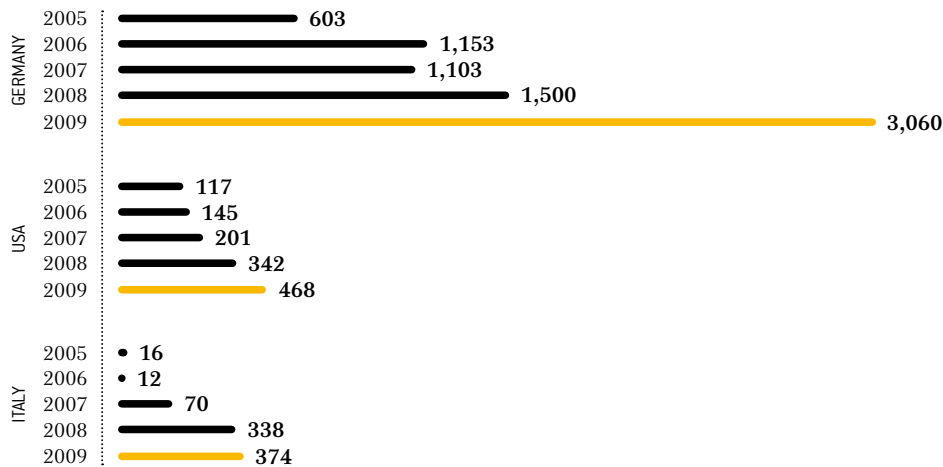
DEMAND PICKED UP SIGNIFICANTLY IN THE SECOND HALF. Due to the change in the competitive situation, customer benefit as a selling point has come into focus in 2009. European providers who have nurtured their presence in the retail market, their strong distribution structures and their high service quality for many years succeeded in positioning themselves better than Asian competitors. Customers were prepared to pay a premium of up to 25 per cent (in comparison to Asian products) in return for higher confidence in the warranty performance and quality. As a result, European brand manufacturers' prices did not drop as dramatically as those of Asian competitors. Moreover, when it comes to the external financing of projects, brand awareness turns out to be an advantage because, with borrowed capital financing as restricted as it is, banks prefer projects that use solar modules of well-known manufacturers.

On the whole, demand was low-key in early 2009. However, over the course of the year the considerable price reductions together with stabilization of the economy stimulated customers' investment propensity. In the second half of the year the solar market picked up noticeably. This was mainly driven by strong demand on the German market. As of the end of the third quarter of 2009, the demand reached such a high level that delivery and assembly bottlenecks occurred on the German market.



22 HISTORIC DEVELOPMENT OF OUR MAIN SALES MARKETS // IN MW

Source: Deutsche Bank, 2010; Barclays Capital, 2010; Gestore Service Energetici, 2010



In 2009 Germany was the growth driver in the solar market. The second most important growth region was the USA, followed by Italy. The Spanish market, which was still one of the growth drivers in 2008, collapsed almost completely due to the more difficult new approval processes.

GERMANY MOST IMPORTANT SOLAR MARKET WORLDWIDE. In spite of the difficult environment, the German solar market developed very well. The reason for this is that this mature market has well-established distribution channels in addition to rapid approval and financing procedures. The newly installed output capacity doubled in 2009 to 3,060 (previous year: 1,500) MW. The cumulative solar power output reached 8,422 (previous year: 5,362) MW. All told, Germany accounted for around 55 per cent of the worldwide solar market in the year under review. The most important growth driver was the roof systems market which, according to figures provided by EuPD Research, accounts for 86 per cent of the overall German market, while free-field solar plants account for a share of only 14 per cent.

US MARKET LAGS BEHIND EXPECTATIONS. The US solar market was particularly hard hit by the economic crisis. Several large-scale projects had to be postponed due to financing difficulties. Driven by the demand in California, the roof systems market did indeed grow, but could not completely compensate for declines in the free-field systems market. According to an estimate of Barclays Capital, on the whole the US solar market grew by 468 (previous year: 342) MW. In 2009 additional funding measures for solar plants were approved within the framework of the economic stimulus package “American Recovery and Reinvestment Act of 2009”. These were, however, not implemented until the third quarter of 2009. The hoped-for demand increase therefore did not materialize in the year 2009. As in previous years, California was again

the most important sales region in the USA in 2009. In the context of the “California Solar Initiative”, slight growth of twelve per cent to 135 (previous year: 121) MW in the newly installed output capacity could be achieved.

EUROPEAN SOLAR MARKETS ON THE INCREASE. In spite of tougher financing obstacles in 2009, Italy succeeded in rising to third place among the solar markets. However, solar projects there suffered more severely from the restricted financing possibilities than those in Germany, for example. In 2009 the newly installed output capacity amounted to 374 (previous year: 338) MW, according to information supplied by the power authority, Gestore Service Energetici.

Other European markets such as France, Belgium, and the Czech Republic also reported positive development in the year under review. The reason for this was the consistent improvement of distribution channels as well as the acceleration of approval procedures. All this contributed to the fact that, in 2009, Europe continued to be the most important solar market region with a share of 65 (previous year: 79) per cent of the worldwide solar market.

NEW FUNDING PROGRAMS IN ASIAN COUNTRIES. In Asia, Japan introduced new funding programs: as a result of these they could, after stagnation in 2008, report renewed growth by 62 per cent to 365 (previous year: 225) MW. The country thus defended its top position in the Asian solar market. Other countries such as China, Australia, and India approved new funding programs for solar power which are, however, not yet fully mature. In South Korea the market in 2009 was reduced by more than half due to the launch of a market cap amounting to 100 MW in comparison with the previous year (276 MW).

Changes to the solar funding conditions for important core markets were announced in the year under review. These are only expected to become effective as from 2010 or 2011. ➔ [*The future solar power market*](#) • p. 135// ➔ [*Supplementary report*](#) • p. 111//

EFFECTS OF GENERAL CONDITIONS ON BUSINESS DEVELOPMENT IN 2009

The business of SOLARWORLD AG was also influenced by the changing general conditions. Product shipments went up, yet revenues developed below-proportionately due to the strong industry-wide decline in prices. We increased the investments for strengthening our brand awareness significantly in the year under review in order to bring home the features and quality of products “Made by SOLARWORLD” to potential customers. In particular, in the first half of the year – characterized as it was by weak demand – SOLARWORLD succeeded in gaining market shares and thus secured full capacity utilization of its production throughout the year. In the second half of the year the group benefited from the strong demand development and was able to successfully place its products on the market. Our specialization in the roof systems market constitutes another competitive advantage since it grew above-proportionately in 2009.

THE SOLAR VALUE CHAIN 2009: FROM SILICON TO MODULES

“PRODUCTION GERMANY” SEGMENT

EXPANSION OF THE WAFER CREATES A BASIS FOR FURTHER GROWTH. In 2009 the focus of our fully integrated⁹ production in Germany was on expanding our wafer production in Freiberg. In the fourth quarter we launched the ramp-up process to 250 MW. Our total capacity in Freiberg thus amounts to 750 MW for wafers. The new, state-of-the-art plant at the Industrial Estate East was largely completed by the end of the year under review and will be officially inaugurated in 2010. We are planning to further expand capacity to 1 GW. At a volume of € 350 million, this is one of the largest ever investment projects in the history of SOLARWORLD.

The expansion underpins our business with external wafer customers in the international solar cell industry and enables us to service the growing demand from our own module production, which will be tripled to 450 MW at our Freiberg site in 2010. ➔ *Facts: Worldwide production capacities 2010+ • p. 140*// Within the value chain, nominal cell capacity was 200 MW.

POOLING SILICON PRODUCTION AND RECYCLING. The group secures its silicon requirements for the growing wafer production – apart from external ➔ *Procurement • p. 079*// – through in-house production and internal recycling⁹. These activities have been pooled within SUNICON AG in Freiberg and ensure constant supplies of the key raw material in photovoltaics. Our subsidiary develops and evaluates alternative production methods. In 2009 the focus was on SUNSIL[®] silicon, which is produced by our joint venture⁹ JSSI GMBH. In 2009 SUNICON manufactured products that were developed in-house for the processing of powdery SUNSIL[®]: By means of being compacted into SUNBRICKS[®], SUNBALLS[®] or SUNPEARLS[®], SUNSIL[®] is universally applicable for wafer production.

As a global pioneer and market leader we have been pushing ahead our recycling activities. We increased our reprocessing result of internally and externally collected raw materials (by-products from different stages of silicon production) to around 1,640 (previous year: 1,240) tonnes by optimizing our etching plants and by investing in new plants for the surface cleaning of silicon, for example. Through process improvements, we increased productivity by roughly ten per cent. To some extent we offered recycling as a service to customers. The proportion of recycling material in the raw material input of our Freiberg wafer production amounted to 21.2 (previous year: 20) per cent.

SUNICON also offers a broad range of recycling solutions to external manufacturers as a service. In the year under review, for instance, we recycled around 2,000 modules from the oldest Belgian solar park, Chevetogne, dating back to 1983. Recycling not only constitutes a reliable source of raw materials to our group but also opens up opportunities for new business fields due to our position as a market and technology leader. ➔ *Economic performance opportunities • p. 132*//



“PRODUCTION USA” SEGMENT

COMMISSIONING OF STATE-OF-THE-ART MODULE LINE. In the USA, SOLARWORLD is already the largest manufacturer of crystalline solar power products produced in the USA. The restructuring and modernization of our plants, which became necessary following takeover of the Shell solar activities, was successfully completed in the first quarter of 2009. At our traditional site in Camarillo, California, the previous module line was substituted at the beginning of the year by a new, fully automated and hence considerably more efficient line. At that site we produce mono-crystalline⁹ high-performance modules in response to the expected strong demand for these products in the USA. In 2009, we achieved a year-end capacity of 150 MW. Wafer and cell production at our new site in Hillsboro, Oregon, launched in October 2008, was successively ramped up in the first half of 2009. Our location in Vancouver, Washington, focused on reprocessing silicon scrap for our wafer production in neighboring Hillsboro.

By the end of 2011 the group will also massively expand its module capacity in the USA. We are building a new production plant with a capacity of 350 MW in Hillsboro. ➔ *Facts: Worldwide production capacities 2010+ • p. 140*// The two sites form our group’s innovative platform for further expansion in the USA. One aspect that plays a strategic role is that SOLARWORLD is positioning itself as a company which produces in the American market. ➔ *Building a brand with strong identity • p. 083*//



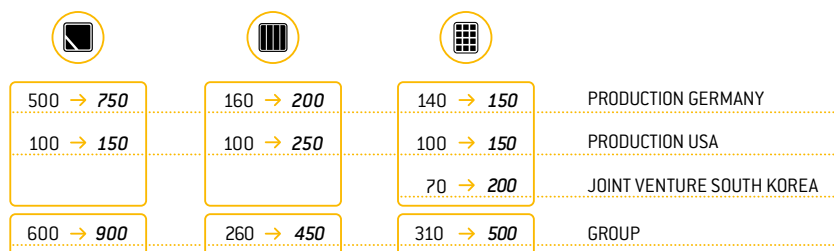
BE INDEPENDENT

BE SUSTAINABLE

BE SUCCESSFUL

FACTS: WORLDWIDE PRODUCTION CAPACITIES

In 2009 the group continued its course of growth and expanded its production capacity. In the course of the year, the target for planned capacity expansion from wafers through to modules was adjusted in light of the market requirements. Our production sites are operating at their capacity limits. We are expanding our global production network to include a state-of-the-art, fully automated module production site in South Korea. We thus have a logistics and production center in the growing Asian solar market for on-grid applications with enormous potential for off-grid solar technology solutions. Our activities in Asia are operated under the leadership of SOLARWORLD KOREA LTD., a joint venture between SOLARWORLD AG and SolarPark Engineering Co. Ltd., Seoul, a company that specializes in process automation and production engineering.

GROUP-WIDE NOMINAL YEAR-END CAPACITY – EXPANSION 2009 (IN MW)**PROCUREMENT**

SUPPLY OF RAW MATERIALS SECURED. In the year under review, the cost of materials was € 691.1 million (previous year: € 454.1m). This corresponds to 64.9 (previous year: 49.2) per cent of the total output. The costs of materials quarter thus changed by 15.7 percentage points. → [Development of material income statement items](#) • p. 098// The supply of raw materials and consumables to our production sites was secured at all times in 2009.

CENTRAL PROCUREMENT MANAGEMENT BOOSTS EFFICIENCY. Raw material prices have risen strongly in the past few years so that procurement management has played an increasingly important role in reducing the cost of materials. Although the hike in raw material prices, which started in 2004, has been curbed by the turbulence on the financial market and the resulting worldwide economic downturn, raw materials continue to constitute an uncertainty factor. Since raw materials account for a large part of total costs at SOLARWORLD and continue to be highly volatile, we rely on our group-wide raw materials and procurement manage-

ment at our Freiberg location. This offers us the advantage of achieving higher efficiency and economies of scale. We achieve better terms and conditions, for instance, through negotiating group-wide agreements to purchase larger volumes. However, we also benefit through the conclusion of long-term supply contracts entailing capacity reservation clauses for our planned expansion stages 2010+. Our Purchasing department uses a management system for materials groups resulting in transparent, well-structured procurement processes concerning purchasing volumes, required standards, supply risks and supplier performance profiles.

Silicon, which constitutes the largest portion of our raw materials and consumables, was supplied under long-term contracts with favorable terms and conditions dating back to the year 2005. In the year under review, we also covered a part of our silicon requirement through our group-owned JSSi silicon production as well as recycling⁹.

In 2009, we also took advantage of the situation on the raw materials markets as an opportunity to secure a low price level for the future and clearly optimize our cost structure in procurement. This applies to raw materials such as aluminium, copper and silver which are included in frames, cables, cell connectors, pastes and semi-finished products, as well as organic and inorganic chemicals. We achieved further cost savings in 2009 by optimizing all purchasing prices for consumables. For aluminium – an essential quality and cost factor for module frames and in rack technology – we secured the price level of early 2009 for 2010 through price fixing. In addition, we optimized aluminium consumption thanks to an innovative rack design. ²⁹ *Innovation targets and priorities* • p. 092//

SOLARWORLD's integrated production approach strengthens our procurement position concerning our input products wafers and cells. Around half of the wafers we produce are used for our own cell and module production. By this means we secure our growth.

CRITICAL SELECTION OF SUPPLIERS PAYS OFF – SUPPLIER CAPITAL⁹. Quality assurance agreements with our suppliers and supplier audits in accordance with ISO 9001⁹ and 14001⁹ enable us to systematically evaluate our suppliers' quality and environmental standards and thus secure our high internal corporate standard. According to an internal supplier survey from September 2009, 77 (August 2008: 77) per cent of our suppliers are ISO 9001 certified in the area of quality management, with 30 (previous year: 30) per cent ISO 14001 certified in the area of environmental management. This critical selection of suppliers is paying off in several regards for our group: We minimize our own inspection of incoming goods, reduce the risk concerning required environmental and quality standards along the entire supply chain, cut costs as a result, and substantiate the quality and environmental claim of the SOLARWORLD brand vis-à-vis our customers.



SALES MARKETS, BRAND AND PRODUCT 2009

“TRADE” SEGMENT

SALES MARKETS PICKING UP GLOBALLY. Companies with strong brands and sound distribution structures were better equipped to withstand the price pressure emerging during the period under review. In the framework of market consolidation, SOLARWORLD held its ground thanks to its strategic positioning and its size. → *Strategy and action* • p. 033// It also benefited from dynamic international demand, although revenues and earnings reflected the pressure on margins. → *Earnings situation* • p. 097// Although demand was still subdued at the beginning of the year due to the economic situation and the hard winter, the second half of the year saw a strong rise in demand due to price reductions driven by an intensification of competition. This trend was additionally boosted by the debate about the declining feed-in tariff structure in Germany, our main sales market, so that we recorded demand hikes and a year-end rally. This boom placed major challenges on our Logistics and Sales departments. Nevertheless, we managed to serve our customers and strongly increase sales of modules and kits in the period under review.

Germany remained our strongest sales market. Driven by strong demand in the second half of 2009, we more than doubled the volumes of modules and kits sold. Our long-standing customer relations with electrical and solar wholesalers provided us with a competitive edge in this respect.

In the period under review, Italy became our second most important sales market. We achieved double-digit sales growth in this country.

In France and Belgium we tripled our sales in the year under review. These young markets with market volumes of less than 300 MW each are still relatively small compared with Germany (3,060 MW), and Italy (374 MW), but offer enormous potential for the future. We mainly sold our solutions for integrated roof plants (ENERGYROOF®) and our complete kits (SUNKITS®) in these countries. In order to improve the quality of our service in the French-speaking regions, we set up a liaison office in Grenoble, France, in the year under review. → *Legal group structure changed* • p. 048//

The US solar market fell short of expectations in 2009. Demand was impacted – considerably more strongly than in Europe – by the financial uncertainty arising from the financial crisis. The measures to promote solar energy announced by the US Administration were not defined in greater detail until the third quarter. They therefore did not have a major impact on demand in the year under review. → *The solar power market* • p. 073// In line with these overall conditions, our sales in this market fell short of the level generated in the previous year. We expect the US market to pick up as of 2010. Thanks to stronger marketing measures and the expansion of our sales activities, we will benefit from this development.

Since 2009, all trading activities in South Korea have been handled by our local joint venture, SOLARWORLD KOREA LTD. so that they were no longer included in the “Trade” segment in the year under review. In the previous year, sales in South Korea accounted for around 12 per cent of total sales abroad for modules and kits in this segment.

Due to above-proportionate growth of the German market and the strong decline of the Spanish market, our share of foreign sales in the “Trade” segment declined to 17 (previous year: 53) per cent.

Apart from our main business with roof-mounted systems, we again demonstrated our competency in large-scale plants, ranging from our pure module business all the way to the development of complete solutions for large buildings and free-field installations. The order book for turn-key projects totaled € 86.1 million (previous year: € 11.2m). This volume, for which SOLARWORLD operated as general contractor, was almost exclusively handled in cooperation with the SOLARPARC Group, which implemented the design and marketing of the large-scale projects. In addition, we engaged in normal delivery business, shipping SOLARWORLD modules to large-scale projects, which is reflected in the “Trade” segment – as is the turn-key business.

SALES STRATEGY PROVES ITS WORTH. One of our strengths in 2009 was SOLARWORLD’s good standing among our specialist partners and customers. In Germany and the USA we have maintained well-established distribution networks for 10 and 30 years, respectively. Our distribution strategy is based on incorporating our customers in our growth – supplying volumes in line with market demand as quickly as possible and offering promotional material to our specialist partners as brand suppliers in order to support their sales. *→ Brand investments stepped up – demand effects for our group and our customers • p. 084*// Our direct customers are wholesalers and retailers through whom we supply to installers who, in turn, sell our modules and kits to end customers. This distribution strategy has proven to be the right one: SOLARWORLD can rely on a large network of well-trained specialist partners. This is a major advantage in a market characterized by volatile demand such as the solar market, securing sufficient short-term installation capacity even in times of demand hikes in order to place our products on the market.

In order to secure this advantage for the future, we expanded our specialist partner program in 2009. Our specialist partners can order brochures, give-aways and promotional material via our exclusive FachpartnerNet and individualize selected products with the company logo and address. The new offers were well received and viewed positively by our German specialist partners. Thus, our annual customer survey showed that the majority were “very satisfied” and “satisfied” with the provision of the advertising materials, sales ads and presentation utensils.

In order to expand and consolidate the network with US contractors, we launched the “SOLARWORLD’S SUNKITS® Program” in 2009 – a training program teaching basic knowledge about SUNKITS® in a two-day workshop and thus facilitating market access to our contractors.



MAJORITY OF CUSTOMERS RATES SERVICE QUALITY AS GOOD. The satisfaction of our customers is a crucial performance indicator of our business activity. ➔ *Corporate management and control* • p. 040// The annual international survey on customer satisfaction among our module and kit customers for the year 2009 showed a satisfactory result: With a good redemption rate of 35 per cent 85.4 per cent of our customers said they were “very satisfied” or “satisfied” with SOLARWORLD. This indicator was identified in this form for the first time in the year 2009. Comparable figures will come to hand in the following year. While 87.6 per cent of our customers gave the criterion of “service” a rating of “very good” and “good”. The rating of “very good” and “good” for the quality of our products given by 99.8 per cent of respondents confirmed our quality positioning. Based on these results the strengths and weaknesses are analyzed and the products and services are continuously optimized. Thus, individual parameters in the area of service indicated that customers were less satisfied than only a year ago. This result is mainly attributable to high demand peaks in the German market towards the end of the year under review, which confronted both our Sales and our Logistics Departments with major challenges. We instantly responded to this development initiating an analysis in the area of Quality Assurance.

