

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//

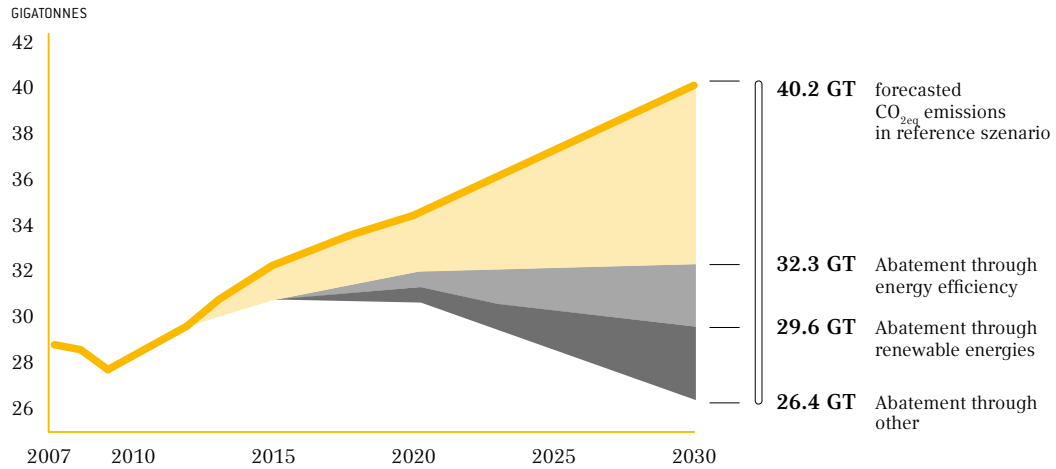
RENEWABLE ENERGIES GAIN IMPORTANCE. A crucial concern for the future will not only be to cover the demand for energy – it will also have to be climate-friendly. Renewable energies⁹, including solar energy, are increasingly moving to the fore in this regard. Climate change poses one of the key challenges 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

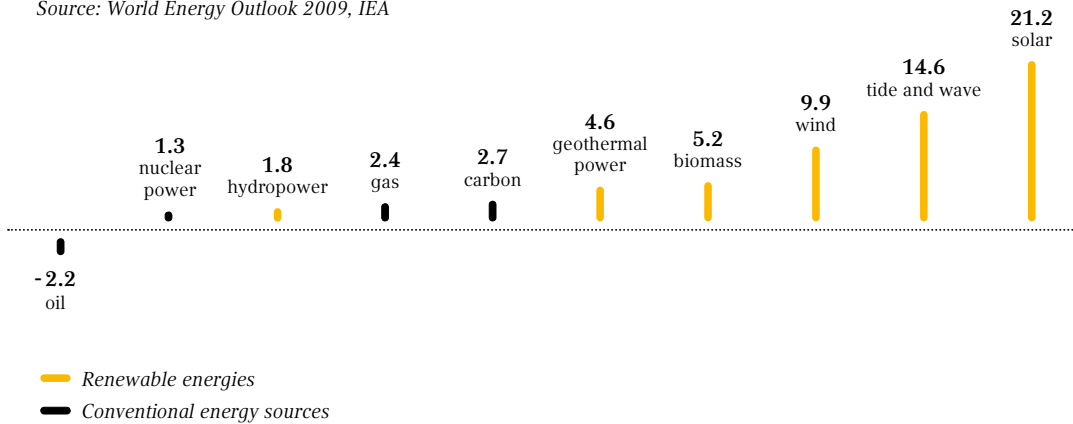
Source: World Energy Outlook, 2009



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.

