

**Edisun Power Europe Ltd.**  
Annual Report 2010



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**Edisun Power**, a solar power producer with installations in Switzerland, Germany, Spain and France, is active in one of the world's largest growth sectors: according to Bank Sarasin, the solar power industry as a whole enjoyed a growth rate of 87% in 2010 thanks to cost reductions and increased efficiency. Sarasin expects the industry to reach average annual global growth of 33% by 2015.

By the end of 2010, Edisun Power Europe Ltd. owned a total of 71 solar installations with a capacity of 9.6 megawatts supplying electricity to the public grid in Switzerland, Germany, Spain and France, with an additional three facilities in construction.









«It's all thanks to the sun that we are able to harvest grain and sugar beets on our fields and feed our mother cows and horses grass from our meadows. So for me, turning solar radiation into electricity by means of the facilities installed on our roofs is the most natural thing in the world!»

Hansruedi Fischer, farmer, Adlisberg farm

A 74-kilowatt Edisun Power facility installed on the roof of Adlisberg farm near Zurich produces solar power.

# Skills and knowhow in the service of carbon-free power production

As a small listed corporation we demand efficiency not only from our solar power facilities, but from our structures and team as well. Despite our size, our listing on the Swiss stock exchange means we offer investors maximal transparency. Since its founding in 2005, Edisun Power Europe Ltd. has managed average annual growth of 30 percent in an extremely volatile and highly regulated environment.

## Administrative challenges

As in previous years, in 2010 we had to clear high administrative hurdles in some countries. Following completion of certain facilities, we were unable to intervene to speed connection to the grid. At the same time, projects outside of Switzerland demand ever swifter implementation, with the result that access to modules and other components is not always guaranteed due to high demand under tight deadlines.

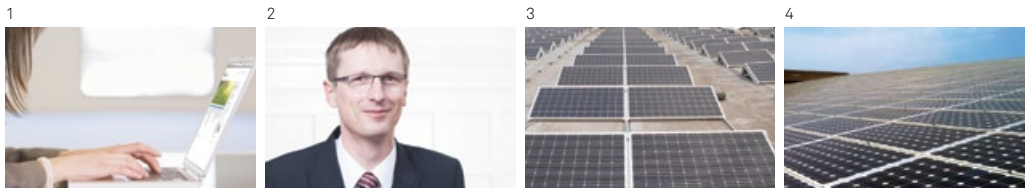
In Switzerland we were able to realize our first construction under feed-in tariff when we completed the Pistor facility (see p. 14), and in France we built two facilities in 2010, and have already received approval for remunera-

tion for feed-in on various projects.

Our 2010 risk analyses included expected short runs on feed-in tariff in various European countries. We are currently reviewing whether our know-how in the financing, construction and operation of solar power facilities is also applicable to other forms of renewable energy, which would allow us to make better use of our strengths and considerable experience.

Our shareholders and bondholders once again gave proof of their confidence in us with a pleasing subscription of our bond issue in late 2010. Thanks to solid company financing we can make a substantial contribution to the creation of feed-in tariff facilities in Switzerland. As an independent, neutral enterprise we are a trustworthy partner for carbon-free power production in Europe and Switzerland.

With the rescinding of the restriction on transferability decided at the General Assembly in May, New Energies Invest Ltd. reduced its stake in Edisun Power, and the 12 percent share package was taken over by a group of shareholders. Broadly diversified, loyal shareholders mean that the Edisun Power share can be sharply in-



## 2010 IN REVIEW

### January

Power production in 2009 up 36.4% year on year.

### February

New Internet presence. 1

### April

Markus Kohler becomes CTO and Member of the Executive Board. 2  
Sale of the 610-kWp facility in Emsbüren to a fund in Germany.

## «One of our great strengths is a streamlined and flexible organization.»

fluenced by small turnovers – with only individual stock changing hands in some cases – so that weak trading may lead to unrepresentative closing prices.

### Streamlined organization and constant change

One of our great strengths is a streamlined and flexible organization, which allows us to adapt to evolving conditions as well as evaluate a range of possibilities for collaboration, construction of facilities for third parties and new business fields.

Our strong growth also demands constant organizational evolution. With Markus Kohler as CTO we have a solar power professional with long years of experience at the helm. For her part, Mirjana Blume has taken on the duties of CFO in addition to her function as CEO, while book-keeping at our Zurich headquarters has been augmented to offer greater support.

Each individual makes a contribution to the success of

the company as a whole, and our staff of 13, with their flexibility and personal commitment, help our business expand further every single day. We would like to express our particular gratitude to them: in addition to the construction of facilities, financing and operation, their work constituted a signal pillar of our development in 2010. We would also like to thank our investors and shareholders, as well as our suppliers and partners, for their loyalty and confidence. Together we are working towards a future of sustainable, renewable energy.



Heinrich Bruhin, Chairman of the Board of Directors

#### June

1.039-megawatt solar power facility in Hürselgau connected to grid. 3

#### August

Solar power facilities with capacity of 1000 kilowatts connected to grid in France. 4  
Heinrich Bruhin becomes Chairman of the Board of Directors.

#### December

First series of 6-year bonds 20% oversubscribed.