PRESENCE AT TRADE FAIRS IN CORE MARKETS. With a presence at eleven (previous year: 15) international trade fairs, SOLARWORLD supported its sales activities in the year under review, developed new customer contacts and strengthened its existing customer base as a wafer, module, and systems supplier as well as a recycling specialist. Our focus was on our core markets of Germany, USA and Europe: SOLARWORLD presented itself at the year’s main international solar event, the 24th European Photovoltaic Solar Energy Conference and Exhibition, and at Intersolar North America, the largest international trade fair in the USA, the market of the future. We also actively presented ourselves at various trade fairs in major European markets such as Italy, France, or Greece.

BRAND PROMISES AND INVESTMENTS

BUILDING A BRAND WITH A STRONG IDENTITY. In 2009 we continued to expand our brand awareness and intensify our marketing and distribution activities. The identity of our brand is fed from the values with which the company has grown over ten years: a pioneering spirit combined with strategic continuity and social responsibility coupled with economic success. Translating these distinguishing characteristics into customer benefits, we communicated the performance promise of our “Made by SOLARWORLD” products as follows in 2009: innovation combined with durability and safety, sustainability all the way from production to recycling coupled with high profitability. The value-added promise of our brand is also based on a well-coordinated range of systems and services offering the right customer solutions from roof-mounted systems through to large-scale plants⁹. ➔ *Products “Made by SolarWorld”* • p. 088//

According to a determination of the brand value by Semion Brand Broker, the value of the SOLARWORLD brand was € 25 million (previous year: € 24m), ranking 47th among the most valuable German brands. According to the survey carried out by Semion Brand Broker, we are therefore Germany’s most valuable solar brand.



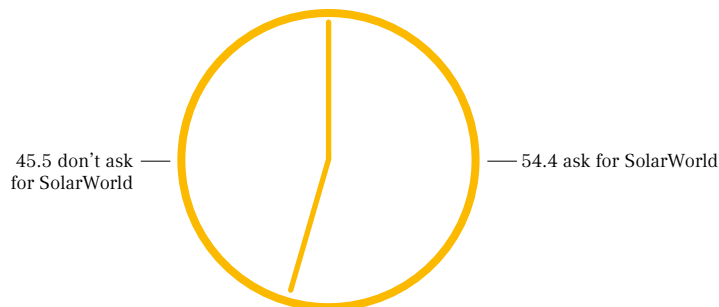
Our brand image in the USA thrives on an original American success story spanning approximately 30 years that started with the ARCO Solar company. As early as at the end of the 1970s, our predecessor had a production site at the SOLARWORLD location in Camarillo, California. In the USA, the SOLARWORLD brand stands for a pioneering spirit, experience and continuity. “Made in USA” is a key argument in this market. SOLARWORLD is deeply rooted in the USA, a phenomenon which provides us with a competitive edge today since it creates a stable basis for trust and acceptance among market participants and our customers in the light of stronger sensitivity concerning the origin of products that is observed in the USA.

BRAND INVESTMENTS STEPPED UP – DEMAND EFFECTS FOR OUR GROUP AND OUR CUSTOMERS. Investments in the brand in the form of ads, TV commercials, leaflets and other advertising material increased by almost a factor of five to € 10 million. Our aim is to create awareness and transparency of the benefit promise of the products sold under the SOLARWORLD brand among end consumers. While the focus of our marketing activities in recent years was on sales promotion for the wholesale and retail trade, amidst increasing competition we are now consolidating brand awareness all the way to end consumers. The demand effect generated by the purchasing behavior of private or commercial roof owners not only increased our group-wide sales of modules, it also increased the revenues of our SOLARWORLD specialist partners. They confirmed to us in an internal customer survey that more and more end customers were asking for the brand by name when they bought modules or kits. While in 2008 it was about 81 per cent who “frequently” or “always” asked for the manufacturer this share already went up to 89 per cent in the year 2009. In most cases the customers specifically asked for the SOLARWORLD brand.

In the year under review, our marketing expenses focused on Germany and Europe, followed by the USA. Our main activities in the USA comprised trade fairs, advertisements and direct mailing to end customers, in particular in California. With these measures which are tailored to specific target groups and markets, we have adjusted to the market situation in the USA characterized by many different promotion schemes.

②③ **NUMBER OF CUSTOMERS SPECIFICALLY ASKING FOR THE SOLARWORLD BRAND // IN PER CENT**

Customer satisfaction analysis of SolarWorld AG, interview period January 2010



In Europe we launched a full-year advertising campaign under the heading “Savings Account on German Roofs”, emphasizing a sustainable investment in the form of a solar power plant on a home owner’s roof, and thus providing an answer to the growing skepticism among private investors concerning traditional financial products. By means of mailing to end customers, supplements and ads in target group media, we selectively addressed home owners, farmers and decision-makers – and hence prospective end customers – in Germany and subsequently in the young solar markets France, Belgium, and Italy. The advertisements generated a total of around 48 million contacts – as determined through the print run and the number of advertisements booked.

In addition, SOLARWORLD has been sponsoring the popular German soccer national league team 1. FC Köln since the summer of 2009. In this framework we launched a broadly based end customer campaign and benefited from the high degree of awareness of Lukas Podolski, an FC player and member of the national German soccer team.

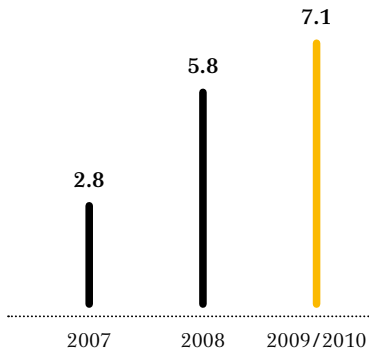
EFFICIENCY CONTROL – INCREASE IN BRAND AWARENESS. We use the results of market research activities to control the success of our brand investments.

According to the “Brand monitor 2009/10” of EuPD Research, an internationally operating B2B market research institute, SOLARWORLD is by far the best-known German solar company (7.1 per cent) in unaided recalls⁹. The second most frequently mentioned competitor only accounted for 2.8 per cent. In aided recalls on brand awareness, SOLARWORLD ranked second at 24.9 per cent, very close behind a competitor that was indicated as “known” by 25 per cent of respondents, but which builds its traditionally strong awareness through other products.

In the past few years we have continually increased the awareness of our SOLARWORLD brand in Germany, more than doubling it since the first survey in 2007.

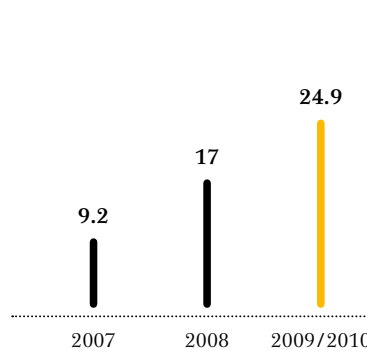
⑳ **UNAIDED BRAND AWARENESS OF SOLARWORLD // IN PER CENT**

Source: EuPD Research / Brandmonitor



㉑ **AIDED BRAND AWARENESS OF SOLARWORLD // IN PER CENT**

Source: EuPD Research / Brandmonitor



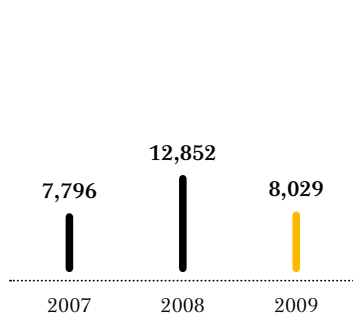
We achieved a further significant increase in our brand awareness, above all in the year under review. While in Brand Monitor 2009 (survey period: 47th calendar week 2008 up to 3rd calendar week 2009) we recorded unaided awareness of 5.8 per cent. Our unaided awareness was 7.1 per cent in the survey for Brand Monitor 2009/2010 (survey period: 42nd up to 44th calendar week 2009). Aided brand awareness also increased substantially in the course of the year: it rose from 17 per cent (Brand Monitor 2009) to 24.9 per cent (Brand Monitor 2009/2010).

A representative study accompanying our TV campaign, carried out across Germany by the Frankfurt-based institute MMA Media Markt Analysen, also showed that we achieved a strong increase in awareness in the year under review. In the pre-wave⁹ survey (carried out in the 26th calendar week 2009), SOLARWORLD still ranked second with unaided brand awareness of 9.1 per cent, behind a competitor spontaneously named by 18.1 per cent of respondents. Until the main wave⁹ survey (36th to 39th calendar week 2009), we more than doubled our unaided brand awareness and ranked first at 18.9 per cent. In the aided brand awareness survey, we reached 14.3 per cent in the pre-wave, and increased this level to 31.7 per cent in the main wave.

A survey carried out by online panel www.photovoltaikumfrage.de// also reconfirmed the level of high brand awareness of SOLARWORLD in Germany. Both in the aided⁹ survey (1,342 entries) and the unaided survey (741 entries), SOLARWORLD achieved the highest level of awareness. The online survey was carried out from August to September. A study by the Bielefeld-based SOKO Institute for Social Research and Communication (survey period March to May), also showed that we have the highest level of awareness of all German solar companies.

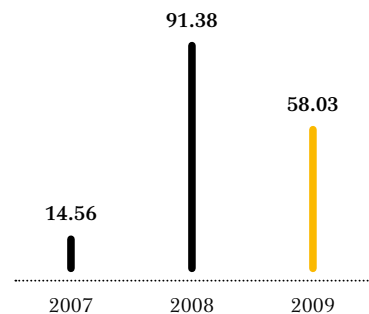
⑳ NUMBER OF ENTRIES IN GERMAN TV, PRINT AND ONLINE MEDIA

Source: Excerpt from media observation



㉑ MEDIA EQUIVALENCE VALUE IN GERMANY // IN MILLION €

Source: Excerpt from media observation



MEDIA EQUIVALENCE – STEADY CONTINUATION OF PR-ACTIVITIES. In the period under review, we continued our intensive Public Relations and press activities, providing the public with comprehensive information through our corporate news, at conferences, trade fairs and events as well as through one-on-ones and telephone interviews. In 2009, a total of 8,029 (2008: 12,852, 2007: 7,796) entries were recorded in TV, print and online media. This was a key factor in order to increase awareness of the SOLARWORLD brand among prospective customers, investors and the public at large.

In the year under review, the media equivalence value in Germany was € 58.03 million (2008: € 91.38m, 2007: € 14.56m). This value represents the value of all editorial contributions published about SOLARWORLD, converted into the advertising value of a commercial advertisement.

In the year under review we increased our TV presence: there were 295 (previous year: 193) entries. Our TV audience thus totaled 42.80 million viewers. At 5,579 entries, most entries were in the online segment, followed by the print media (2,155 entries). We were mentioned in national newspapers such as the Handelsblatt, Financial Times Deutschland, Frankfurter Allgemeine Zeitung or Süddeutsche Zeitung.

SOLAR2WORLD – NOT-FOR-PROFIT COMMITMENT STEPPED UP. In line with our vision “BUILD A SOLARWORLD”, one of the core claims of our brand is to establish unlimited, fair energy supplies across the world. This is what we support in the framework of our not-for-profit commitment “Solar2World”⁹. The group supports aid projects in emerging economies and developing countries with off-grid solar power solutions. www.solar2world.de In the period under review, Solar2World projects with a total capacity of around 114 (previous year: 53) kWp were implemented in developing countries – primarily in Africa – in cooperation with various project partners and with the voluntary support of our employees. Since our activities were launched, we have completed projects with a total output of around 191 kWp under our Solar2World program. We are currently planning further projects with a total capacity of around 50 kWp.

Apart from Solar2World, SOLARWORLD supported the first “Football for Hope Center” in 2009 in the run-up to the Soccer World Cup 2010. The “Football for Hope” movement is part of the FIFA campaign “20 Centers for 2010”, in the framework of which 20 health, education and football centers are to be built in Africa www.streetfootballworld.org/football-for-hope-de SOLARWORLD is planning to install additional Sun TV stations in southern Africa by the start of the World Cup next summer. With this voluntary commitment we will provide population groups, who otherwise would not be able to take part for lack of a grid connection, with access to the World Cup. At the same time, we demonstrate the multiple applications of modern and sustainable solar power technology.



PRODUCTS “MADE BY SOLARWORLD”

HIGH-QUALITY PRODUCTS CREATE A BASIS FOR BRAND PROMISE. We deliver on our brand promise vis-à-vis our customers by means of high product quality.

According to “Brand Monitor 2009/10” of EuPD Research, the quality features: durability, efficiency, and reliability are the three key purchasing criteria when selecting a solar plant. It is precisely these crucial parameters that give the SOLARWORLD brand a competitive edge.

BE INDEPENDENT

BE SUSTAINABLE

BE SUCCESSFUL

FACTS: QUALITY “MADE BY SOLARWORLD”

- **DURABILITY:** In 2009 we already provided a performance warranty of 25 years (after ten years: 91 per cent, after 25 years: 80 per cent) on all modules. As of 1 January 2010, we underpinned our top position in our sector with further enhancements to our warranty terms and conditions.
 - ➔ [Improved warranty terms and conditions](#) • p. 143 //
- **EFFICIENCY:** In a quality study by the Photon trade journal published in 2009, in which module types of different competitors were tested in a test field (under standardized test conditions^g), the solar power modules of SOLARWORLD came out in top position: The SOLARWORLD MODULE SW 210 POLY achieved the highest standardized annual yield in 2008, generating more electricity than comparable competitive products. In 2010, our module again came out in top position in the module yield test.
 - ➔ [SolarWorld again wins in the Photon module yield test](#) • p. 111 // To date, the Photon test field is the only one in the world carrying out such tests under scientific conditions. The plus-sort^g guarantees our customers the highest level of efficiency. It is based on SOLARWORLD Flash Report, measuring the yield of every single module under standard test conditions.
- **RELIABILITY:** SOLARWORLD modules are, of course, certified according to universally recognized standards including IEC^g and UL. However, our own demands concerning the safety, resilience and durability of our products go far beyond these standards and are underpinned by our own extensive test processes. Essential components are regular performance tests in production, lifecycle tests in our climate chambers, examining ammonia resistance^g and corrosion tests in salt spray fog.

EFFICIENCY AS AN IMPORTANT SELLING POINT. Our group-internal, international survey among specialist partners and trade customers provides evidence of the high reputation of our products in a competitive comparison. → *Majority of customers rates quality and service as good* • p. 083 // German specialist partners in particular consider the efficiency of modules to be “much better” and “better” (65.4 per cent). Accordingly, the Photon test victory in which the efficiency was scientifically proven plays a “very important” or “rather important” role (98.6 per cent) as a selling point vis-à-vis customers for our specialist partners.

PRODUCT STRATEGY FOCUSES ON CRYSTALLINE TECHNOLOGY. Due to our quality and ecological sustainability claims, SOLARWORLD focuses exclusively on silicon-based, i.e. crystalline solar power technology. Our product strategy explicitly dispenses with thin film technology. Our technology offers relatively higher efficiencies, correspondingly higher yields on the same area and hence lower costs in relation to the overall system. Moreover, crystalline modules are more environmentally compatible since they do not contain cadmium (Cd). In accordance with the motto “A clean product for clean energy generation”, our philosophy is that a durable investment item such as a roof-mounted solar system on a home has to be as environmentally friendly as possible. “Brand Monitor 2009/10” shows that environmental concerns constitute the fourth most important criterion in selecting a solar plant.

ASSORTMENT STRATEGY – SYSTEMS ENGINEERING INCREASES THE ADDED VALUE OF THE BRAND. SOLARWORLD has ten years of competency in systems engineering, which provides us with a clear competitive edge on the market. For the most part, the group’s kit assortment has been developed by our own engineers. They adjust the assortment to market requirements and customer wishes. Our ENERGYROOF® is therefore a door-opener in the French market since integrated systems such as ENERGYROOF®, equipping the entire roof with solar laminates, fall under special promotion schemes in France. In 2009, this system already accounted for over 30 per cent of our sales in that market.

Apart from sophisticated rack and assembly systems, our assortment policy focuses on additional components and ensures that the handling of a solar plant is simple, safe and profitable for end customers. Our new development introduced in 2009 under the SUNTROL® range offers plant operators an opportunity to obtain an overview of the output data of their solar plant any time and anywhere. The system includes a data logger, a display unit in the house and the internet portal www.suntrol-portal.com.org.de//, which also facilitates mobile enquiries. This tool also highlights our SOLARWORLD brand among home owners and their personal environments.

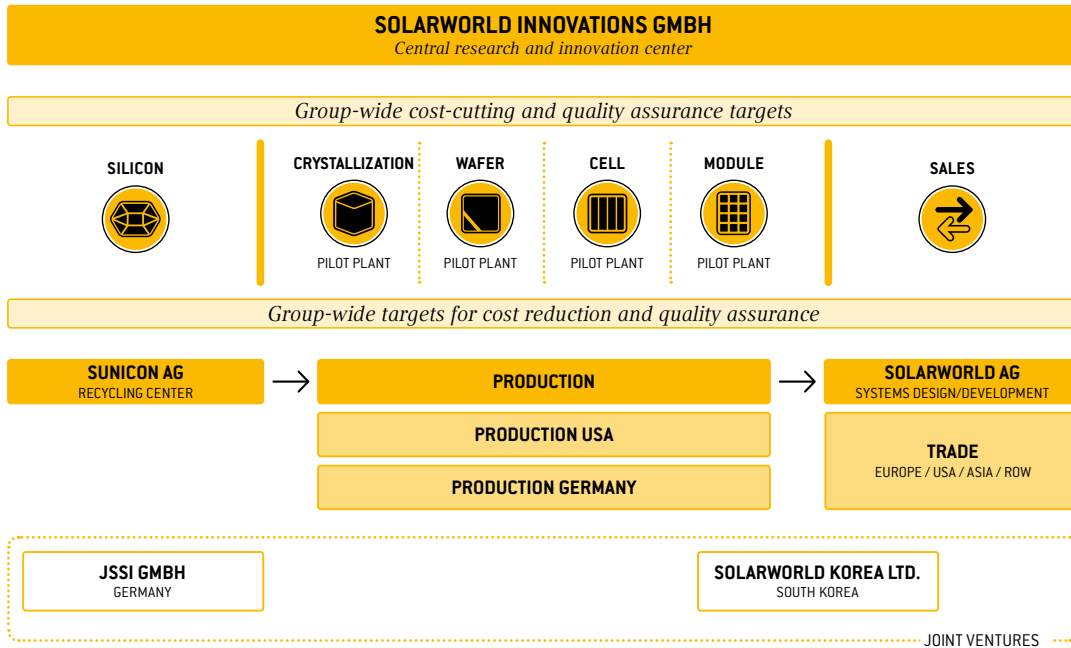


INNOVATION REPORT 2009

ORGANIZATION OF OUR INNOVATION ACTIVITIES

HOLISTIC INNOVATION APPROACH BOOSTS MARKET POSITION. SOLARWORLD's technological innovation contributes substantially to the group's competitiveness in a market environment characterized by oversupply and price pressure. → *Corporate Technology 2010+ • p. 034*// Our technology and product development is based on understanding the causes and effects all the way from silicon to the finished system. This gives SOLARWORLD a crucial competitive edge in terms of exploiting our cost saving potential while securing and enhancing quality. Innovation can also be implemented more precisely by adjusting individual parameters. Our development mandate is based on market requirements and hence on our customers' needs. We follow our innovation motto "Setting benchmarks": We seek to set industry standards in crystalline solar power technology including PV systems technology.

28 ORGANIZATION OF RESEARCH AND DEVELOPMENT AT SOLARWORLD



SOLARWORLD INNOVATIONS – GROUP DEVELOPMENT “FROM LAB TO FAB”. Our innovation management has been centralized within SOLARWORLD INNOVATIONS GMBH at our German production site in Freiberg, Saxony. This region, a center of science and research, offers us favorable conditions for our own R&D activities and for cooperation schemes. In the year under review, we expanded our local innovation infrastructure: In March 2009 we commissioned our wafer pilot plant with an annual rated capacity of 20 MW. Our new cell and module pilot plant, which also has an annual rated capacity of 20 MW, was almost completed in the period under review. In the first quarter of 2010, our development teams launched their activities at that plant.

Our pilot plants play a major strategic role for our group and are the centerpiece of our development activities. We thus increase productivity in production by shifting development activities to our pilot plants, where we develop new process variants and automation solutions under conditions that are very close to actual production conditions. We also optimize the use of consumables on a pilot scale. This core knowledge developed on the basis of near-production conditions is an asset which neither we nor any other company can buy from institutes or suppliers – and giving SOLARWORLD a competitive edge. The results will only be transferred to production when they have reached a level permitting series production. We thus create standards for all international sites: our Corporate Technology.