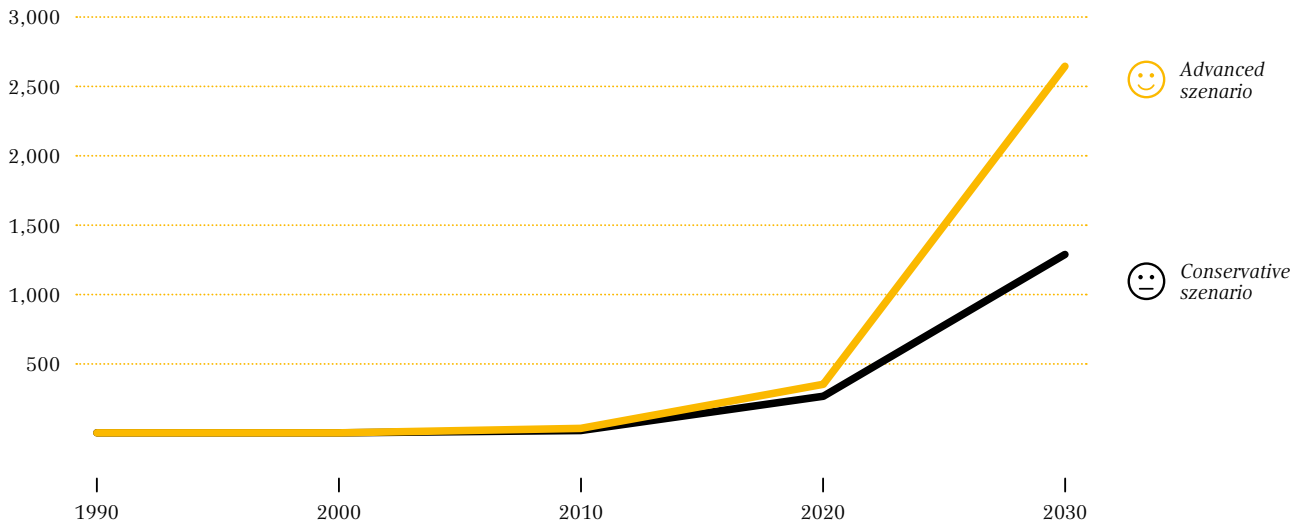
The trend towards renewable energies is also driven by the growing scarcity of fossil fuels and the resulting price increases for conventionally produced power. At the same time, the price of solar power products will continue to fall due to advancing technological optimization, lower cost of materials, 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.

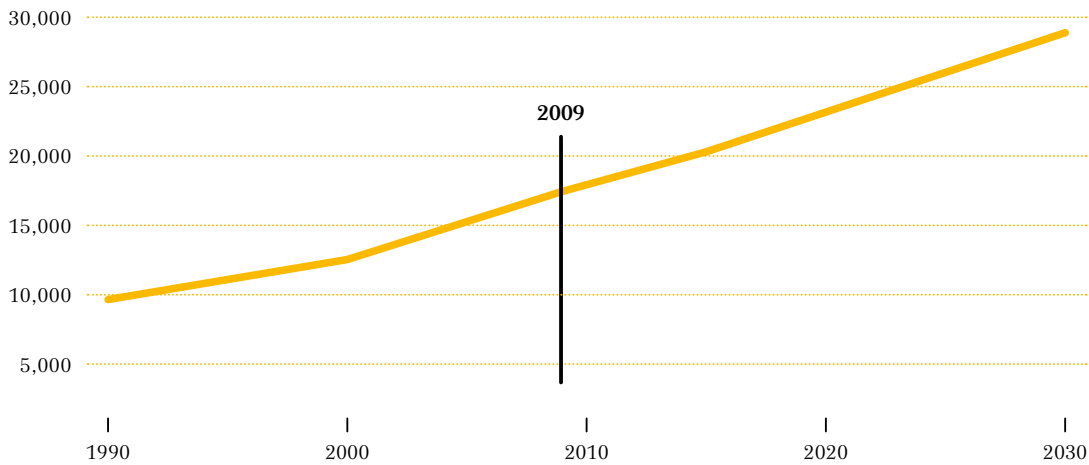
49 SOLAR POWER DEVELOPMENT FORECAST UNTIL 2030 // IN TWH