Bundling our R&D activities centrally at SOLARWORLD INNOVATIONS provides us with a further benefit: We deliver synergies⁹ in quality assurance through our development and test laboratories, further expanded in 2009, but also in patent and literature administration, project management, the coordination of state-funded development projects and central Intellectual Property⁹ management (IP management). → *Considerable rise in registered inventions • p. 096//*

PRODUCT MANAGEMENT CREATES INNOVATION CLOSE TO THE CUSTOMER. We organize regular forums and workshops to engage in a transfer of knowledge and an exchange of information with our production sites. Moreover, employees from the individual production areas work closely with their SOLARWORLD INNOVATIONS colleagues on our production technology teams. → *Up on the rooftops of the world//* Customer-centered innovation in systems engineering is created by our product management unit at SOLARWORLD AG in Bonn, where our engineers cooperate closely with distribution and customer service.



STRATEGIC INNOVATION TARGETS

- CUTTING COSTS
- ASSURING AND ENHANCING QUALITY
- DEVELOPING INNOVATIVE AND SUSTAINABLE SOLUTIONS



OUR STRATEGIC INNOVATION TARGETS ARE INTERDEPENDENT: IN ASSURING AND ENHANCING QUALITY, WE ALSO OPTIMIZE PROCESSES AND MATERIALS USAGE AT THE SAME TIME.



OPERATING TARGETS 2009/2010+

- **Translating market trends into product innovation:** Observing markets, customers and trends → product innovation with added value and specific additional benefit to tap new business areas and market potential
- **Strengthening the performance promise of products “Made by SolarWorld”:** Enhancing durability, efficiency and reliability
- **Economic and ecological sustainability:** Reducing the consumption of natural resources, avoiding the use of pollutants, avoiding emissions of greenhouse gases and pollutants, avoiding waste
- **Systems engineering for specific market and customer requirements:** Facilitating rapid, simple and safe assembly, developing design variants, offering our customers technical support
- **Process development:** Increasing yields through, e.g. sophisticated analysis methods, increasing throughput, automation and standardization, reducing cycle times in crystallization, optimizing the silicon generation process → productivity ↑
- **Product development:** Increasing the specific performance of cells and modules ↑ → efficiency rate ↑, increasing the durability of modules through better production details and new materials
- **Optimization of materials:** Improving consumption of consumables ↓ and substitution by alternative consumables ↑
- **Energy saving:** Reducing energy and water consumption ↓
- **Basic research:** Pushing basic scientific/technological knowledge ahead/qualification of alternative materials and consumables

TARGETS ACHIEVED IN 2009/ MARKET LAUNCH 2010+

→ FUTURE PERFORMANCE POTENTIAL/MARKET OPPORTUNITIES COMPETITIVE EDGE

In 2009 our R&D activities contributed to **cost reductions** in analogy with the decline in feed-in tariffs as at 1 January 2010 in the framework of the German Renewable Energies Sources Act (EEG) ⁽⁸⁸⁾ *Targets achievement 2009 and targets 2010+ * p. 38//*

Key measures taken:

- ☑ Increasing the output of our modules by 3.2 per cent (multi-crystalline, production Germany)
- ☑ Enhancing the efficiency of solar cells by 2.5 per cent (multi-crystalline, production Germany)

Cost reductions were supported by many individual (including minor) savings in the entire production chain, various process improvements in production and the qualification of alternative supplier products or suppliers.

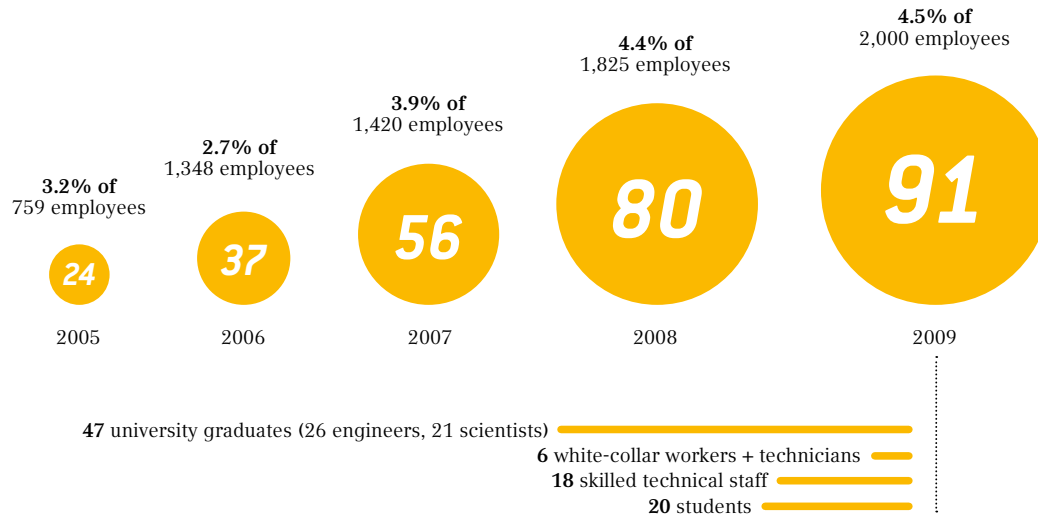
In 2009 we developed the following **new products and product improvements** marketlaunch:

- Sunmodule Plus® SW 220-235 mono black: mono-crystalline black module (module format: 1675 mm x 1001 mm) and Sunmodule Plus® SW 145-155 Compact mono black: mono-crystalline black module (module format: 1675 mm x 682 mm)

→ FUTURE PERFORMANCE POTENTIAL: Tapping additional customer groups through the product feature “aesthetics”

- Expansion of our product range in the off-grid segment in order to include modules with high-performance 6-inch cells
→ FUTURE PERFORMANCE POTENTIAL: Tapping off-grid markets (Central/South America, Africa, Asia/Pacific) through performance
- SunCarport®: combination of carport and solar system
→ FUTURE PERFORMANCE POTENTIAL: Environment-friendly solar power forming the basis for electric mobility
- Sunfix® kombi: combined roofing and assembly system, universal solution for many different roof constructions
→ FUTURE PERFORMANCE POTENTIAL: Tapping additional potential for solar rooftop systems
- Sunfix® plus: assembly system for all conventional inclined roofs, facilitates rapid assembly, saves time and material
→ FUTURE PERFORMANCE POTENTIAL: Expanding our market position in the rooftop systems market through better assembly options
- Energyroof® for integrated roof solutions with laminate format: 1670 mm x 677 mm
→ FUTURE PERFORMANCE POTENTIAL: Expanding our market potential concerning integrated systems through greater flexibility and ease of assembly
- Lead-free modules
→ FUTURE PERFORMANCE POTENTIAL: Re-certification as a basis for market launch
- New module frames offering better stability and lower aluminium consumption
→ FUTURE PERFORMANCE POTENTIAL: Reducing the specific consumption of materials (on improved quality parameters), boosting our competitiveness and reducing energy pay-back
- Development of purer crystallization processes; examination of impurities and defect clusters as well as development and optimization of measurement methods to characterize their impact on the efficiency of solar modules; avoidance of degradation mechanisms
→ FUTURE PERFORMANCE POTENTIAL: Enhancing materials quality (mechanical and electronic properties of wafers and cells)

30 DEVELOPMENT OF OUR R&D HEADCOUNT



INCREASE IN R&D HEADCOUNT. Our employees are a crucial factor for the success of our R&D activities. We therefore attach a great deal of importance to winning and retaining skilled technical and management staff. In 2009 we again increased the headcount of our R&D subsidiary, SOLARWORLD INNOVATIONS. The number of employees rose by 13.8 (previous year: 42.9) per cent. They accounted for around 4.5 (previous year: 4.4) per cent of the total group headcount.

Since our segment reporting was adjusted this year → *Segment structure adjusted • p. 049*// the indicated headcount numbers relate exclusively to SOLARWORLD INNOVATIONS GMBH, i.e. permanent employees including student staff, e.g. working or PhD students. SOLARWORLD INNOVATIONS launched its business operations on 1 January 2008.

Apart from employees of SOLARWORLD INNOVATIONS, many other employees from other group areas and our joint ventures⁹ also performed R&D activities. In 2009, for instance, 69 (previous year: 121) employees from our production plants in Freiberg were involved in research projects implemented in the wake of state-sponsored operational trials. At SOLARWORLD AG we increased our headcount in systems engineering. We thus had eleven (previous year: 7) employees in product management, seven (previous year: 5) in construction development and three (previous year: 2) in software development.

HIGH PERCENTAGE OF SKILLED TECHNICAL STAFF. Due to the large variety of R&D activities required, our HR policy takes care to ensure a balanced relationship between engineers and scientists from different disciplines. In addition, the establishment of our new pilot plants and the associated development activities implemented in close relationship with production also leads to a high percentage of skilled workers in SOLARWORLD INNOVATIONS. [⑩ Development of our R&D head count • p. 094](#)// We attach great importance to training and promoting highly qualified junior staff within our group, [➔ Inspiring, gaining and retaining employees with a strong employer brand • p. 107](#)// as reflected by a large number of student staff.

COOPERATION SCHEMES STRENGTHEN KNOWLEDGE BASE. In the period under review, we expanded our in-house know-how through cooperation projects with universities, institutes and other external centers of competence. In 2009 we cooperated with a total of 25 international research institutes (previous year: 21), an increase of 19 per cent year-on-year.

Our R&D teams at our Freiberg site cooperate and network closely with scientific institutions on a joint technology campus, above all with the Technical University and Mining Academy Freiberg (TUBA), and the Fraunhofer Technology Center for Semiconductor Materials (THM) as well as start-up companies in the neighboring Start-Up and Innovation Center, Freiberg (GIZeF).

We also support basic research and development and the German photovoltaic⁹ research community through cluster projects such as SolarFocus, LOANA, PV Reliability. Examples of successful cooperation with external partners include a project between SOLARWORLD and the Fraunhofer THM Freiberg, the Fraunhofer Institute for Integrated Systems and Component Technology (IISB) Erlangen. Cooperating closely, researchers found out how to avoid special materials faults in the industrial production of silicon crystals and thus considerably cut costs. The teams received the Georg Waeber Innovation Award 2009 of the Sponsorship Association for Microelectronics e.V.

EXTERNAL KNOW-HOW COMPLETS IN-HOUSE DEVELOPMENT. In the framework of close cooperation to develop an innovative metallization process for solar cells, we secured an exclusive option concerning the basic know-how of our development partner. Should the process prove ready for production in 2010, as scheduled, we will be able to draw on this option. We will thus optimally complete our in-house innovation in this area, and are seeking to achieve a unique product feature.

Other than that, we did not purchase any essential know-how in the period under review, nor in previous years. Nevertheless, SOLARWORLD had of course access to additional external know-how through contracts or cooperation schemes, in particular with equipment manufacturers and research institutes.



CONSIDERABLE RISE IN REGISTERED INVENTIONS. Protecting intellectual property is a top priority for SOLARWORLD, not least due to the tightening of the competitive situation in the solar industry, and it is secured through our central IP management. Group-wide, our staff registered 28 (previous year: 18) inventions in 2009, a considerable increase of 55.6 per cent year-on-year. The IP ratio at our German sites and the ratio of registered inventions to our R&D headcount, also rose substantially to 31 (previous year: 23) per cent in 2009.

Another task of our IP management is to continually monitor the economic efficiency of our patent portfolio. In 2009, activities included removing old patents with a low cost-benefit ratio from our stock of property rights and property rights families so that its number declined year-on-year.

EFFICIENCY TARGET ACHIEVED. Cost reductions form the benchmark used to measure our research efficiency. Our minimum target for 2009 was to offset the decline as at 1 January 2010 established by the German Renewable Energies Sources Act. Last year, the group succeeded in reducing costs in line with that target corridor – through continuous improvement, based in particular on the increase in module output and the efficiency of our solar cells. ³⁰ *Targets Achievement 2009 and targets 2010+ • p. 038//*

³¹ PERFORMANCE INDICATORS IP RIGHTS

	Registered inventions	IP ratio*	IP rights or applications owned	IP rights families owned
2008	18	23%	220	103
2009	28	31%	209	87

* Ratio of registered inventions to number of R&D employees

³² DEVELOPMENT OF R&D EXPENSES*

	2006	2007	2008	2009
Total R&D expenses (in m€)	8.6	10.8	13.0	12.0
Sponsored portion (in %)	45.3	34.2	18.5	15.0

* Disclosures excluding research and development activities of our researching joint ventures and the expenses of Sunicon AG ("Production Germany" segment) and SolarWorld AG ("Trading" segment)

³³ RESEARCH RATIO AND RESEARCH INTENSITY // IN PER CENT*

	2006	2007	2008	2009
Research ratio	1.7	1.6	1.4	1.2
Research intensity	1.8	2.0	1.9	1.2

[Research ratio = R&D expenses/revenues x 100]

[Research intensity = R&D expenses/total expenses x 100]

*Disclosures excluding the R&D activities of our joint ventures

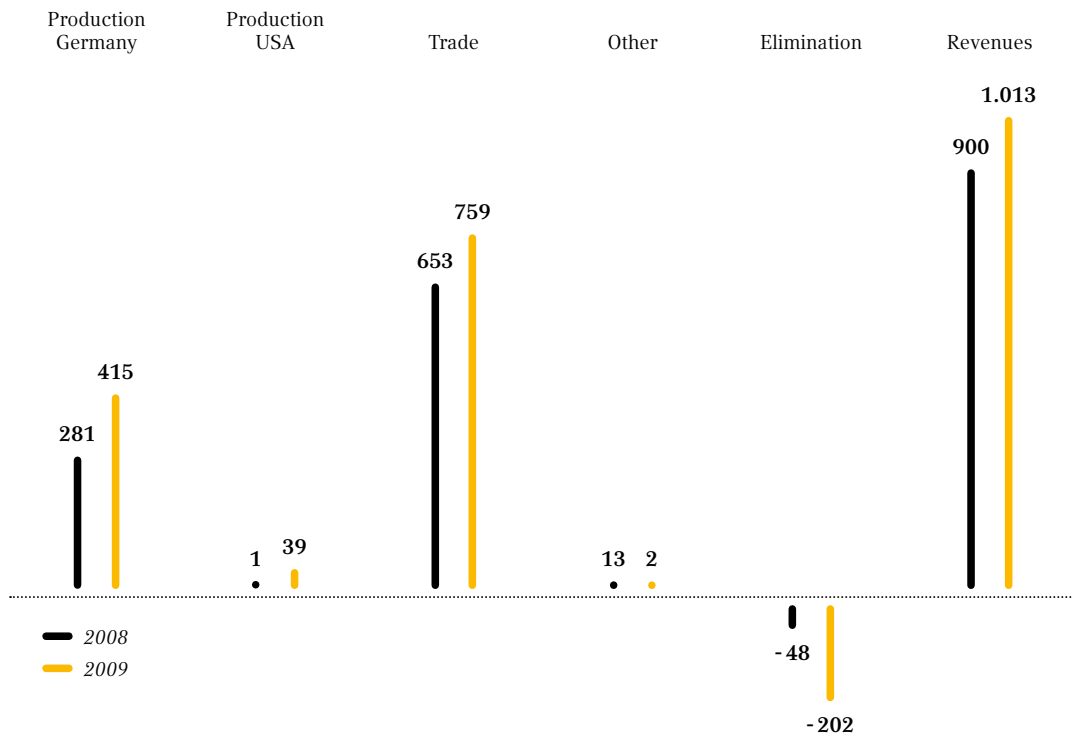
EARNINGS, FINANCE AND ASSETS SITUATION 2009

EARNINGS SITUATION

DEVELOPMENT OF REVENUES AND PROFIT OR LOSS. We were able to clearly increase our cumulated shipments of wafers and solar modules in the course of the reporting year: It increased by 38 per cent to 578 (previous year: 418) MW. The group benefited from the increasing demand for high-quality solar power products.

As compared to the previous year, group revenues increased by 12.5 per cent or € 112.3 million to € 1,012.6 million (previous year: € 900.3m). This enabled us to over-compensate for the decrease in prices the industry experienced by increasing the sales volume.

③ SALES SUBDIVIDED INTO SEGMENTS // IN MILLION €



The group-wide foreign quota amounted to 29.3 (previous year: 54.0) per cent. This change can be attributed to the above average increase in demand on the German solar market during the second half of the year, in particular. The decreasing Spanish market additionally added to the effect.

Earnings before interest and taxes (EBIT⁹) amounted to € 151.8 million (previous year: € 263.3m) in 2009. Earnings before interest, taxes and depreciation and amortization (EBITDA) amounted to € 215.5 million (previous year: € 318.4m). The group-wide 2009 EBIT margin⁹ amounted to 15.0 (previous year: 29.2) per cent.

Group profit amounted to € 59.0 million (previous year: € 148.7m) in the reporting year. To better understand this development, the fact needs to be taken into consideration that deferred taxes⁹ of € 32.4 million (previous year: € 19.8m) accumulated by the year-end 2009 were adjusted due to the overall unstable market environment and the previous year's group profit was influenced by the proceeds from the disposal of 65 per cent of the shares in GÄLLIVARE PHOTOVOLTAIC AB in the amount of € 13.4 million. The adjusted group profit amounted to € 91.4 million (previous year: € 135.2m).

ORDER TREND. Due to the difficult market environment – especially with respect to manufacturers that only produce cells or modules – wafer customers of our subsidiary DEUTSCHE SOLAR AG ordered less than the agreed quantity in 2009. As the underlying contracts stipulate take-or-pay obligations⁹, the customers were contacted successively in order to compensate for order shortages by, for instance, reordering. At this point, we also benefited from our strategic positioning as an integrated solar technology manufacturer, which was – at the same time – the answer to the increasing demand for modules all over the world: We were able to compensate for default risks by conducting a strategic shifting of externally scheduled wafer quantities into inner-group processing. ➔ [Default risks • p. 122 //](#); ➔ [Sales and price risks • p. 122 //](#)

DEVELOPMENT OF MATERIAL INCOME STATEMENT ITEMS. As compared to the previous year, employee expenses increased by € 9.7 million to € 99.8 million (previous year: € 90.1m). This increase is mainly due to a continuous increase of employees within the scope of our consistent global expansion of manufacturing capacities and the increased shipments. The employee expense ratio was slightly reduced by 0.4 percentage points to 9.4 (previous year: 9.8) per cent.

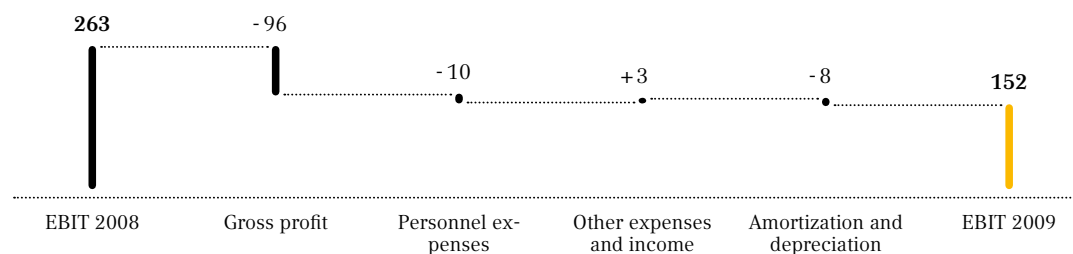
The cost of materials quota increased to 64.9 (previous year: 49.2) per cent. This is mainly due to price reductions and the increase in inventories of work in progress and finished goods measured at cost on 31 December, 2009.

Amortization and depreciation increased by € 8.5 million to € 63.7 million (previous year: € 55.2m) as a result of the planned continuation of investments in the expansion of manufacturing capacities.

The increase in other operating expenses by € 22.2 million to € 108.9 million (previous year: € 86.7m) can mainly be attributed to the increased production and shipments as well as investments in expanding brand recognition. The expense quota amounted to 10.2 (previous year: 9.4) per cent.



35 DEVELOPMENT OF MATERIAL ITEMS OF THE INCOME STATEMENT // IN MILLION €



As compared to the previous year, and especially due to the reversal of customer advances in the amount of € 25.4 million, other operating income rose by € 24.5 million to € 50.7 million (previous year: € 26.1m).

After the previous year's financial result was burdened by write-downs on securities, the financial result for the reporting year increased by € 54.5 million to € -20.1 million (previous year: € -74.6m).

36 FIVE-YEAR-COMPARISON OF THE EARNINGS SITUATION* // IN K€

	2005	2006	2007	2008	2009
Revenue	355,971	515,246	698,818	900,311	1,012,575
Revenue from continued operations		509,139	689,588	900,311	1,012,575
Changes in inventories products	12,387	30,916	-17,670	15,160	48,830
Own work capitalized	3,359	590	542	7,740	3,117
Other operating income	14,856	96,185	57,253	26,123	50,653
Operating performance	386,573	636,830	729,713	949,334	1,115,175
Cost of materials	-210,902	-302,988	-333,654	-454,060	-691,062
Personnel expenses	-37,780	-54,958	-75,004	-90,130	-99,783
Amortization and depreciation	-19,687	-41,954	-42,054	-55,166	-63,659
Other operating expenses	-29,590	-59,351	-80,129	-86,718	-108,865
Subtotal	-297,959	-459,251	-530,841	-686,074	-963,369
Result of operations	88,614	177,579	198,872	263,260	151,806
Financial result	-4,850	1,285	-22,962	-74,591	-20,054
Taxes of income	-31,782	-49,811	-65,027	-53,422	-72,779
Result from discontinued operations (after tax)		1,513	2,373	13,432	
Consolidated net income	51,982	130,566	113,256	148,678	58,973

③7 INDICATORS // IN PER CENT

	2005	2006	2007	2008	2009
Return on sales (Consolidated net income/revenue)	14.6	25.3	16.2	16.5	5.8
Cost of materials quotient (Cost of materials/revenue from continued operations plus changes in inventory and own work capitalized)	56.7	56.0	49.6	49.2	64.9
Personnel expenses ratio (Personnel expenses/revenue from continued operations plus changes in inventory and own work capitalized)	10.2	10.2	11.2	9.8	9.4

* In order to show the operating result adjusted for currency translation gains and losses the group decided in 2009 to report the exchange rate result in the Income Statement (P&L) under the item "Other Financial Result". The previous year's figures were appropriately adjusted. → [Notes/No. 6. Changes in Disclosure • p. 165//](#)

FINANCIAL SITUATION

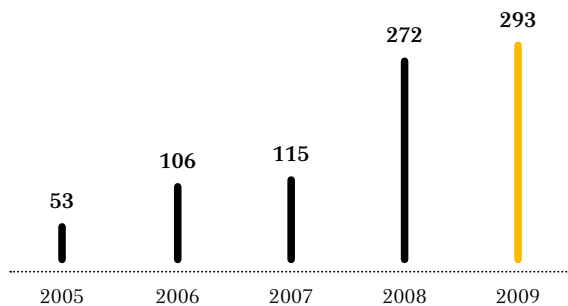
PRINCIPLES AND OBJECTIVES OF FINANCIAL MANAGEMENT. Our financial management is geared to short- to medium-term requirements of our operations and our long-term business strategy. → [Strategic financing 2009/2010+ • p. 036//](#)

Our aim is to strengthen the financial flexibility of the group and to reduce our dependence on banks by employing a broad range of financial instruments and measures. Our operations therefore form the main pillar of the group's liquidity reserves. In addition, cash needs are supplemented by bonds, promissory notes and loans. → [Financing analysis • p. 100//](#) Through central cash management, liquidity items are invested in an up-to-date daily manner, mostly in the fixed deposit area (day-to-day money, weekly and monthly deposits) in the public and private German banking sector. In the scope of our financing structure, we aim at maintaining a stable equity ratio⁹ of some 40 per cent over the longer term.

Our international credit agreements are subject to terms that, in part, run until 2018 and will require respective follow-up financing no sooner than 2014. A list of the redemption structure of our non-current credit lines can be found on page 199, note 61e. Our central financing strengthens our negotiating position with regard to banks and other market participants and enables us to take out loans subject to the best possible terms. → [Notes/ Principles and objectives of financial risk management • p. 196//](#) Solar World's further growth rests on a sound foundation.

FINANCING ANALYSIS. Compared to 31 December 2008, equity⁹ increased by € 24.4 million to € 865.5 million (31 December 2008: € 841.1m). At balance sheet date, the equity ratio amounted to 39.0 (31 December 2008: 39.7) per cent.

38 DEVELOPMENT OF INVESTMENTS // IN MILLION €



Financial liabilities increased by € 85.4 million to € 789.5 million (31 December 2008: € 704.1m), 95.1 per cent of which are non-current liabilities. → [Notes/Liquidity risks](#) • p. 199//

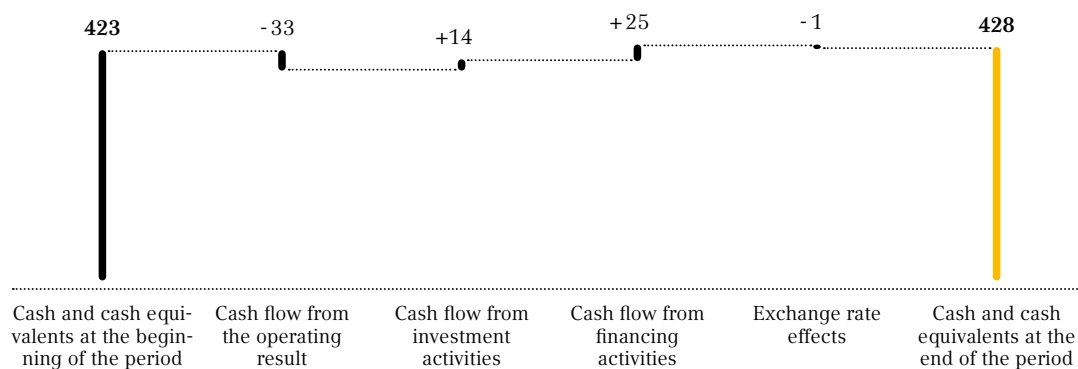
Investment subsidies and grants shown in non-current liabilities amounted to € 68.3 million (31 December, 2008: € 78.8m) as at balance sheet date. These public funds for the expansion of manufacturing capacities deferred on the liabilities side of the balance sheet will be released to income over the course of the useful lives of the subsidized investments.

The remaining non-current liabilities decreased by € 41.8 million to € 250.7 million (31 December 2008: € 292.5m). The non-current proportion of customer advances for long-term wafer supply contracts recognized therein amounted to € 242.9 million (31 December 2008: € 265.1m) as at balance sheet date.

SIGNIFICANCE OF OFF-BALANCE FINANCING INSTRUMENTS FOR THE FINANCIAL POSITION . Off-balance financing instruments were not utilized for financing purposes of the group.

INVESTMENT ANALYSIS. In 2009, SOLARWORLD increased the investments in intangible assets⁹ and property, plant and equipment by eight per cent to € 293.2 million (previous year: € 271.6m). Our investment activities focused mainly on the expansion of wafer production at DEUTSCHE SOLAR AG at the Freiberg, Germany, location (€ 138.2m), and the integrated cell and wafer production at the Hillsboro, USA, location (€ 107.5m). In addition, we invested in the expansion of research and development activities of SOLARWORLD INNOVATIONS GMBH (€ 19.8m), and cell production of DEUTSCHE CELL GMBH (€ 11.1m). A total of € 16.6 million were invested at other locations.

③⑨ CASH FLOW RECONCILIATION // IN MILLION €



LIQUIDITY ANALYSIS. Free liquidity (liquid funds and other financial assets) amounted to € 509.7 million (31 December 2008: € 836.1m) as at balance sheet date. Liquid funds amounting to € 428.1 million (31 December 2008: € 431.7m) include cash and cash equivalents that mainly consist of day-to-day money and fixed term deposits. In addition, the company held capital market products amounting to € 81.6 million (31 December 2008: € 404.4m) as at the balance sheet date.

The cash flow^a from operating activities amounted to € -33.0 million (previous year: € 320.5m) in 2009.

Cash flow from investment activities in the amount of € 14.5 million (previous year: € -165.2m) was mainly influenced by payments for investments in fixed assets in the amount of € -318.4 million and a cash inflow of € 320.1 million from the reversal of financial assets.

Cash flow from financing activities amounted to € 24.9 million (previous year: € 1.8m), and is primarily characterized by taking out a proportion of the syndicated loan line in an amount of € 100 million. In addition, it includes interest payments of € -39.7 million, an outflow of means for the redemption of loans amounting to € -18.6 million, as well as payments due to dividend distributions in an amount of € -16.8 million.

④⑩ FIVE-YEAR COMPARISON OF THE FINANCIAL SITUATION // IN K€

	Dec 31, 2005	Dec 31, 2006	Dec 31, 2007	Dec 31, 2008	Dec 31, 2009
Consolidated net income	51,982	130,566	113,256	148,678	58,973
Liabilities (non-current and current)	229,523	407,089	1,012,920	1,279,547	1,351,588
Equity	217,056	597,321	691,546	841,075	865,462
Total assets	446,579	1,004,410	1,704,466	2,120,622	2,217,050

④ INDICATORS

	Dec 31, 2005	Dec 31, 2006	Dec 31, 2007	Dec 31, 2008	Dec 31, 2009
Return on equity (Consolidated net income/equity); in %	23.9	21.9	16.4	17.7	6.8
ROCE (key date) (EBIT/Capital Employed ¹); in %	49.4	38.4	36.5	37.4	13.7
First degree liquidity (Liquid funds + securities/ current liabilities)	1.4	2.3	7.0	4.5	2.2
Second degree liquidity (Liquid funds + means available on short notice/current liabilities)	1.7	3.0	8.1	5.0	3.2
Third degree liquidity (Current assets/current liabilities)	2.7	4.8	11.3	7.8	5.8

* Intangible assets and property, plant and equipment less investment subsidies plus net current assets excluding financial means and financial liabilities

ASSET SITUATION

ASSET STRUCTURE ANALYSIS. As compared to 31 December 2008, the balance sheet total increased by € 96.4 million to € 2,217.1 million (31 December 2008: € 2,120.6m).

In the course of the reporting year, non-current assets increased by € 214.9 million to € 881.8 million. This can mainly be attributed to increased property, plant and equipment due to expansion investments. Working capital⁹ changed to € 449.6 million as of 31 December 2009. Inventories amounted to € 598.2 million (31 December 2008: € 523.8m) as of 31 December 2009. Customer advances recognized within inventories came to € 384.3 million (31 December 2008: € 377.9m). Due to our significantly increased shipments in the business year and especially during the last quarter, trade receivables increased to € 211.4 million (previous year: € 71.2m). In addition, trade payables increased by € 13.5 million to € 83.9 million (31 December 2008: € 70.4m). As at 31 December 2009, customer advances amounted to € 276.0 million (31 December 2008: € 287.0m).

OFF-BALANCE ASSETS. Per balance sheet date, our group only had assets that were financially visible.

SIGNIFICANCE OF OFF-BALANCE FINANCING INSTRUMENTS FOR THE FINANCIAL STANDING. Off-balance financial instruments do not influence the financial standing of our group.

④ FIVE-YEAR COMPARISON OF THE ASSET SITUATION // IN K€

Assets	Dec 31, 2005	Dec 31, 2006	Dec 31, 2007	Dec 31, 2008	Dec 31, 2009
Non-current assets	219,776	362,514	422,725	666,884	881,824
Current assets	226,803	641,896	1,281,741	1,453,738	1,335,226
Total assets	446,579	1,004,410	1,704,466	2,120,622	2,217,050

Capital	Dec 31, 2005	Dec 31, 2006	Dec 31, 2007	Dec 31, 2008	Dec 31, 2009
Equity	217,056	597,321	691,546	841,075	865,462
Non-current liabilities	144,284	273,722	899,266	1,093,559	1,119,411
Current liabilities	85,239	133,367	113,654	185,988	232,177
Total equity and liabilities	446,579	1,004,410	1,704,466	2,120,622	2,217,050

④ INDICATORS

	Dec 31, 2005	Dec 31, 2006	Dec 31, 2007	Dec 31, 2008	Dec 31, 2009
Equity ratio (Equity/total assets); in %	48.6	59.5	40.6	39.7	39.0
Investment intensity (Non-current assets/ total assets); in %	49.2	36.1	24.8	31.4	39.8
Frist degree equity-to-fixed assets ratio (Equity/Non-current assets)	1.0	1.6	1.6	1.3	1.0
Second degree equity-to-fixed assets ratio (Equity + Non-current liabilities/ Non-current assets)	1.6	2.4	3.8	2.9	2.3

OTHER INTANGIBLE VALUES. We assess our international investor and capital market contacts as stable. We strengthen them through comprehensible strategic positioning and transparent communication. → *Investor Relations work improved* • p. 067//

We mainly generate process advantages regarding current and future business from our integrated research and development activities on all levels of value creation. → *Innovation report 2009* • p. 104//
→ *Future products and services* • p. 142//


The expansion of customer relations that are of value is part of our sales strategy. We succeeded in increasing brand recognition yet again in the reporting year. We therewith created a sustainable brand value, both for our sales partners and for ourselves. → *Brand investments stepped up – demand effects for our group and our customers* • p. 084//

HUMAN RESOURCES 2009

SECURING SUSTAINABLE GROWTH WITH STRATEGIC PERSONNEL MANAGEMENT. The right personnel strategy helps us to achieve our ambitious corporate objectives. The major components of this strategy are the qualitative and quantitative expansion of employment in relation to our group growth. By investing in the qualification of our employees we develop and maintain the existing know-how in the company, optimize our internal processes and, at the same time, open up individual career perspectives. New recruitments will help us gain additional people to enable us to expand our production on a broad basis and to inject new ideas into the SOLARWORLD Group. Both of these things taken together create a sustainable basis for our planned growth and guarantee safe jobs for our employees in the future.

We created 175 new jobs group-wide in the reporting period and thus increased the number of employees by ten per cent in comparison with the previous year. As at 31 December 2009 SOLARWORLD had a total of 2,000 employees on its payroll. The proportion of female employees grew to 22 (previous year: 19) per cent.

New recruitments were mainly made in the areas of Production, Research & Development and International Sales as well as in central group functions such as Controlling, Accounting, IT, Human Resources, Procurement, Technical Service, Logistics and Marketing.

In Germany, the number of employees increased by twelve per cent to 1,341 (previous year: 1,198). In the USA, also, the strategically important market of the future, we upped our workforce. The headcount there rose by 6 per cent to 644 (previous year: 609). Staff fluctuation increased in the year under review and amounted to a group-wide figure of 9.3 (previous year: 3.6) per cent. This was mainly attributable to restructuring measures at our US sites. In Camarillo, California, the legacy module line was taken out of service in the first quarter of the year and a new, highly efficient line was commissioned. In Vancouver, Washington, the production facility was refocused in the first quarter to the reprocessing of silicon material. At these sites, we employed less people. In Hillsboro, Oregon, on the other hand, we created an additional 124 regular employment jobs. The absenteeism rate in the SOLARWORLD Group amounted to 3.4 (previous year: 2.5) per cent. As far as the other recorded social service indicators such as health protection are concerned, we refer at this point to the integrated  [Report on sustainable corporate management/Social service indicators](#) • p. 242 //

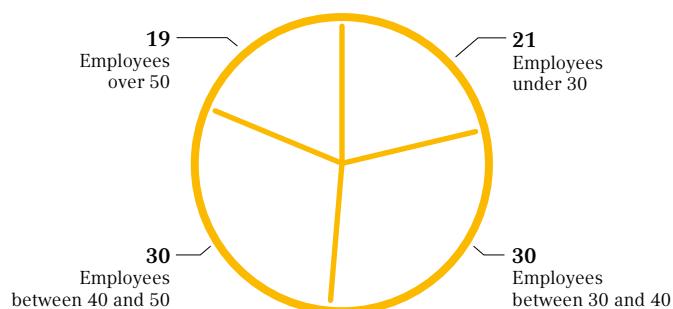
ASSUMING RESPONSIBILITY – CREATING TRAINING OPPORTUNITIES. In the year under review 86 (previous year: 83) young people received qualified vocational training at the German locations of SOLARWORLD. The training rate was 6 (previous year: 7) per cent. In 2009 we took on 21 (previous year: 26) new trainees/apprentices. In addition, we offered 9 (previous year: 8) young people an opportunity to start a practice-oriented sandwich course on “Industrial Management”. In the reporting period we gave 61 (previous year: 64) per cent of the trainees an employment contract after they had passed their final examination.

④④ **HEADCOUNT DEVELOPMENT // AS AT CUT-OFF DATE 31 DECEMBER**

	2008	Of which trainees	2009	Of which trainees	+/- absolute
Germany	1,198	83	1,341	86	+143
USA	609	0	644	0	+35
Rest of the World	18	0	15	0	-3
Total	1,825	83	2,000	86	+175

PERSONNEL EXPENDITURE ROSE IN LINE WITH GROWTH. Personnel expenditure in the year under review amounted to € 99.8 million (previous year: € 90.1m). This is equivalent to a share of 10.4 (previous year: 13.1) per cent of the total operating expenditure and 9.9 (previous year: 10.0) per cent of total group revenues.

➔ *Development of material income statement items • p. 098//*

④⑤ **AGE STRUCTURE IN THE SOLARWORLD GROUP // IN PER CENT**

EMPLOYING TEMPORARY STAFF FOR SPECIFIC TASKS. In 2009, also, the specific employment of temporary staff – some of whom have qualified technical training – was again an important tool in our personnel policy. We can thus act quickly and flexibly at our production sites during phases of expansion. In Freiberg alone, 36 people found future-oriented permanent employment with SOLARWORLD in 2009 as a result of their temporary work for the company. Including our temporary staff, a total of 2,725 (previous year: 2,498) people were employed by the SOLARWORLD Group as at the cut-off date of 31 December 2009.

DEVELOPING A LEADERSHIP CULTURE TOGETHER. Our worldwide SOLARWORLD locations continued to grow successfully in the reporting period. In order to further improve our international cooperation we want to develop our SOLARWORLD corporate culture⁹ appropriately. It will be designed to support our strategy while taking our cultural diversity into consideration. This is why, in the year under review, we started to work intensively on the concept and establishment of a cross-location set of values for a SOLARWORLD leadership culture. In the future, all management staff are to align their actions with this culture and thus

also improve group-wide cooperation – an important success factor for the group as a globally operating company. We started the process at our headquarters in Bonn as well as in Camarillo in the USA. In this process, members of the first management level identified corporate values considered to be relevant to corporate success. → *Strategy and action* • p. 033// A group-wide validation phase will follow as the next step of implementation from 2010 onwards. → *Human resources – future development* • p. 144//

INSPIRING, GAINING AND RETAINING EMPLOYEES WITH A STRONG EMPLOYER BRAND. A priority of our 2009 personnel strategy was to position SOLARWORLD more strongly as a national and international employer. It is only in this way that we can gain the best talents for the group in the competition for qualified employees, and also lastingly retain employees who already work for us. Within the framework of our “Employer Branding Strategy” we have, for example, strengthened our PR and press activities and have thus specifically appealed to potential applicants by way of media reports. In addition, we have increased our presence at the appropriate fairs and exhibitions. Through such internal and external measures we want to communicate our vision and our corporate culture in Germany and in the USA and inspire people with the ideas of SOLARWORLD.

This is the kind of commitment that pays off: According to a joint study by Manager Magazin and the Berlin trendence Institute of August 2009, SOLARWORLD is one of young German engineers’ desirable employers. For the four editions of the study, some 25,000 students were interviewed – in the “Engineering Edition”, SOLARWORLD came in at 15th place as the highest ranking newcomer.

In order to awaken enthusiasm and interest in our young engineers for the future technology of photovoltaic^e engineering, we continued our higher education marketing in the reporting period. This included an extensive offer of internships, theses and doctorates in our company as well as dialogue with students and professors in the departments of electrical engineering, mechanical engineering, process technology, physics and chemistry. Our cooperation with the “Portland Community College (PCC)” in the vicinity of our US site in Hillsboro was continued in the year under review. In the context of this partnership we support the qualification of “Photovoltaic Technology Associate’s Degree”. We also expanded our support for the MECOP Internship program for the combined universities of Oregon State, Portland State, and the Oregon Institute of Technology. We also continued the excellence program started in 2008 for doctorates in the field of silicon-based photovoltaic technology (“Graduate School of Photovoltaic Technology”) in cooperation with the Technical University and Mining Academy (TUBA) at our German production site in Freiberg. In September of 2009 we also awarded the SOLARWORLD Junior Einstein award^r for the fourth time. The award, which carries prize money of € 5,000, goes to young scientists who do their research in photovoltaic technology or related topics. The award winner in 2009 was the young scientist Dr. Thomas Müller. In his doctoral thesis he dealt with amorphous silicon layers for surface passivation and emitter and rear side coatings on crystalline silicon.

PROMOTING EMPLOYEES, DEVELOPING TALENTS, SHAPING GROWTH. At SOLARWORLD, personnel development is of strategic importance. Accordingly, the direct costs for education and training in the year under review amounted to a group-wide figure of € 0.71 million (previous year: € 0.70m), rising analogously to the increase in staff numbers. We consider this to be an investment in the future because, over the medium term, a lack of skilled workers as an effect of demographic and structural change will influence the German economy more than the current economic crisis. According to the Association of German Industry and the Association of Employers' Federations, we are already short of some 60,000 skilled workers in the computer science, natural science and engineering segments. Those who want to be successful must therefore not only gain qualified new staff but also specifically develop those who are already working for the company. The personal development perspectives of each employee are identified on an individual basis in an annual employee appraisal interview and appropriate continuing education measures are derived from this.