Source: EPIA Solar Generation V



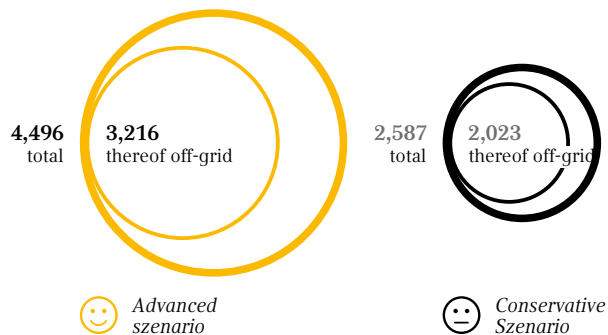
50 WORLDWIDE ELECTRICITY CONSUMPTION // IN TWH

Source: World Energy Outlook 2009, IEA



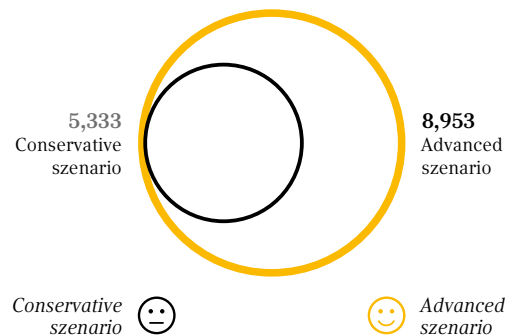
51 SOLAR POWER USERS WORLDWIDE 2030 // IN MILLION PEOPLE

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 recycling⁹ 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 Directive⁹: Waste Electrical and Electronic Equipment; RoHS Directive⁹: 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 stakeholders⁹ – “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

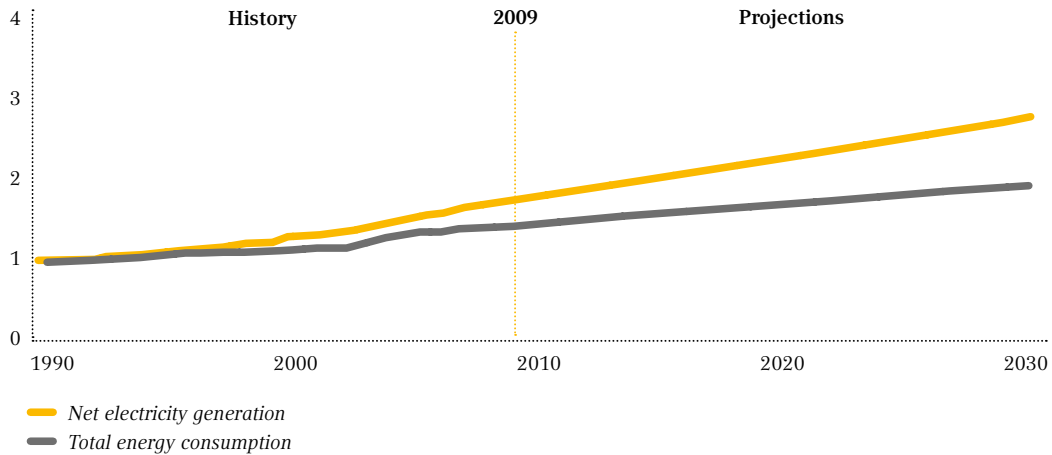
THE FUTURE WORLD ELECTRICITY MARKET

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.

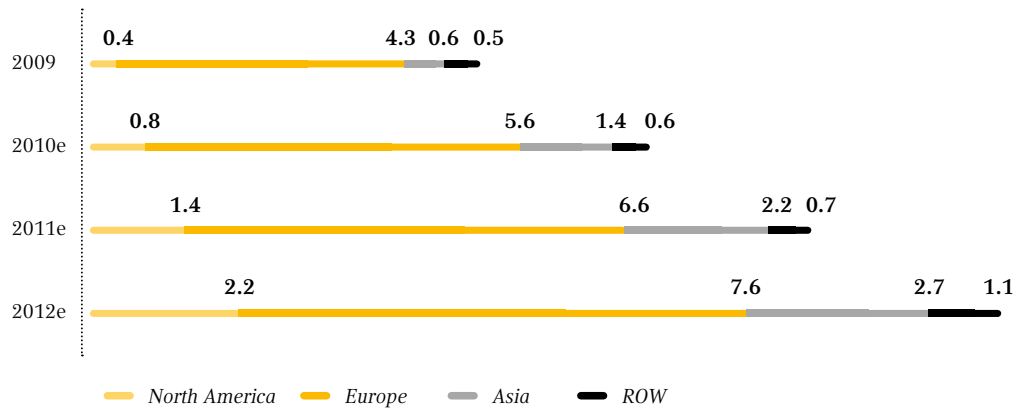


Having overcome the recession, the solar markets in France, the Czech Republic and Belgium are expected to continue to grow in 2010. The Sarasin Bank expects the European markets (excluding Germany and Italy) to achieve overall growth of 33 per cent to 1,190 (2009: 896) MW in 2010. For 2011, these European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

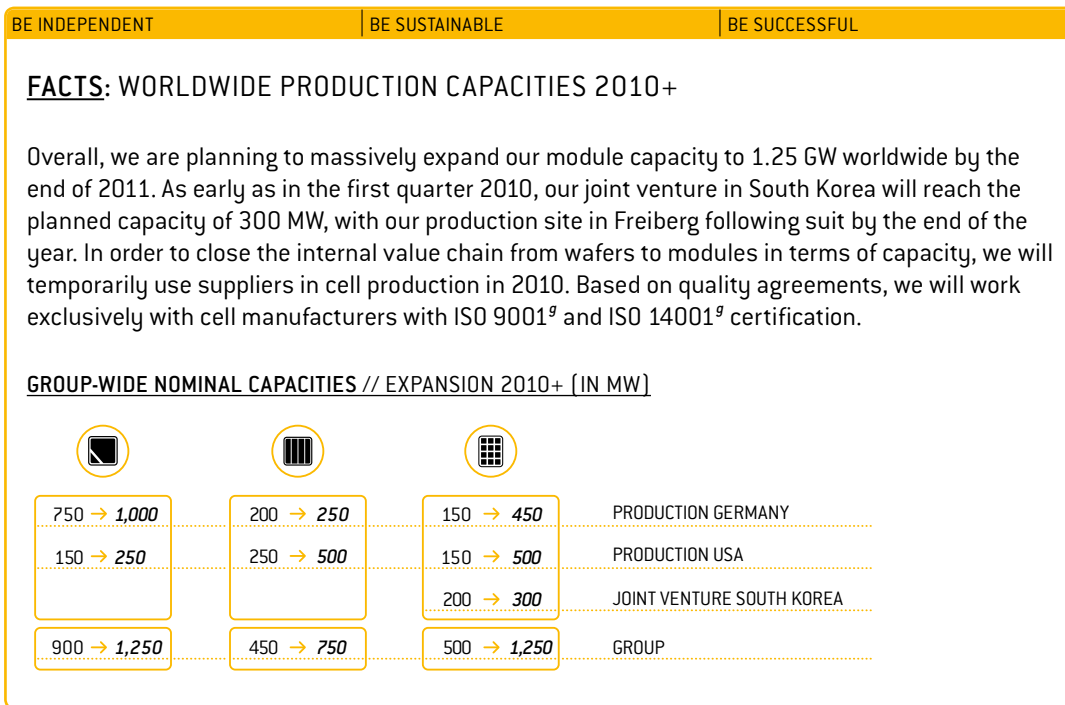


FUTURE DEVELOPMENT OF “PRODUCTION GERMANY” SEGMENT

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.