Another future-oriented element of our personnel development is the cross-location know-how transfer within SOLARWORLD. Through an exchange of experts we can efficiently use our global engineering know-how "Made by SOLARWORLD" at all our locations and, at the same time, expand it group-wide. This is a competitive advantage for SOLARWORLD and also represents a career opportunity for the individual employee. We have developed a posted labor directive and offer inter-cultural training in order to optimally further the mobility of our employees, to make it easier for them to get used to a new living and working environment, and to reduce language and cultural barriers. An example: In 2009 we started our "Operator/Worker Exchange Program". To date, the first technicians from the Freiberg production area worked at our Hillsboro, USA, site for about two months. Starting in January of 2010, US employees began a similar exchange in Freiberg in order to contribute their experience and, reciprocally, to learn from their German colleagues. This program will be consistently continued and expanded to other employee groups. The regular exchange of Best Practice Methods among our different sites is part of our knowledge management. Moreover, it also improves the cooperation and cohesion within the group by sustainably strengthening the networking relationships.

In 2009, our new international executive development program commenced. SOLARWORLD AG needs a strong management that guides employees efficiently – so that together we can attain the goals set and continue to succeed in competition. This is why we started our SOLARWORLD management feedback – initially in Bonn – to implement a 360° assessment for managers in 2009: Feedback comes from supervisors, from colleagues, from immediate co-workers, and also from self-assessment. These responses create the basis for deriving, agreeing upon, and implementing individually coordinated development measures.

EMPLOYEES PARTICIPATE IN THE COMPANY DEVELOPMENT. Part of our corporate culture is to permit our employees to participate in the success of SOLARWORLD. This is why our remuneration concept contains a profit-oriented participation model (GOMAB)[®]. At the German locations the employees, in addition to their salaries, receive a performance-related bonus. At the Freiberg location, over 87 per cent of the employees were paid according to collective bargaining agreements in 2009. GOMAB is part of the in-house collective



bargaining agreements of the Freiberg companies and replaces other collective bargaining elements. In 2009 the GOMAB bonus payments amounted to € 8.7 million (previous year: € 14.2m). In Germany we also offer an in-company pension plan with an employer's contribution as well as benefits to promote capital formation with the maximum contribution from the employer. In collective bargaining negotiations with the miners', chemical workers' and energy workers' union (IG BCE), our German subsidiaries, DEUTSCHE SOLAR AG, DEUTSCHE CELL GMBH, SOLAR FACTORY GMBH and SOLARWORLD INNOVATIONS GMBH, jointly agreed in 2008 to introduce an individual performance bonus for employees on the negotiated wage rate at the beginning of the year 2009. Payment of the performance bonus is designed to reward employees above-average and very good performance.

In the USA, we provide a Company Bonus similar to the German GOMAB. This bonus is based on group-wide indicators as well as on the performance of SOLARWORLD INDUSTRIES AMERICA INC. and SOLARWORLD CALIFORNIA INC. In 2009, these payouts amounted to € 1.1 million (previous year: € 0.8m). Additionally, in the USA we contribute to the retirement savings plan (401k) of our employees. Furthermore, we offer an annual Individual Bonus Plan (IBP) to professional employees and managers in key positions.

In the year under review we introduced a profit-sharing model similar to GOMAB at our location in South Africa. At other locations such as Singapore and Spain there are also separate bonus systems.

MANAGING IDEAS WITH THE COMPANY SUGGESTION SYSTEM. As a matter of principle there is an open working climate within SOLARWORLD which, due to flat hierarchies and short decision-making paths, is an excellent basis for the quick implementation of good ideas. At all locations the executives in charge check and coordinate suggested improvements on a continuous basis. At our location in Bonn, particularly, we intensively use the additional advantage of direct contact and open communication with the Management Board to permanently optimize processes and structures.

In addition, SOLARWORLD promotes the suggestion system with special programs: At the production locations in Germany and the USA we have, for example, also established a formal suggestion system. In Hillsboro, USA, we created focus groups of employees at the beginning of 2009 that are tasked with making proposals concerning conversion of the shift system. The objective was to optimize effectiveness for the company and employees in production. These were efforts that paid off for both sides: The result was that, in July 2009, the old rotation principle was replaced by a compressed working week. The new working time model provides for longer shifts in a shorter working week. The new system improvements benefit our employees and at the same time meets our operational requirements.

At our German location Freiberg a total of 209 (previous year: 164) suggestions for improvement were made in 2009. The cost savings from the successfully implemented suggestions was estimated to amount to € 57,950 (previous year: € 35,100).

Another instrument for continuous process optimization is our Total Productive Management (TPM)*.

➔ *Interlinking of management tools • p. 044//* Presently, 27 teams are working at our Freiberg location on increasing process efficiency and thus on cutting costs. TPM is not only limited to production but also refers to the areas of Technical Service, Logistics, and IT. In the future we want to increasingly motivate our employees to participate in TPM, which is why we have offered a “Challenge Cup” that is going to be awarded every six months based on factors such as the results of the monthly “walk-arounds” as well as the audits. Initially, only teams from Freiberg may apply, but in the future it is conceivable that the “Challenge Cup” will also be offered globally.

INQUIRING ABOUT EMPLOYEE SATISFACTION, DISCOVERING IMPROVEMENT POTENTIALS. In the course of the year under review SOLARWORLD has identified different indicators that permit conclusions to be drawn as to employee satisfaction. ☉ *Report on sustainable corporate management/social key performance indicators • p. 242//*

What is more, employees at our German locations were able to take part in the “Germany’s Best Employer 2010” study by the Great Place to Work® Institute in June 2009, in which questions were asked about team orientation and fairness within the company. This voluntary offer was taken up by 58 per cent of the employees. SOLARWORLD successfully placed itself on the list of the 100 best employers in Germany.

➔ *SolarWorld is one of Germany’s best employers • p. 111//*



SUPPLEMENTARY REPORT

DISCLOSURE OF TRANSACTIONS OF PARTICULAR IMPORTANCE

BOND SUCCESSFULLY PLACED. In mid-January 2010, SOLARWORLD AG successfully emitted a bond worth € 400 million. Most of the bonds were placed with financial institutes and investors in Germany and other European countries.

SPECIAL REDUCTION OF FEED-IN TARIFFS ANNOUNCED IN GERMAN EEG. At the end of January the Federal Ministry of the Environment presented a draft for an amendment of the EEG. Since then this has been widely discussed. The amendment is designed to come into force on 1 July 2010. It has not yet been finally passed and still needs the approval of the Bundestag. ➔ [EEG amended](#) • p. 136//

SOLARWORLD AGAIN WINS IN THE PHOTON MODULE YIELD TEST. According to an annual evaluation by the Photon trade journal published in February 2010, our SW 210 POLY MODULE again came out as the best module in a field test. ➔ [Facts: Quality "Made by SolarWorld"](#) • p. 088// Our module generated the highest standardized annual yield per installed capacity. The group thus again achieved top position with respect to a crucial quality criterion and purchasing argument.

NEW FEED-IN TARIFFS ADOPTED IN EUROPEAN SOLAR MARKETS. A new feed-in tariff⁹ system entered into force in France in January 2010. Tariffs for integrated roof systems were reduced slightly but remained attractive by international standards at 0.58 €/kWh. The market is expected to gain additional momentum from an increase in the feed-in tariff for free-field systems, granted as a function of the radiation intensity at the respective site. In February a new feed-in tariff program was adopted in the UK; it is to enter into force as of 1 April. It will apply to plants with a maximum size of 5 MW.

SOLARWORLD IS ONE OF GERMANY'S BEST EMPLOYERS. For the second time, SOLARWORLD successfully participated in the survey "Germany's Best Employers" of the Great Place to Work[®] Institute. www.greatplacetowork.de// We achieved 55th position, having ranked 57th in 2008. The survey mainly assesses the corporate culture⁹ in the companies taking part. Employees participate in an anonymous online survey, assessing the five dimensions of credibility, respect, fairness, pride and team orientation.



GROUP STRUCTURE MODIFIED. Effective 11 February 2010 our Korean joint venture⁹ partner made use of his right to acquire 26.5 per cent of the shares in SOLARWORLD KOREA LTD. On 1 March 2010 SOLARWORLD AG agreed a joint venture with the Qatar Foundation. We will acquire a stake of 29 per cent in Qatar Solar Technologies (QST) located in the Emirate of Qatar. In addition to the Qatar Foundation (70 per cent) the Qatar Development Bank (1 per cent) will also be part of the Joint Venture. The QST will invest more than 500 million US\$ in the construction of a silicon production facility. → [Legal group structure modified](#) • p. 048//

IMPACT OF TRANSACTIONS OF PARTICULAR IMPORTANCE

BOND ENHANCES FLEXIBILITY. The successful placement of our bond, which will mature in seven years, strengthens our financial flexibility for our planned growth. → [Future liquidity](#) • p. 146//

EEG AMENDMENT INCREASES COST PRESSURE. The announced amendment to the German Renewable Energy Sources Act (EEG) has created additional consolidation pressure within the solar sector. It will not be possible to directly offset the additional decline (on top of the reduction of 9 per cent already effected in January), in full through cost reductions. Nevertheless, SOLARWORLD will push ahead with its cost cutting program. → [Strategy and action](#) • p. 033//

QUALITY LEADERSHIP CONFIRMED. The renewed good rating of our solar modules in an independent test confirms our quality strategy. This gives us a key edge in international competition and strengthens our positioning as quality leader.

SOLARWORLD BENEFITS FROM PRESENCE IN EUROPEAN MARKETS. Europe will remain a major sales market for SOLARWORLD. The amendment to the feed-in tariff⁹ in France and the new act in the UK will open up new potential in these young European markets for solar power technology. Demand in these two countries is expected to continue to grow over the next few years; this will benefit SOLARWORLD with its strong presence in Europe and its regional flexibility.

STRONG EMPLOYER BRAND SECURES GROWTH. We will only be able to continue to grow successfully if we win and retain highly qualified employees. A strong public employer brand will give us a competitive edge over our competition.

JOINT VENTURE PARTNER BUYS STAKE IN SOLARWORLD KOREA LTD. Thus, both SOLARWORLD AG and our partner again hold 50 per cent each in the Joint Venture.



RAW MATERIAL SUPPLY SUPPLEMENTED. Through the newly formed joint venture Qatar Solar Technologies SOLARWORLD AG will have access, probably from the end of 2012 onwards, to a supplementary, inexpensive source of raw material for further expansion.

OVERALL STATEMENT BY THE MANAGEMENT BOARD ON THE ECONOMIC SITUATION AT THE TIME OF THE REPORT

The economic situation of the group is rated as positive by the management of SOLARWORLD AG, taking into account our net assets, financial position and results of operations resulting from the consolidated annual financial statements for 2009 and outlined above, as well as considering the ongoing business in 2010 at the time of drawing up the group management report.



REPORT ON EXPECTED DEVELOPMENT WITH ITS MAJOR OPPORTUNITIES AND RISKS

RISK REPORT

OPPORTUNITY AND RISK MANAGEMENT SYSTEM

SOLARWORLD's corporate strategy underlies our opportunity and risk management⁹ system → *Strategy and action* • p. 033// based on which the Management Board defines our risk policy. We implemented a group-wide opportunity and risk management system that is integrated into our business processes. Moreover, all fully consolidated companies of the SOLARWORLD Group are incorporated into our opportunity and risk management. → *Notes/Scope of consolidated financial statements and legal group structure* • p. 160// Risks are identified and monitored in a decentralized manner by the management of the operating business units. On the basis of a standardized reporting system, monthly risk reviews are presented to the Management Board; any current risks and opportunities are immediately notified to the Board. In close alignment with Group Controlling, the Management Board is able to assess the impact of identified risks and opportunities on our net assets, financial position and results of operations without delay and to initiate counter-measures where required.

Group-wide bodies to identify, analyze and handle corporate strategy and performance opportunities and risks include our strategy meetings, in addition to Management Board meetings. At these meetings, which take place several times a year, the Management Board discusses any possible opportunities and risks with the managing directors and Board members of the subsidiaries – also with regard to corporate issues such as HR strategy and information technology. The Group Committee, which meets once a year, also involves the managing directors and the senior managers of the operating units. These bodies form a broad group-wide basis for our opportunity and risk management and enable us to rapidly implement the decisions taken at all management levels.

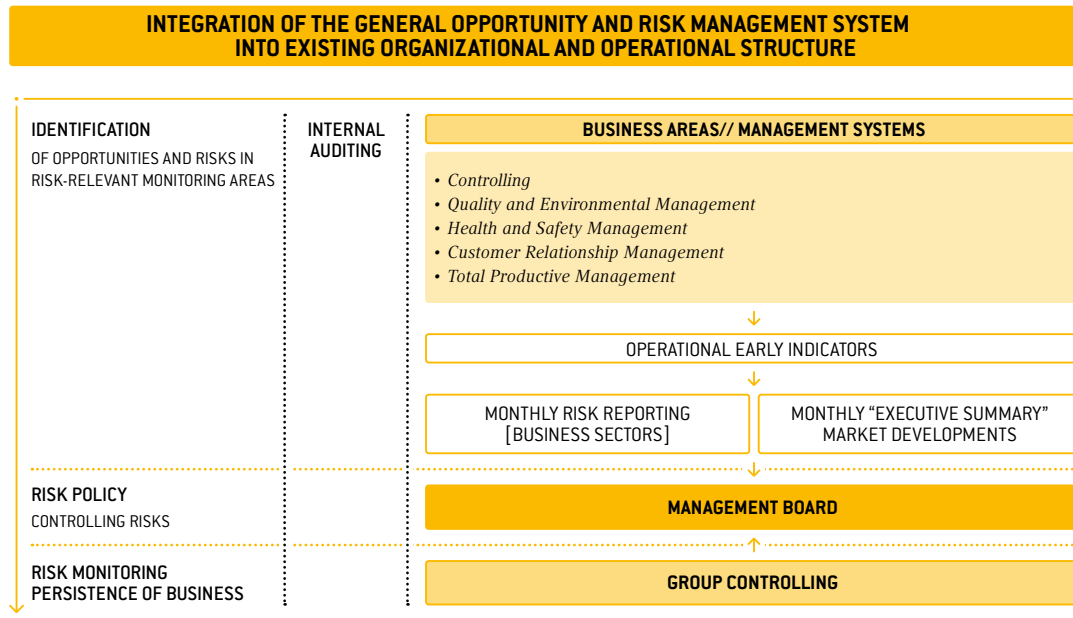


Opportunities and risks arising from the general economic conditions are determined by means of market, tendency and competition analyses in Investor Relations, Marketing and Distribution. They are evaluated and reported to the Management in the form of a monthly executive summary. In order to minimize ecological and social risks and tap economic opportunities, we have developed an integrated sustainability management system which reports directly to the Board in its function as a control and monitoring tool. We also operate an integrated group-wide quality and environmental management⁹ system → [Interlinking of management tools](#) • p. 044// in order to counter risks in our process chain and make quality process and environmental standards transparent. Statistics on waste, emissions, waste water, power consumption and the use of consumables facilitate early detection and risk identification with regard to consumption data. The monitoring of laws and regulations, for instance laws and guidelines against insider trading, is the responsibility of our compliance officer, backed by legal advice from external lawyers. External specialist legal experts also provide integrated consultation on general legal risks.

In order to limit the remaining risks, SOLARWORLD has taken out corresponding insurance cover to minimize risks. The extent of the cover is regularly reviewed in order to keep pace with our steady growth. Our opportunity and risk management system is evaluated by our auditors on an annual basis.

We will only be successful over the long term if we seize opportunities while identifying risks at an early stage, analyzing them, and managing and controlling them accordingly. Considering the acceptable overall risk level, the Management Board decides whether any risks are taken in a controlled manner to seize opportunities. Where the decisions taken are of fundamental importance to the company, the Supervisory Board is also involved. We thus identify developments that might jeopardize the continued existence of our company at an early point in time.

④ INTEGRATION OF THE GENERAL OPPORTUNITY AND RISK MANAGEMENT SYSTEM



INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM REGARDING THE GROUP REPORTING PROCESS

The objective of the control and risk management system regarding the (group) reporting process is to make sure that the reporting is uniform and in line with the legal requirements, the generally accepted accounting principles and the International Financial Reporting Standards (IFRS)⁹ as well as internal group guidelines so as to give recipients of the annual financial statements true and reliable information. To this end SOLARWORLD has principles, processes and measures whose essential characteristics can be described as follows:

Within SOLARWORLD AG and/or the SOLARWORLD Group there is a clear-cut management and enterprise structure in which the various group companies enjoy a large measure of independence and individual responsibility. On this basis the functions of Finance and Accounting, Controlling and Investor Relations essential to the reporting process are controlled right across the group by appropriate departments at SOLARWORLD AG.

The functions and responsibilities of Finance and Accounting, Controlling and Investors Relations are clearly separated and allocated with mutual control processes assuring a continuous exchange of information.

The basis of the internal control system is provided by precisely defined preventive and monitoring control mechanisms like systematic and manual coordination processes, predefined approval processes, the separation of functions and the adherence to guidelines.

The financial systems used are protected against unauthorized access by appropriate installations in the IT system. Standard software is used as far as possible.

Uniform reporting is guaranteed in particular by reporting guidelines that apply group-wide and by a standardized reporting format. The guidelines and the reporting format are regularly reviewed and updated by members of the group accounting department.

The group companies prepare their financial statements locally and communicate these in the prescribed format to group accounting. They are themselves responsible for adherence to the group reporting guidelines as well as the proper and timely management of all reporting-related processes and systems. In this context they are fully supported by group accounting throughout the entire reporting process.

Adherence to the reporting guidelines as well as to time and process requirements are monitored by group accounting. In addition to systems technology controls there are manual controls and analytical audit procedures. Here the appropriate control environment is taken as much into consideration as the relevance of certain reporting facts with regard to the contents of the financial statements.

For special technical questions and complex reporting issues group accounting acts as the central interlocutor. If required external experts (auditors, qualified accounting specialists, etc.) will be consulted.

On the basis of the data supplied by the group companies consolidation will take place centrally in group accounting. At least a four-eyes-principle will apply at each level.

Independently of group accounting a monthly analysis of target/actual and actual/actual deviations is conducted by group controlling as a result of which an examination of major or implausible changes takes place at an early point in time.



RISK MANAGEMENT SYSTEM REGARDING FINANCIAL INSTRUMENTS

The SOLARWORLD Group as an internationally operating group of companies is subject to market, liquidity and default risks within the framework of its business activities with regard to its assets, liabilities and future transactions either fixed or planned. The task and objective of risk management regarding financial instruments is to monitor these risks continuously and to limit them by way of operational and financial measures.

The monitoring of the risks involved lies in the responsibility of the respective board members and managing directors of the subsidiaries who report to the Board of Management of SOLARWORLD AG on existing and newly emerging risks. For the use and handling of financial instruments there are rules and regulations designed specifically to make sure that no major financial transactions take place without coordination with the Board of Management of SOLARWORLD AG. Derivative financial instruments are regularly only used for hedging purposes. Apart from this we refer you to the following information on the respective individual risks and the remarks in the → [Notes/Principles and Goals of Financial Risk Management](#) • p. 196//.

Financial risks such as price, currency, and interest rate risks arising through our increasing international business are countered by means of general contracts, maturity structures and hedges in line with our risk management.

CORPORATE RATING

The SOLARWORLD Group is not subject to an official rating^a by Standard & Poor's, Moody's or comparable standards.

INDIVIDUAL RISKS

LEGEND

Risk assessment	
↑	Up on the previous year
↓	Down on the previous year
→	Flat on the previous year
×	Does not exist
Time horizon of effects	
Short term:	One to three years
Medium term:	Three to five years
Long term:	More than five years

PRELIMINARY NOTE: With regard to the risk analysis and the disclosure of counter-measures we do not distinguish between the reportable operative “Production Germany” and “Production USA” segments in our in-house production. By contrast, risk factors to be assessed differently for different regions constitute exemptions.

↓	Macroeconomic risks
Risks	<ol style="list-style-type: none"> 1. Worsening of the financial crisis and/or the recession: Falling propensity to invest among private end customers; tighter financing terms and conditions for investors in large-scale solar projects 2. Falling electricity prices for private households: Delays in solar power reaching grid parity; slowdown in tapping new markets
Probability	<ol style="list-style-type: none"> 1. Low: According to economic experts the recession has already bottomed out. We therefore assess the risk of a falling propensity to invest among private end customers as low. They will continue to have access to loans for investments in solar power systems in the framework of programs to promote economic activity. Medium: We assess the risk of tighter financing terms and conditions for large-scale projects as medium. According to experts, the most difficult phase of the financial crisis is behind us. Nevertheless, there may be short-term credit bottlenecks for large-scale investment projects. 2. Low: We assess the risk as low. Falling costs of primary sources of energy are hardly ever passed on to customers. Due to a further rise in energy demand, prices are expected to tend to rise in future.
Effect (strength, time horizon)	<ol style="list-style-type: none"> 1. Medium, short term: A decline in demand from end customers might have a medium negative effect on our group revenues and earnings. Low, short term: Large-scale projects only represent a small portion (9 per cent) of our revenues. If these investments were to decline, the negative effect on SolarWorld would be minor. 2. Medium, medium term: In the medium term, household power prices will impact on our business since, due to the incentive system for self-consumption of solar power, the economy of solar plants will be affected by price expectations for household electricity in the medium term.
Counter-measures	<ul style="list-style-type: none"> • Trade: Our internationalization strategy helps us spread the risk of a decline in consumption between different markets. → <i>Future sales markets 2010+ • p. 141 //</i> • Production; Other: Ongoing cost reductions and efficiency enhancements along the entire value chain⁹ help us shape competitive prices. → <i>Enhancing cost efficiency • p. 142 //</i>

↑ Political and regulatory risks	
Risks	Changes in laws to promote solar power: Slower market growth due to a reduction in, or even abolition of, financial incentives in individual countries
Probability	High: In our sales markets, Germany and Italy, changes in the regulatory framework have been announced and will probably take effect as of mid-2010 or 2011. → EEG amended • p. 136// → Growth in European markets • p. 137//
Effect (strength, time horizon)	High, short term: Declines in demand due to changes in the regulatory framework in individual regions may temporarily impact our revenues and earnings. As long as grid parity ² is not achieved in individual markets, SOLARWORLD will be exposed to this risk.
Counter-measures	<ul style="list-style-type: none"> • Trade: Our internationalization strategy helps us spread the risk between several markets. → Future sales markets 2010+ • p. 141// • All segments: Continual cost reductions and efficiency enhancements facilitate faster achievement of grid parity and thus far-reaching independence from promotion incentives as well as long-term competitive pricing. → Enhancing cost efficiency • p. 142//

↑ Risks from tougher competition	
Risks	Intensification of competitive pressure: A tendency towards consolidation at all stages of the value chain in the industry, price competition, oversupply
Probability	High: Due to development of the solar market towards an end customers' market, competitive pressure is intensifying significantly. The fight for market shares and an ongoing expansion of supply will result in price reductions in the wafer and module segments. → Further rise in supply • p. 135//
Effect (strength, time horizon)	Medium, medium term: Potential loss of market shares and stronger pressure on margins due to tighter price competition may have adverse effects on revenues and earnings. Due to our solid market position, we assess the probability of a significant impact of this risk on our group as medium.
Counter-measures	<ul style="list-style-type: none"> • Trade: Investments in expansion of the SolarWorld brand; differentiation of our products through quality, service, innovation; customer retention programs. → Brand investments stepped up – demand effects for our group and our customers • p. 084// • Production: Stronger expansion of production capacity in the cell and module segments in order to secure economies of scale and optimize our cost structure; → Facts: Worldwide production capacities • p. 140// cost reduction through efficiency enhancements • Production: Utilization of existing and future wafer capacity through selling our wafers to a diversified customer base and internal processing of wafers to solar modules

↓ Risks arising from alternative solar power technologies	
Risks	Technological breakthrough of alternative solar power technologies: Risk of substitution for crystalline technologies
Probability	Medium: Due to the fall in silicon prices, previous cost advantages of alternative solar power technologies versus crystalline technologies have declined. This applies mainly to the rooftop systems market. The potential for these companies to succeed is additionally impaired by the more difficult financing environment. Few of these companies have so far been able to produce on an industrial scale. These technologies might also be adversely affected by future regulation measures, disposal risks and the finite nature of the raw materials used such as cadmium, tellurium and indium. ➔ <i>Supply exceeds demand</i> • p. 073//
Effect (strength, time horizon)	Medium, medium term: A potential loss of market shares and increasing price competition with stronger pressure on margins might adversely affect our revenues and earnings.
Counter-measures	<ul style="list-style-type: none"> • Production; Other: Ongoing investments in research and development in order to enhance efficiency and optimize costs • Production; Other: Regular, analytical observation of the development of alternative solar power technologies in the market. ➔ <i>Opportunity and risk management system</i> • p. 144//

→ Procurement risks	
Risks	<ol style="list-style-type: none"> 1. Convergence of contract and spot market prices for silicon: Long-term silicon contracts less advantageous, higher procurement costs than competitors 2. Supply bottlenecks for kit components, consumables: Security of supply at risk
Probability	<ol style="list-style-type: none"> 1. Medium: With a rise in silicon supplies, the risk of market prices falling below the level agreed under long-term contracts increases. 2. Medium: The solar industry is a young sector so that supply bottlenecks may occur at suppliers of industry-specific consumables and kit components, e.g. inverters⁹ at the current point in time.
Effect (strength, time horizon)	<ol style="list-style-type: none"> 1. Medium, short term: Unchanged procurement costs might cause margin erosion if wafer and module prices should fall; they might thus have an adverse effect on our earnings. As a major silicon customer, we have good long-term relationships with our suppliers, giving us flexibility in renegotiations. We assess the effect of this risk on our business as medium. ➔ <i>Procurement</i> • p. 079// 2. Medium, short term: Bottlenecks in supplies of kit components and consumables may adversely affect our cost structure, slow down production processes, and thus reduce our earnings.
Counter-measures	<ul style="list-style-type: none"> • Production; Trade: Expansion of our supplier networks and maintenance of our good, long-term supplier relationships ➔ <i>Future procurement</i> • p. 143// • Production; Trade: International procurement management and supplier diversification increases independence from regional bottlenecks. • Production; Trade: Use of alternative products reduces dependence on individual suppliers. • Other; Production: Continuous reduction of silicon requirements per watt-peak

↑ Default risks	
Risks	Insolvency of individual customers: Loss of receivables outstanding
Probability	High: Due to rising consolidation tendencies in the market, the risk of wafer and trading costumers' insolvency is increasing. We assess this risk as high for us.
Effect (strength, time horizon)	Medium, short term: Contractual defaults and non-performance of payment obligations might have a negative effect on earnings and our order book.
Counter-measures	<ul style="list-style-type: none"> • Production; Trade: Ongoing monitoring and analysis of receivables and selective conclusion of credit insurance. • Production; Trade: Cash in advance and/or down payment arrangements.

↑ Sales and price risks	
Risks	<ol style="list-style-type: none"> 1. Stronger price pressure and increased supply: Falling demand for our products 2. Purchase of less than agreed volume: Non-performance of long-term wafer contracts
Probability	<ol style="list-style-type: none"> 1. Medium: Due to growing internationalization, tougher competition and changes in the legal framework in the core market Germany, price and cost pressure might emerge in the market. Shifts in demand might increasingly be observed among customers basing their purchasing decision exclusively on price. ↻ <i>The future solar power market</i> p. 135// 2. High: Due to the dropped market prices and the increased supply of wafers, it is to be assumed that not all wafer customers will meet their contractual purchasing obligations in 2010 or demand re-negotiations.
Effect (strength, time horizon)	Medium, short term: None of our customers for wafers or modules accounts for more than ten per cent of our revenues. Sales and contractual defaults might have a negative effect on our earnings and order book. They can also lead to inventories being built up. If long-term contracts were to be cancelled, downpayments already made by customers would be retained.
Counter-measures	<ul style="list-style-type: none"> • Production: Flexibility through vertical integration. Building of capacities in order to be able to process not delivered wafer volumes into brand modules in our in-house value chain. • Trade: Further expansion of our brand and positioning as a quality supplier as customer retention measures. Risk diversification to considerably more than 100 international systems integrators, specialized wholesalers and installers as customers.

→ Corporate strategy risks	
Risks	Misjudgments concerning future developments: Wrong investment and technology decisions, lack of market acceptance for newly developed products.
Probability	Low: Thanks to our long-standing market experience and the conclusion of important partnerships and strategic alliances, we assess the probability of this risk as low.
Effect (strength, time horizon)	High, long term: Losses of market shares, image, and capital due to wrong strategic decisions might adversely affect the economic situation of our group. Lack of acceptance of new products might have a negative effect on revenues and earnings.
Counter-measures	<ul style="list-style-type: none"> • All segments: Identifying market trends by means of market analyses in all business segments and long-term relationships with customers, suppliers and political decision-makers. → <i>Opportunity and risk management system</i> • p. 114// • Production; Other: Concluding strategic alliances and joint ventures to split up the investment risk. • Other: Performing broadly based research and development activities and cooperation schemes with universities and research centers. → <i>Innovation report 2009</i> • p. 090//

→ Human resources risks*	
Risks	Shortage of highly qualified technical staff and executives: Difficulties in filling key positions.
Probability	Low: Due to our reputation as an attractive employer and increasing personnel marketing, we assess this risk as low for us. Moreover, interest in solar companies has risen in the labor market due to the growth of the solar industry.
Effect (strength, time horizon)	Medium, medium term: Potential reduction in our technological edge and corporate growth due to shortage of skilled technical staff may adversely affect our revenues and earnings.
Counter-measures	<ul style="list-style-type: none"> • All segments: Selective, needs-oriented development of skills of our existing staff • All segments: Strengthening our image as an attractive employer, university marketing, research cooperation schemes. → <i>Human resources – future development</i> • p. 144// • All segments: Promoting employee motivation through strong leadership and corporate culture, working hour schemes and profit-oriented variable remuneration schemes • All segments: Defining deputies and powers within the framework of our quality management system

* We also refer to the social performance indicators recorded in the integrated Sustainability Report, which indicates further risks from the perspective of “employees” as a stakeholder group. → *Report on sustainable corporate management/Social performance indicators* • p. 242//

→ IT risks	
Risks	Disturbances in the operation of IT systems and networks: Data security risks and interruption of work at our sites worldwide
Probability	Medium: Our IT systems comply with state-of-the-art safety standards and undergo regular maintenance.
Effect (strength, time horizon)	Medium, long term: Productivity losses due to interruption of production and workflows might have a negative impact on our productivity.
Counter-measures	<ul style="list-style-type: none"> • All segments: Regular investments in updates and soft- and in hardware systems; up-to-date virus scanners and firewalls reduce the risk of virus and hacker attacks; certified systems to enhance safety and reliability • All segments: Separation of IT systems from production and administration in order to minimize potential failure risks • All segments: Regular multiple daily backup of data

→ Liquidity risks	
Risks	<ol style="list-style-type: none"> 1. Credit crunch: More difficult access to credit markets; rise in financing costs due to widening of interest spreads and shorter maturities in lending 2. Failure to reach financial indicators: Termination of borrowed funds
Probability	<ol style="list-style-type: none"> 1. Low: Due to our long-term credit agreements and our strong liquidity, we assess the short-term risk as low for us. Should the situation in the credit business not improve over the medium to long term, we would have to accept a widening of spreads⁹ in future financing measures. 2. Low: In the fiscal year the financial indicators were regularly exceeded substantially.
Effect (strength, time horizon)	<ol style="list-style-type: none"> 1. Medium, medium term: Tougher lending commitments would have a medium negative impact on the funding options for our expansion plans. 2. Medium, medium term: Premature refinancing needs with potentially poorer conditions.
Counter-measures	<ul style="list-style-type: none"> • All segments: Diversification and expansion of the capital base of our group by means of capital measures concluded in previous years. In 2009 a syndicated loan was additionally taken out → <i>Liquidity analysis</i> • p. 102// In early 2010 we placed a bond worth € 400 million on the capital market. → <i>Estimated development of liquidity</i> • p. 146// • → <i>Notes/Liquidity risks</i> • p. 199//

↑ Other financial risks	
Risks	Currency, interest rate and price risks
Probability	Medium to high: Due to the procurement of raw materials, in particular in US dollars, and the sale of US products in other currency regions, we are exposed to currency risks. As a global player we are also exposed to interest rate and price risks.
Effect (strength, time horizon)	Medium, long term: Impact on the financial results of our business operations. Thanks to the pro-active, regular, careful review of our financial instruments, we assess these risks as controllable.
Counter-measures	<ul style="list-style-type: none"> • All segments: Specific use of derivative and non-derivative financial instruments • → Notes/ Financial instruments • p. 196//

→ Legal risks	
Risks	Legal risks: A wide range of tax, competition, patent, anti-trust, copyright and environmental provisions in the framework of our international business operations
Probability	Low: SolarWorld is currently not aware of any risks from litigation, patent infringement or other legal risks that might significantly impact the business situation of our company.
Effect (strength, time horizon)	Medium, long term: Litigation might have an impact on earnings from business operations since it would tie up financial resources and might jeopardize our reputation.
Counter-measures	<ul style="list-style-type: none"> • All segments: integrated legal advice from external legal experts

→	Warranty, liability and other risks*
Risks	<ol style="list-style-type: none"> Warranty risks: Granting a warranty of 25 years for solar modules which we sell. Since 1 January 2010, this has been a linear performance warranty. Other customary liability risks
Probability	<ol style="list-style-type: none"> Low: Due to the careful review of our process and product quality, we assess the risk of claims being made against our product warranty as low. Low: Thanks to pro-active regular controls concerning protection against hazards and health and safety protection at our sites, we assess the probability of these risks as low.
Effect (strength, time horizon)	<ol style="list-style-type: none"> Medium, long term: Potential negative impacts on our net assets, financial position and results of operations in the event of warranty Medium, long term: Production loss, loss of assets, potential claims for damages
Counter-measures	<ul style="list-style-type: none"> All segments: Risk provisioning in our balance sheet for our warranty commitment through the formation of a provision.⁹ → <i>Notes/Non-current and current provisions</i> • p. 192 // All segments: Securing other risks via comprehensive insurance cover based on customary market concepts; regular review of the extent of insurance cover for our risks based on site inspection.

* We also refer to the performance indicators recorded in the integrated Sustainability Report, which indicate further risks from the perspective of SolarWorld's stakeholders. ☉ *Report on sustainable corporate management/Performance indicators* • p. 242 //

OVERALL STATEMENT BY THE MANAGEMENT BOARD ON THE RISK SITUATION OF OUR GROUP

According to our assessment, the risks described above are controllable and do not jeopardize the continued existence of the SOLARWORLD Group at the time of reporting. This applies both to the individual companies and the group. The overall risk situation resulting from the individual risks presented above has changed year-on-year, in particular due to tighter competition and potential changes in the regulatory framework. In connection with the individual risks mentioned and based on the assumption that the market will remain stable, no negative deviations of the developments outlined in the Forecast Report will occur. From today's perspective we do not expect any major changes in the risk situation.

×	Risks endangering the continued existence of the company
Risks	Risks threatening the SOLARWORLD Group's continued existence as a going company
Probability	From the management perspective, there are no specific trends apparent that might have an essential and sustained negative impact on the SolarWorld Group's net assets, financial position and results of operations.
Effect	Negative effect on the results from our business operations, risks endangering the going company assumption
Counter-measures	<ul style="list-style-type: none"> • Our opportunity and risk management system observes external and internal developments in order to be able to act in good time • At present there are no risks apparent which would endanger the SolarWorld Group's continued existence as a going company

OPPORTUNITIES

OPPORTUNITIES FROM THE DEVELOPMENT OF GENERAL CONDITIONS

FURTHER RISE IN ENERGY DEMAND. The steady increase in the demand for energy is one of the megatrends that will codetermine the development of the global economy over the short, medium and long term. This trend is influenced and reinforced by global population growth and the steadily rising demand of developing countries and emerging economies for a share in wealth and social well-being.

According to the reference scenario of the World Energy Outlook 2009 of the International Energy Agency (IEA), global demand for power will rise by 66 per cent to 28,930 TWh over the next 20 years. Non-OECD countries will account for over 80 per cent of this growth. ⁵⁰ *Worldwide electricity consumption* • p. 131//

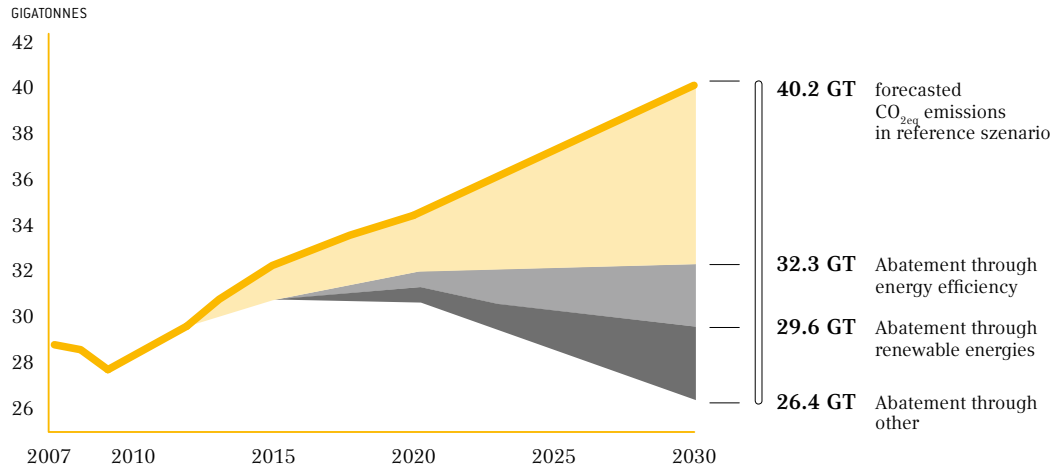
RENEWABLE ENERGIES GAIN IMPORTANCE. A crucial concern for the future will not only be to cover the demand for energy – it will also have to be climate-friendly. Renewable energies⁹, including solar energy, are increasingly moving to the fore in this regard. Climate change poses one of the key challenges of the 21st century. Its adverse impact will not only have ecological but also economic effects and place a major strain on the global economy in future. That is why demand for low-carbon technologies is increasing, driven on the one hand by national and international political promotion measures and on the other also by rising public awareness of the repercussions of climate change. More than 40 per cent of energy-related greenhouse gas emissions⁹ are currently caused by the electricity sector. Power production is thus the main cause of greenhouse gas emissions, even ahead of transportation (23 per cent) and industry (17 per cent). Accordingly, it entails the largest savings potential. According to the European Photovoltaic Industry Association (EPIA)⁹ solar power will make a major contribution to this. ⁵² *CO₂ savings through solar power 2030* • p. 131//

According to the IEA, renewable energies may over all account for around 20 per cent of the total energy-related savings potential by 2030. In order to achieve this goal, investments of more than US\$ 520 billion will be required within the next ten years.



④⑦ WORLDWIDE ENERGY-RELATED GREEN HOUSE GASES EMISSIONS ABATEMENT

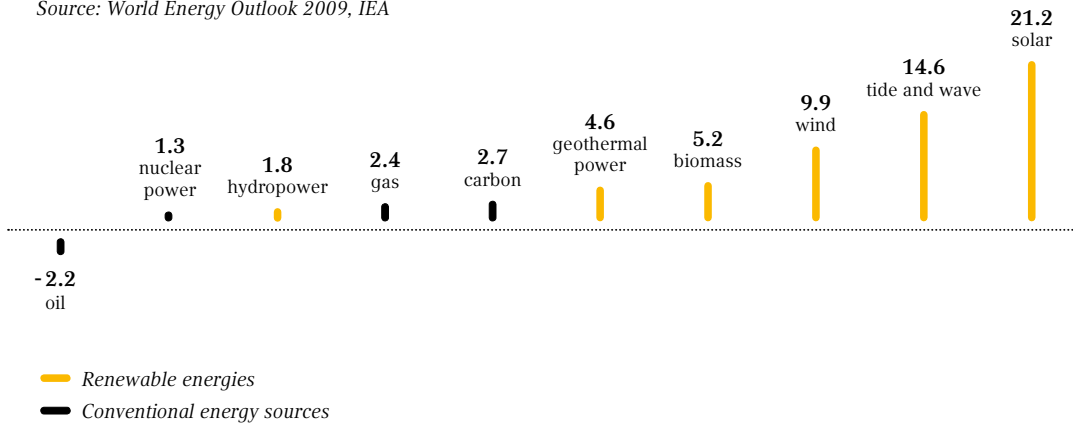
Source: World Energy Outlook, 2009



④⑧ AVERAGE ANNUAL GROWTH RATES BY ENERGY SOURCES FOR POWER GENERATION BY 2030

// IN PER CENT

Source: World Energy Outlook 2009, IEA



According to the EPIA forecast, it will be possible to produce more than 1,291 TWh of electricity worldwide from solar energy in 2030. ④⑨ *Solar power development forecast until 2030* • p. 131// By way of comparison, the current electricity requirement in the entire European Union is approximately 1,700 TWh. The average annual growth rate for solar power will be 21.2 per cent by 2030, according to the IEA reference scenario. Solar power is thus the fastest growing source of energy.

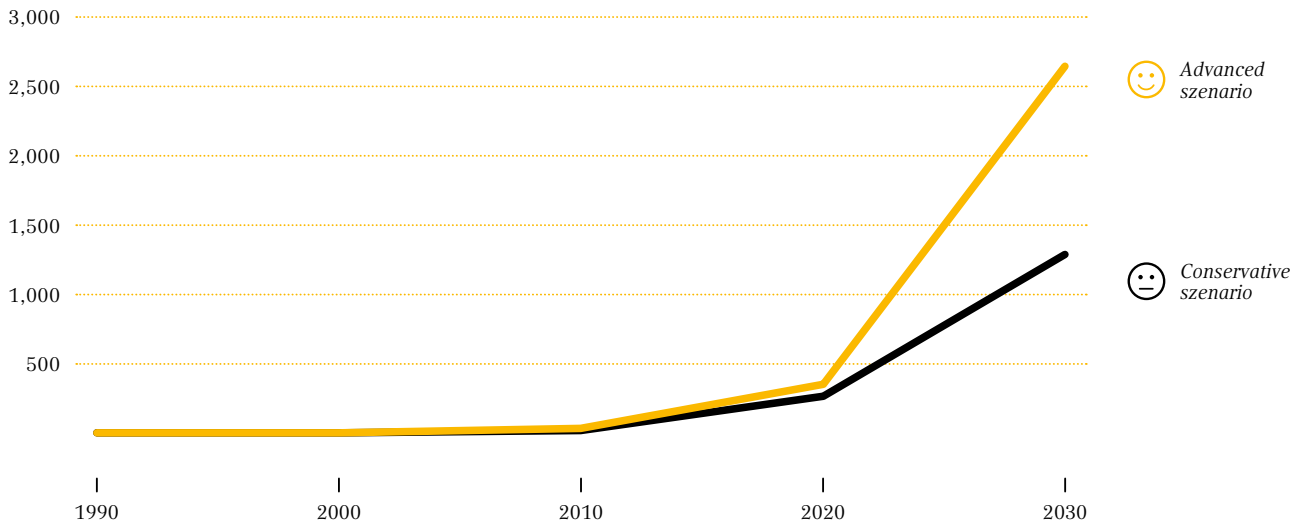
The trend towards renewable energies is also driven by the growing scarcity of fossil fuels and the resulting price increases for conventionally produced power. At the same time, the price of solar power products will continue to fall due to advancing technological optimization, lower cost of materials, economies of scale and learning curve effects. Experts presume that grid parity will be achieved in almost all solar core markets within the next five years. As a result, solar energy will develop into an economic alternative to conventional sources of energy not requiring incentives.

As a fully integrated⁹ solar technology supplier, SOLARWORLD AG consistently uses opportunities arising in the solar energy growth market. The worldwide rise in demand for solar power products is expected to benefit our revenues and earnings in numerous markets. ➔ *Estimated development of revenue and result* • p. 145//

OFF-GRID TECHNOLOGY TAPS NEW MARKETS. Our sound position in the off-grid⁹ applications segment also offers us many opportunities in this future market. According to estimates by IEA 🌐 *World map*// around 1.5 billion people worldwide do not have access to electricity. Solar power technology offers even off-grid regions an uncomplicated and low-maintenance solution for decentralized power production – without requiring the cost- and time-intensive establishment of a grid. EPIA presumes that up to 3 billion people will use this type of power supply by 2030. 📄 *Solar power users worldwide 2030* • p. 131// SOLARWORLD AG not only produces the appropriate technology for these applications, we also have many years of experience with projects in this field and have a presence in the largest off-grid markets with our sales branches in Asia, Africa, and America. We have thus secured a major competitive edge in these hitherto underdeveloped regions, which represent important regions for the future.

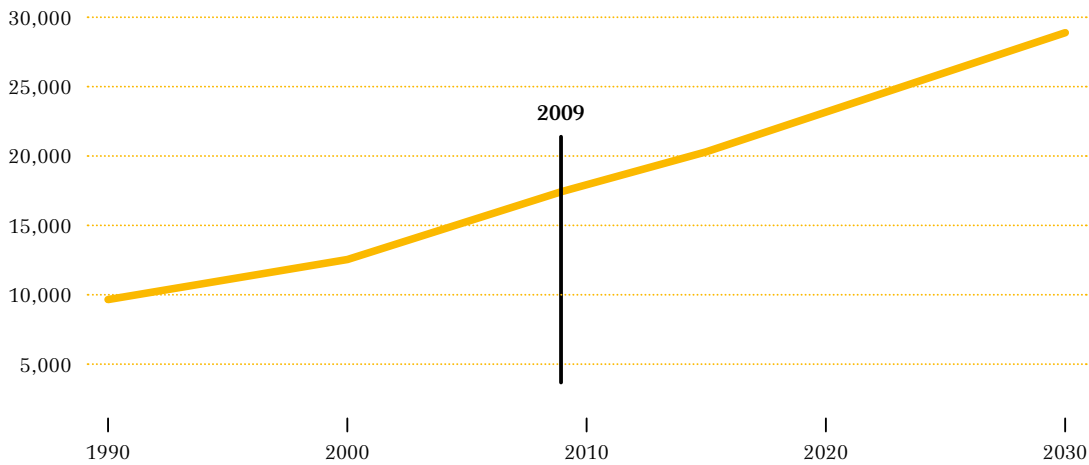
49 SOLAR POWER DEVELOPMENT FORECAST UNTIL 2030 // IN TWH

Source: EPIA Solar Generation V



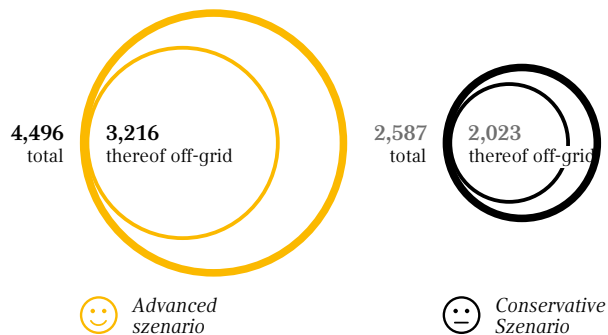
50 WORLDWIDE ELECTRICITY CONSUMPTION // IN TWH

Source: World Energy Outlook 2009, IEA



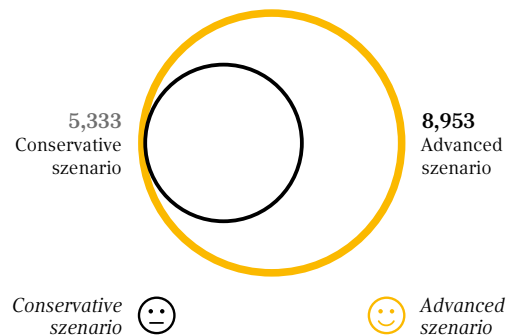
51 SOLAR POWER USERS WORLDWIDE 2030 // IN MILLION PEOPLE

Source: EPIA Solar Generation V




52 CO₂ EMISSIONS SAVINGS THROUGH SOLAR POWER 2030 // IN MTCO₂



Source: EPIA Solar Generation V





STRATEGIC OPPORTUNITIES

LOCATION-RELATED STRATEGY PAYS OFF. For many years we have operated production sites in the key solar markets Europe, USA, and Asia. We therefore not only benefit from good locations  [World map](#), but are also able to respond to rapidly changing regional conditions in a particularly flexible manner and optimize our logistics costs. With the planned capacity expansion at our sites, we are well positioned to take advantage of the enormous growth potential in these markets. At the same time we can benefit from the political framework in these countries and the willingness of the respective governments to support renewable energies⁹ by various means, including financial support. In the framework of the American Recovery and Reinvestment Act 2010, the US administration, for instance, decided to offer tax grants worth US\$ 2.3 billion for companies and their projects in the field of renewable energies, to be realized in the USA as of 2010. For our US subsidiary SOLARWORLD INDUSTRIES AMERICA INC. tax grants of US\$ 82.2 million have been reserved.

We also expect additional corporate strategy opportunities to arise from the establishment of our new US subsidiary, SOLARWORLD POWER PROJECTS INC. This company will be in charge of the design and implementation of large-scale projects in the US market where these projects will play a major role in future.

SELF-CONSUMPTION OF SOLAR POWER GAINS IMPORTANCE. The amendment to the German Renewable Energy Sources Act (EEG)  [EEG amended](#) • p. 136// provides for privileges applying to solar power consumed by plant operators themselves. That is why we are planning to introduce complete solutions, including battery systems, suitable for self-consumption of solar power by the respective households.  [Future products and services](#) • p. 142// We should benefit from the changes to the general legal framework in the German solar market applicable as of July 2010.

ECONOMIC PERFORMANCE OPPORTUNITIES

FURTHER COST REDUCTIONS. According to experts, silicon prices will remain at a low level or even continue to fall.  [The future solar power market](#) • p. 135// For SOLARWORLD as a producer of silicon-based solar power products, this creates opportunities to further cut production costs. Internally, too, we constantly strive to optimize our production processes. Examples include a new design for an aluminium frame for our modules, which enables us to reduce our aluminium demand as of 2010 while increasing frame stability and thus module quality.  [Innovation targets and priorities](#) • p. 092//

IMPROVING THE EFFICIENCY OF LOGISTICS. Enhancing the efficiency of our distribution channels also creates opportunities for the group. At our German production site in Freiberg, we changed our warehouse operations to a four-shift scheme and thus reduced our delivery times in the year under review. As a result, we are able to place the growing shipments of our products swiftly on the markets in line with requirements. In the course of 2010 we intend to further optimize our delivery processes and thus achieve faster product throughput and hence higher sales.



RECYCLING GAINS IMPORTANCE. Additional economic performance opportunities for SOLARWORLD result from expansion of our recycling capacity. Around 21 per cent of the silicon used in the “Production Germany” segment is already generated internally. This strengthens our raw materials basis and reduces costs.

We also actively assume our recycling^s responsibility as a manufacturer of solar power products and thus avoid expensive legally stipulated solutions. As one of the co-initiators of the industry consortium PV CYCLE [\[1\] www.pvcycle.org//](http://www.pvcycle.org/) SOLARWORLD promotes a voluntary European recycling program. To date, a collection system for solar manufacturers has not yet been mandatory, neither under the German Act on Electrical Equipment nor under EU regulations (WEEE Directive^s: Waste Electrical and Electronic Equipment; RoHS Directive^s: Restriction of Hazardous Substances). However, pressure to introduce a binding system is increasing. In Germany, the installation of free-field systems will only be permitted as of 2010 if a system for the collection of end-of-life products, like for instance in SOLARWORLD, is operated. In order to qualify for a loan granted by the German Reconstruction Loan Corporation (KfW), a collection system will probably be a binding prerequisite for crystalline modules, too, as of the end of 2010.

This development offers enormous opportunity for SOLARWORLD as one of the leading suppliers of recycling services. A competitive edge results from the broad portfolio of activities offered. We offer our recycling services for by-products of solar and semiconductor production and processing, from wafer and cell rupture material through to all commercial crystalline solar modules.

OTHER OPPORTUNITIES

We refer to our integrated sustainability report which lists additional opportunities from the perspective of our stakeholders^s – “employees”, “customers” and “suppliers”. ☉ [*Report on sustainable corporate management*](#) • p. 211//



MARKET 2010+

FUTURE ECONOMIC ENVIRONMENT

GROWTH EXPECTED. According to Euroframe, the recession has already bottomed out and the global economy will recover again as of 2010. However, the situation has not yet stabilized and the recovery might be curbed again if new, unexpected economic developments were to occur. On the whole, however, economic experts expect the world trade volume to grow by 7.5 per cent in 2010 and 8.4 per cent in 2011, so that the global Gross Domestic Product (GDP)⁹ is expected to grow again. According to the Euroframe forecast for 2010, GDP will grow by 2.9 (2009: -1.0) per cent. In 2011, growth is expected to be even stronger at 3.8 per cent.

In our production and sales regions, Euroframe expects the economic performance to recover as of 2010, a trend expected to continue in 2011. The anticipated economic performance is expected to benefit demand and the propensity to invest in the solar sector.

⑤③ GROSS DOMESTIC PRODUCT // YEAR-ON-YEAR CHANGE IN PER CENT

Source: Euroframe, 2009; IfW, 2010

Country/region	2009	2010	2011
World	-1.0	2.9	3.8
EU-27	-4.1	1.0	2.2
Germany	-4.9	1.3	1.8
USA	-2.6	2.1	2.8
South Korea	-0.1	4.4	3.8

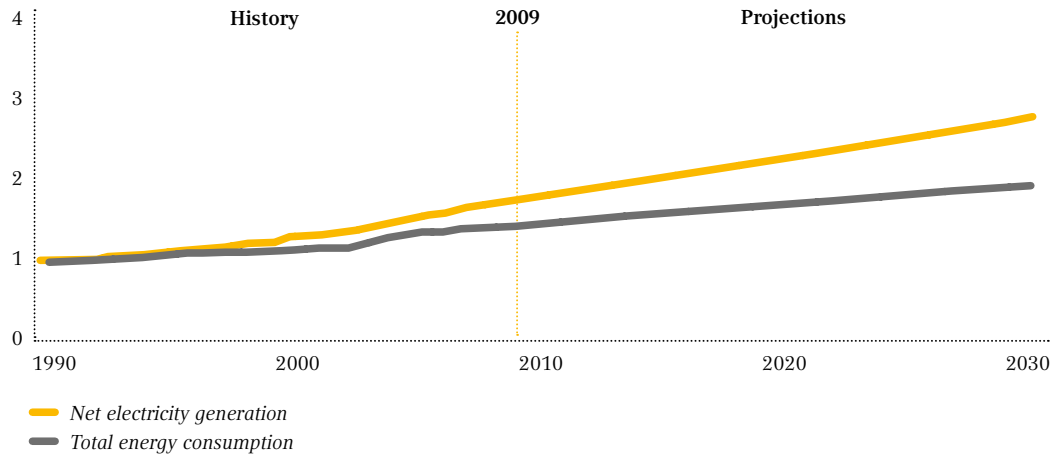
THE FUTURE WORLD ELECTRICITY MARKET

RENEWABLE ENERGIES GAIN MARKET SHARES. With the anticipated recovery of economic activity, the demand for energy is expected to continue to rise worldwide. The Energy Information Administration (EIA) expects the demand for oil to grow by 1.1 million barrels/day to 85.2 million barrels/day in 2010. It also presumes that the average monthly price for oil (WTI) will rise by nine per cent to 82 (December 2009: 76) US\$/barrel by December 2010. Bottlenecks in refinery capacities, reductions in oil production volumes by the OPEC and the scarcity of oil supplies might again trigger strong price volatility.

According to experts, the demand for electricity will grow further in 2010. The EIA expects worldwide electricity consumption to grow by 2.4 per cent to 20.6 billion TWh. According to the EIA, the growth of the electricity market will outperform all other energy sectors in future. Renewable energies will increasingly be used in power production in the next few years (growth rates p.a.: 2.9 per cent), growing more

54 GROWTH OF ENERGY CONSUMPTION AND ELECTRIC POWER GENERATION IN A COMPARISON

Source: Energy Information Administration, 2009



strongly than other energy sources (gas: 2.7 per cent, coal: 2.5 per cent, nuclear power: 1.5 per cent). Renewable energies⁹ will thus gain additional market shares in the international energy mix.

THE FUTURE SOLAR POWER MARKET

MARKET GROWTH FORECAST. Although the structural change of the solar market has not yet ended, the general conditions in the forthcoming years are expected to improve again. Bank Sarasin analysts expect newly installed solar power capacity in the international solar market to grow by 46 per cent to 8.4 (2009: 5.8) GW. In 2011 the market is expected to grow further with an anticipated newly installed solar power capacity of 12.7 GW. The European Photovoltaic Industry Association (EPIA)⁹ forecasts newly installed solar power capacity of 6.0 to 10.8 GW for 2010. For 2011 the forecast growth corridor ranges from 7.5 to 17.4 GW.

FURTHER RISE IN SUPPLY. Increasing competition in the silicon market and the expansion of production capacity to 68,000 (2009: 67,000) tonnes in 2010 and 98,000 tonnes in the subsequent year are expected to create a further decline in silicon prices. The Sarasin Bank expects the average price to fall to 45 (2009: 55) US\$/kg in 2010 and 40 US\$/kg in 2011. This will help manufacturers of crystalline solar power technology – such as SOLARWORLD – to further cut their production costs so that it will be easier for them to compensate for potential price reductions in modules.

Solar manufacturers can tap additional cost savings potential through efficiency enhancements in wafer and cell production. As a result, average silicon demand is to be reduced by five per cent to 7.8 (2009: 8.2) g/Wp as early as in 2010 and to 7.6 g/Wp in 2011.

In the next two years, global production capacity for wafers, cells and modules will continue to rise. Asian competitors, in particular, have announced ambitious expansion schemes. The Sarasin Bank therefore anticipates growth in crystalline cell production of 53 per cent to 12.5 (2009: 8.1) GW in 2010 and a further 21 per cent to 15.2 GW in 2011. Manufacturers of alternative solar technologies such as thin film will also expand their production capacity, although many research projects carried out in this area will probably not result in marketable products due to the more difficult funding environment. Moreover, potential cost benefits of these manufacturers will be less relevant due to the fall in crystalline cell and module prices. By contrast, more mature technologies such as module production based on cadmium/telluride will probably gain market shares. However, this technology which uses highly poisonous substances might fall under future regulation provisions. The use of cadmium is already governed and has been limited by the EU Chemicals Regulation.

The rise in supply will probably cause further price reductions, a key step on the way to achieving grid parity⁹. Once parity will have been achieved, completely new markets will open up for the solar sector, regardless of incentive schemes. In the long term, the sector will therefore benefit from falling prices. Consolidation tendencies in the market provide established companies such as SOLARWORLD with an opportunity to gain additional market shares and strengthen its position as a quality supplier.

EEG AMENDED. Despite the planned amendment to the German Renewable Energy Sources Act (EEG), experts predict that Germany will remain the world's largest solar market in 2010. EPIA expects newly installed capacity of up to 2.8 (2009: 3.0) GW. As the growth corridor of 1.5 GW defined by the EEG was exceeded in 2009, the feed-in tariffs for solar power will decline by nine or eleven per cent, respectively, as of 2010, depending on plant type and size.

Due to strong market growth in 2009, a further decline in feed-in tariffs⁹ for solar power plants is also being discussed. With effect from 1 July 2010, the feed-in tariff for rooftop systems should be reduced by 16 per cent on a one-off basis while feed-in tariffs for free-field plants are expected to sink by 15 per cent. Free-field systems on arable land should not receive any further incentives according to the current status of discussion.

These additional declines – which should be significantly higher than originally discussed – create enormous challenges for the solar sector. As Germany currently is by far the largest solar market, the amendment is likely to further reinforce the consolidation pressure within the entire solar sector.



In order to nevertheless guarantee growth in the solar market in Germany over the long term, growth corridors are again to be stipulated in the most recent amendment to the EEG. These corridors allow for an adjustment of the tariffs to the market situation. Accordingly, the basic feed-in tariff decline of 9 per cent will enter into force at annual growth of 2,500 to 3,500 MW. If newly installed capacity exceeds this corridor, the feed-in tariff decline will rise in 1,000 MW stages: in 2011 by 2 percentage points and in the following years by 3 percentage points respectively. If, by contrast, market growth falls short of the 2,500 MW line, the basic feed-in tariff decline will be reduced in 500 MW stages by 2.5 percentage points each time.

The feed-in tariff for solar power used for self-consumption is planned to be made more attractive through amended EEG. The existing limitation of self-consumption to systems of less than 30 kW will be lifted to 800 kW. This will benefit the regulation of power grids and balance power consumption. As a result, the German solar market will remain attractive, above all in the private rooftop area. EuPD Research expects rooftop systems on private and non-private buildings to account for around 91 per cent of the entire German solar market by 2012 (2009: 86 per cent). By contrast, the share of free-field systems will fall to nine per cent (2009: 14 per cent).

INCENTIVE PROGRAMS TAKE EFFECT. For the USA, analysts expect stronger growth in demand in 2010. One of the key drivers of this development will be the national Cash Grant Program adopted in the course of the third quarter of 2009, under which solar customers can get 30 per cent of the cost of new solar power installations reimbursed in the form of a grant. Market experts believe that the US solar market will exceed the 1,000 MW threshold of newly installed output in 2010. Barclays Capital forecasts newly installed capacity of 1,076 (2009: 468) MW for 2010 and even 2,945 MW for 2011. Unlike in Germany, the USA are expected to experience strong growth, in particular, in the market for free field systems. This is due to the fact that many US utilities are interested in increasing their share of solar power due to the introduction of statutory minimum shares of renewable energies⁹ in the energy mix. Since these companies may also benefit from the tax credits of 30 per cent of the Cash Grant Program, building large-scale plants is particularly attractive to them.

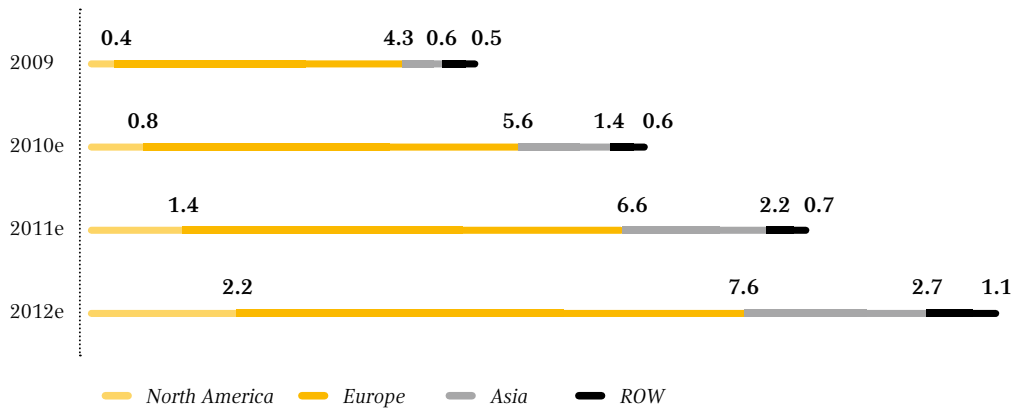
GROWTH IN EUROPEAN MARKETS. The remaining European markets are also expected to show positive development. According to experts, Italy is mainly expected to show a dynamic trend in the next two years. In 2010 newly installed solar capacity is expected to be 924 (2009: 374) MW. In 2011 the Italian solar market is expected to growth to a newly installed output of 1,478 MW. Italy is expected to achieve accumulated solar capacity of 1,200 MW as early as in 2010 so that the feed-in tariff for solar power would have to be amended again in accordance with the Italian Energy Act "Conto Energia II". The new tariffs would then enter into force as of January 2011. Although no official announcements concerning the new tariffs have been made, the Italian Solar Industry Association has already presented the draft of a new tariff scheme to the government. It provides for stronger reductions for free-field systems compared to roof-mounted systems so that the breakdown of newly installed capacity in Italy might change to the benefit of the rooftop segment.

Having overcome the recession, the solar markets in France, the Czech Republic and Belgium are expected to continue to grow in 2010. The Sarasin Bank expects the European markets (excluding Germany and Italy) to achieve overall growth of 33 per cent to 1,190 (2009: 896) MW in 2010. For 2011, these European markets are expected to continue to grow and achieve newly installed capacity of 1,707 MW.

GROWTH IN ASIA BENEFITS THE GLOBAL COMPETITIVE SITUATION. The key growth driver in Asia will be Japan. According to expert forecasts, the Japanese solar market will grow by 50 per cent to 547 (2009: 365) MW in 2010, with newly installed capacity of 739 MW in 2011. According to Bank Sarasin, China and India will develop as key sales regions, too. As a result, the competitive situation in Europe and the USA will be alleviated to some extent since Chinese manufacturers will probably increasingly seek to sell their products primarily in these countries due to their logistic proximity to these markets. Taken together, the two markets are expected to more than double in 2010 and reach a newly installed solar capacity of 557 (2009: 245) MW. On the whole, the Asian market is expected to achieve newly installed capacity of 1,560 (2009: 896) MW in 2010. For 2011, the market volume is expected to grow to 2,475 MW.

55 **EXPECTED DEVELOPMENT OF THE SOLAR MARKET BY REGIONS // IN GW**

Source: Deutsche Bank, 2010



DEVELOPMENT OF BUSINESS 2010+

FUTURE ORIENTATION OF THE GROUP

PLANNED CHANGES IN BUSINESS POLICY IN THE FORTHCOMING TWO FISCAL YEARS

The group will continue its successful strategy as a fully integrated⁹ global solar technology group.

➔ [*Strategy and action*](#) • p. 033//

We will increase our production capacity all the way from wafers via cells through to modules in 2010 with a view to expanding our market position. Group-wide module capacity, in particular, will be substantially increased to 1.25 GW. This is our strategic response to growing end customer markets. From today's perspective we will grow organically. Our location policy will focus on existing production sites in Germany and USA. This will reduce our group's complexity costs and help us benefit from favorable market factors. ➔ [*Corporate strategy opportunities*](#) • p. 132// As with our joint venture in South Korea, we are evaluating opportunities to expand our strategic alliances with local partners.

We are continually working to optimize our processes in order to achieve additional cost savings and further enhance the quality of our products. We will also continue our brand investments.

We are constantly probing new markets as we are planning to increase the relative share of our group-wide foreign operations considerably.

Should corresponding opportunities arise, we will examine new strategic business areas in order to drive forward our vision of clean, infinite, and fair energy supplies for the future.

FUTURE LEGAL GROUP STRUCTURE

As per 11 February 2010 we sold 26.5 per cent of our shares in our South Korean joint venture SOLARWORLD KOREA LTD. As per 1 March 2010 we announced that we had acquired a 29 per cent stake in the newly founded joint venture Qatar Solar Technologies. ➔ [*Group structure modified*](#) • p. 112//

In the course of 2010, we will convert our liaison office in Grenoble, France, established in the third quarter of 2009 ➔ [*Change in legal group structure*](#) • p. 048// into a wholly-owned subsidiary.

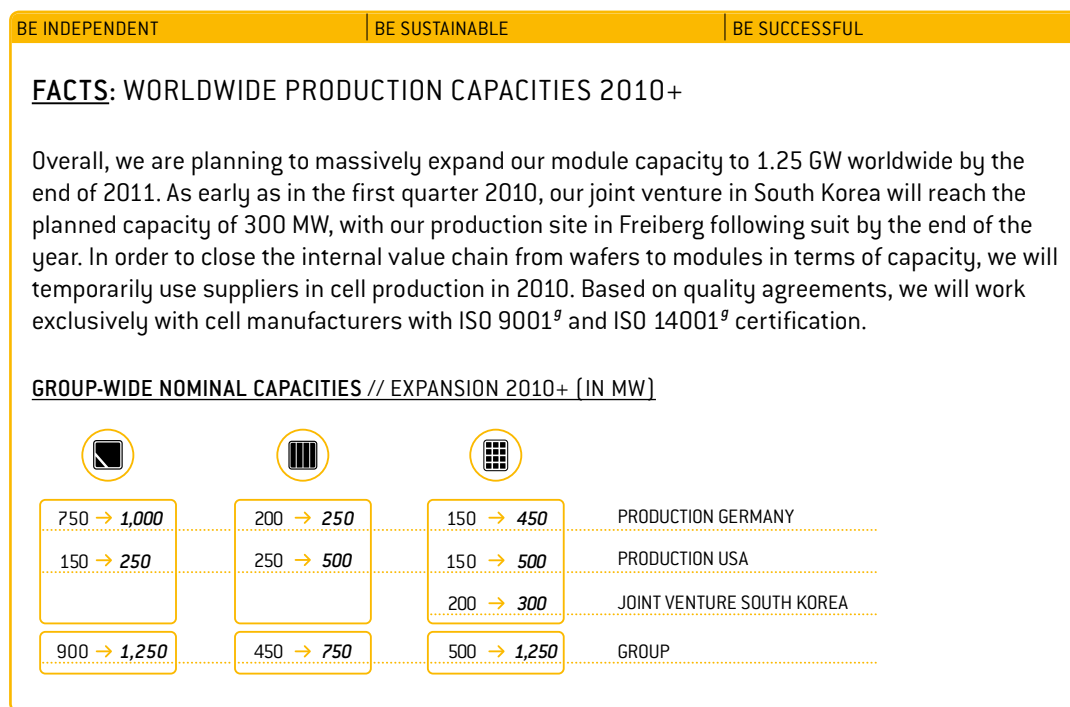


FUTURE DEVELOPMENT OF “PRODUCTION GERMANY” SEGMENT

At our German site in Freiberg, we will triple our module capacity to 450 MW by the end of 2010/beginning of 2011 in order to benefit from the expected increase in demand in the end customer business. The expansion of wafer production at the Industrial and Commercial Estate East, targeting 1 GW for the entire Freiberg location, is progressing according to plan.

FUTURE DEVELOPMENT OF “PRODUCTION USA” SEGMENT

At our site in Hillsboro, Oregon, we are constructing a module production plant with a capacity of 350 MW to be finished by the end of 2011. Together with the existing 150 MW production in Camarillo, California, we will reach a total module capacity of 500 MW in the USA. In Hillsboro we are going to enhance our cell production capacity to 500 MW.



FUTURE SALES MARKETS 2010+, “TRADE” SEGMENT

We are expecting our global shipments to grow in line with the expansion of our production volumes in 2010. We have a presence in all key solar markets worldwide and are monitoring the markets in the framework of our risk and opportunities management. This approach enables us to respond quickly to short-term regional shifts in demand and to continually optimize our group-wide sales strategy.

In Germany we are expecting demand hikes for the first half of 2010. This anti-cyclical market behavior will be driven by amendments to the EEG announced by federal environment minister, Norbert Röttgen. → [EEG amended](#) • p. 136// As of the second half of the year, the demand for rooftop systems mainly producing power for self-consumption to be coupled with corresponding storage media is expected to rise. We will extend our assortment accordingly to include storage technology in order to be able to serve the expected demand on the market optimally. → [Future products and services](#) • p. 142// The demand for free-field systems is expected to decline in the German market as of the second half of the year. This will be due to the planned additional reduction in the feed-in tariff⁹ by 15 per cent. Systems installed on arable land should no longer be funded. Nevertheless, thanks to its selective marketing strategy in other European growth markets such as France, Italy, the Czech Republic, and Belgium, SOLARWORLD is convinced it will be able to increase sales. For 2010, EPIA forecasts a total sales volume of up to 2.7 GW for Europe (excluding Germany).

We expect sales growth in France, driven primarily by our ENERGYROOF[®] product. → [Products “Made by SolarWorld”](#) • p. 088// EPIA expects a volume of 340 to 500 MW (2009: 196 MW) for the French market for 2010, driven primarily by integrated rooftop systems. In Belgium and Italy we expect an increase in demand for our complete SUNKITS[®]. Since all components are precisely coordinated, assembling the systems is particularly easy and fast. This gives us a special competitive edge in young markets with limited installation experience. Moreover, we are able to benefit from our good relationships with systems integrators and wholesalers.

We also expect a strong rise in demand in the USA, boosted by the incentive programs adopted at the end of 2009. → [Incentive programs take effect](#) • p. 137// We will reinforce our marketing activities in this market in order to increase awareness of SOLARWORLD. Our newly established subsidiary, SOLARWORLD POWER PROJECTS INC., will enable us to increase our operations in the growing market for free-field systems. We expect to be able to increase our shipments and gain additional market shares.

We also consider that the off-grid segment offers additional sales potential. With respect to off-grid applications, our sales office in South Africa expects stronger demand from Nigeria and Angola for 2010. In South Africa a market for on-grid systems is expected to develop alongside the off-grid market, boosted by new statutory feed-in tariffs as of 2010. In Asia and South America we are also expecting demand to grow for off-grid solutions, served by our rural modules.



FUTURE RESEARCH AND DEVELOPMENT ACTIVITIES // “OTHER” SEGMENT

USE OF NEW TECHNOLOGIES AND PROCESSES

ENHANCING COST EFFICIENCY. We will consistently pursue our existing innovation targets in 2010 and beyond. → *Innovation report 2009 • p. 090*// In the process we want to further increase our cost efficiency. Step by step we will transfer our further developed wafer, cell and module generations with higher degrees of efficiency, increased material yields and improved quality into the production process. This will increase our cost efficiency even further. In 2010 our R&D will be working on increasing module performance through improved optical confinement, i.e. the optimization of light capture as well as the reduction of resistance losses.

ACCELERATING THE DEVELOPMENT OF BATTERIES. Against the backdrop of the planned amendment to the EEG, we will tackle a further key topic related to renewable energies in 2010 in cooperation with a number of companies: storage technology. Here, too, we are aiming to be a key driver of technological progress.

FUTURE PRODUCTS AND SERVICES

FULLY TAPPING MARKET POTENTIAL. We will continue to focus on our core business with crystalline solar power applications and increasingly invest in our module and systems portfolio. Sales of these high-quality standard products will continue to be the basis of our corporate success. We intend to make solar plants even easier, safer and more profitable to operate in order to fully tap the market potential for our technology. ② *Innovation targets and priorities 2009 • p. 092*// To this end, we will consistently increase the output classes of our standard modules of the SUNMODULE PLUS® brand and offer new or modified rack and assembly systems.

INCREASING HOUSEHOLD SELF-CONSUMPTION OF SOLAR POWER THROUGH BATTERIES AND SMART HOME TECHNOLOGY. Working with cooperation partners, SOLARWORLD will also launch a battery system on the market as of 2010. It can be used to store solar electricity and then consume it at a later point in time. We will thus offer a smart home energy supply system based on the motto “Power generated on your roof, stored in the basement”. With our battery system, we will not only respond to the changed market situation in 2010 following the amendment to the EEG, but also chart a new course in terms of decentralized energy supplies and thus enhance the competitiveness of solar power. → *Up on the rooftops of the world*//

CUSTOMER-CENTERED AND FUTURE-ORIENTED ASSORTMENT. In 2010 we will also partly redesign our existing assortment. With completely black modules and the new compact format, we will offer aesthetic variants and tap new customer groups, above all among design-oriented home owners. A further offering tailored to the needs of our end customers is our SUNCARPORT®, a carport that already produces solar power to be fed into the grid or consumed by the household and which, in future, will also serve as a solar “power filling station” for electric or hybrid vehicles. → *Up on the rooftops of the world*//



IMPROVED WARRANTY TERMS AND CONDITIONS. Alongside these market launches, we will underpin the quality promise made by SOLARWORLD in 2010: above all through a considerable improvement in warranty terms and conditions. Since 1 January 2010 we have extended our product liability to a period of five years and have been the first manufacturer in our sector to offer a linear performance warranty over twenty-five years.

BE INDEPENDENT

BE SUSTAINABLE

BE SUCCESSFUL

FACTS: LINEAR PERFORMANCE WARRANTY

Customary market guarantees only offer staggered performance warranties to customers, e.g. 90 per cent of the lowest rated output for the first ten years, and 80 per cent as of year eleven. SOLARWORLD's linear performance warranty means that the actual output of the solar power modules will at least be 97 per cent of rated output in the first year of operation and that it will not decline by more than 0.7 per cent of rated output per annum as of the second year of operation. SOLARWORLD modules will thus have an actual output of at least 80.2 per cent of rated output after expiry of the warranty in the 25th year of operation. The performance warranty is based on the service certificate valid at the purchasing date.

FUTURE PROCUREMENT

Supplies of our raw material silicon for the planned growth of our group in 2010 have been fully secured by means of long-term delivery contracts as well as in-house production and recycling⁹ accounting for an estimated proportion of about 20 per cent. For consumables, secure supplies have been contractually fixed for 2010.

We will support further expansion measures or peaks through additional raw material contracts. Due to the worldwide rise in silicon capacities → *Further rise in supply* • p. 135// silicon prices are expected to be stable or even fall in 2010.

We will reduce specific raw material costs in 2010 in comparison to the year under review. This is to be achieved by optimized purchase terms, consumption optimization and efficiency enhancements.



HUMAN RESOURCES – FUTURE DEVELOPMENT

In order to be able to realize our ambitious expansion plans, our HR management will again focus on qualitative and quantitative employment growth in 2010. We will support qualification, internal job advertisements and career opportunities, and will also recruit new staff and invest in our workforce and thus create a significant competitive edge in light of the looming threat of a shortage of skilled labor.

In the year 2010 we are planning to hire additional employees on a full-time basis. The strategic core areas for new recruitments will be Sales, Production, and Research & Development. Knowledge motivates each individual employee and enhances the value of our company. That is why SOLARWORLD also attaches a great deal of strategic importance mainly to vocational and ongoing training for existing employees – both in 2010 and beyond. Our activities in this area: We intend to further expand the promotion of cooperation spanning different sites. We will also continue our new executive development program spanning different sites in 2010, just as with our junior staff and executive training schemes that have been successfully implemented for several years.

Due to the rapid growth over recent years, the convergence of all group sectors and sites will gain importance for SOLARWORLD. To this end, we need a clear corporate and management culture since this is what underpins our corporate strategy and thus also boosts the sustainability of our operations. In the year under review we therefore launched a new project and will develop our corporate culture further on the basis of our joint SOLARWORLD values. In 2010 we will include the executives from all sites in further validation of the value basis established as a first step. This will strengthen all executives' identification with our corporate culture⁹ and create a common understanding of values as a basis for management behavior. Since executives also play the role of multipliers for our employees, they will also contribute to spreading our corporate culture to the entire company.

Our employees and their know-how constitute one of the major strengths of SOLARWORLD – and they are therefore our key resource. If our employees are satisfied with their workplace and their tasks, they will be particularly efficient and productive. That is why we take our employees' feedback very seriously and regularly conduct employee satisfaction surveys. So far, these surveys and studies have focused on Germany – and we now intend to place a stronger focus on our US site in Hillsboro, where we employed 551 people at the end of 2009, around 28 per cent of our overall group headcount. In the framework of the "Oregon Business Magazine Best Employers Survey" we will probably take part in an expert survey at the end of 2010. In the next few years we intend to use the outcome of the surveys to determine our strengths and weaknesses and derive measures to stabilize and increase our employees' satisfaction, and ultimately secure and expand SOLARWORLD's strong position.



EXPECTED EARNINGS AND FINANCIAL SITUATION

ESTIMATED DEVELOPMENT OF REVENUE AND RESULT. In 2010, the scheduled increase of our production volume amounts to more than 30 per cent, i.e. we will maintain our growth rate. We will intensify our investments in expanding our capacities, in research and development and in increasing SOLARWORLD brand awareness; our high equity ratio⁹ and liquidity are a major competitive advantage in this respect, too. Against the background of the pending legal framework conditions on the core market Germany at the time of reporting, we plan to sustainably exceed the previous year's revenue level of € 1 billion.

We will still shift the wafer volume from long-term contracts to refinement of solar modules or kits. With regard to the profit for the year, the decisive factor will be the level of price degression that will have to and can be absorbed on the cost side.

FUTURE DIVIDEND AND DISTRIBUTION. Due to the sound earnings development, the Management Board and the Supervisory Board will propose distribution of a dividend⁹ of 16 (previous year: 15) cents per share for fiscal year 2009 to the Annual General Meeting held on 20 May 2010. The Annual General Meeting will decide on the appropriation of retained earnings from the individual financial statements of the joint stock corporation for fiscal year 2009 with an amount of € 17.88 million to be distributed for the 111.72 million dividend-bearing no-par value shares. Our shareholder-oriented dividend policy is placed on a broad basis through profit and loss transfer agreements with our major German subsidiaries.

Following the resolution on the distribution of a dividend, the remaining retained earnings of SOLARWORLD AG of € 89.6 million will be transferred to revenue reserves. This will secure the SOLARWORLD Group's equity basis for financing further investment projects.

From today's perspective, SOLARWORLD AG will continue its steady dividend policy over the long term, assuming that corresponding retained earnings are achieved and weighing up the development of liquidity and investments required. ➔ *Annual General Meeting 2009 resolves a cap on Management Board remuneration and dividend* • p. 066 //

SCHEDULED FINANCING MEASURES. In January 2010, SOLARWORLD AG placed a € 400 million bond on the capital market. In consideration of these measures, the existing liquidity and sustainable earning power of SOLARWORLD, we have – from today's point of view – sufficient financial means available to finance our short- and medium-term growth targets and, at the same time, still retain a strategic liquidity reserve at all times.

SCHEDULED INVESTMENTS. The worldwide expansion of our manufacturing capacities will be continued as planned in 2010. The predominant proportion of investment expenses will again fall upon the Freiberg, Germany and Hillsboro, USA locations. In Freiberg, we will continue to expand wafer production and, simultaneously, increase the module production capacity to some 450 MW by late 2010/early 2011. In



Hillsboro, we will continue to expand the manufacturing capacities for integrated cell and wafer production and push the expansion of module production to 350 MW. In addition, the module production capacity of our South Korean joint venture will be further increased in the course of 2010.

The setting up of a central research and development centre at the Freiberg location will be finalized as planned in 2010.

Presently, we expect a group-wide 2010 investment volume of up to € 300 million.

ESTIMATED DEVELOPMENT OF LIQUIDITY. As at 31 December 2009 free liquidity (liquid funds and other financial assets) amounted to € 509.7 million (31 December 2008: € 836.1m). SOLARWORLD AG received further liquid funds of € 400 million from the placement of a bond in early 2010.

OVERALL STATEMENT BY THE MANAGEMENT BOARD ON THE ANTICIPATED DEVELOPMENT OF THE GROUP

Also for the future we are expecting a market environment in which we can grow in the long term. As one of the leading producers and providers of solar power technologies worldwide with a strong brand we have positioned ourselves competitively in the market. As a fully integrated company we feel we can take on the price and margin pressure caused by the planned EEG amendment in Germany as well as the worldwide increase in competition by way of cost reductions and technological progress along the entire solar value chain. Following our strategy we will further expand our position in the core markets but will also increasingly open up new growth regions.