«We demand innovation – not only in our students’ heads, but in the operation of the Uni Irchel building as well. And the solar power facility installed on our roof is a veritable billboard for innovation, the expression of a new era in power supply.»

Daniel Flückiger, Sector Head Auxiliary Services,  
University of Zurich’s Irchel Campus



A 55-kilowatt Edisun Power facility installed on the roof of Uni Irchel in Zurich produces solar power.





# On the pulse of the solar power sector



Mirjana Blume, CEO and CFO of Edisun Power Group  
Markus Kohler, CTO of Edisun Power Group

A swiftly evolving political situation on key markets driven by economic difficulties in some European countries was a hallmark of 2010. Nevertheless, Edisun Power continued to build facilities, and the solar power producer's portfolio comprised 71 installations by the end of 2010. Mirjana Blume, CEO and CFO, and Markus Kohler, CTO of Edisun Power Europe Ltd., talk about a challenging year.

## What most affected the Edisun Power Group in 2010?

**Mirjana Blume:** As a solar power producer we work in a sector marked by strong growth, and correspondingly swift change, so for us planning 12 months in advance is already long-term. In 2010 the political situation was in constant evolution, and we analysed it in real time and tuned our business activities accordingly so as to secure the best results for Edisun Power. But we were also busy on the operational front: in early February we took our new homepage live, and since April we have been able to count on the expertise of Markus Kohler in his role as CTO and on the Executive Board. At the beginning of April we were also able to sell our first facility – in Emsbüren – to

a fund, while in August there was a change in the Board of Directors when Heinrich Bruhin took over as Chairman from Pius Hüsler, who is however remaining on the Board (see p. 21). Finally, at the end of the year our bondholders expressed their confidence in us by subscribing some six million francs worth of paper in a very short time.

## How many facilities were connected to the grid in 2010?

**Markus Kohler:** All in all, four facilities with combined capacity of 2484.2 kilowatts. At the same time we are also struggling with delays in grid connections in France, which can have a negative impact on Group sales. The application processes in many countries are time-consuming and not always in conformity with the market: in France, for example, we are obliged to use the modules and transformers listed in our application even if the market has evolved in the meantime, since the process can stretch to more than a year. In Spain, too, there were retroactive changes in remuneration for feed-in, with the number of hours for which solar support is paid out being reduced. So to lessen the hardship somewhat, remuneration was extended from its current 25 years to 28 years.

**Mirjana Blume:** For 2011 to 2014 this new regulation will mean a 20 to 30 percent drop in yield for affected facilities. If the ruling is not changed beforehand, however, the extended remuneration will go a long way to compensating for the damage. Still, it makes planning harder, and not only in Spain. Luckily, our streamlined structures mean we can adapt quickly to new market situations.

«In 2010 the political situation was in constant evolution.»

**What facility completed in 2010 was for you the most interesting, whether financially, technically or aesthetically?**

Makus Kohler: Our 1039-kilowatt facility in Hörselgau in Germany is the largest plant we have in operation to date. Completing the facility was a challenge both in terms of time and logistics, since it had to be connected to the grid before the unscheduled rate reduction in late June. While the Hörselgau facility is classically roof-mounted, we also built roof-integrated plants in France, in Pous-san and Haréville. Integrated facilities need better planning and execution, since they are part of the building on which they are installed.

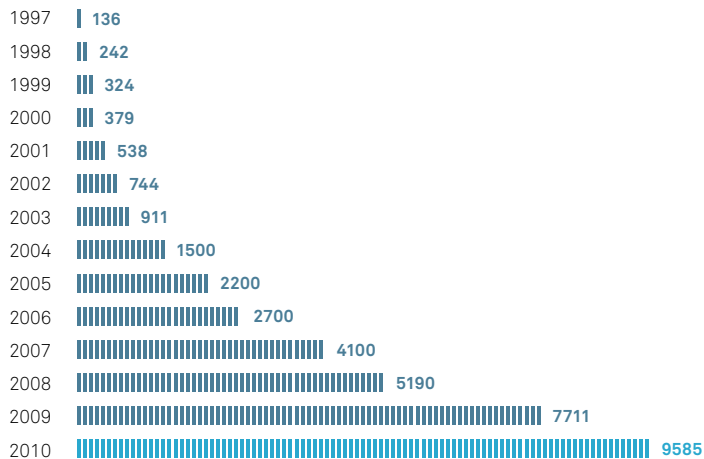
Mirjana Blume: And of course you mustn't forget the Rothenburg facility, our first under the terms of remuneration for feed-in. With its two different transformer

technologies, the facility is installed on three rooftops and was the largest solar power plant in central Switzerland when it went operational.

**Edisun Power also constantly keeps an eye on new markets. What were those markets in 2010, and why didn't Edisun Power enter them?**

Mirjana Blume: Italy is an interesting market, but in 2010 it was already very overheated and won't be cooling down again for a while, so we decided not to invest there. We try not to be swayed by short-term trends, believing instead that the company's good work over the long term constitutes added value for its shareholders.

Total installed capacity in kW











«The solar power facility installed on our roof is an expression of Pistor Ltd.'s commitment to a sustainable energy supply for our company. In fact, Pistor has always championed the most efficient possible energy use.»

Jules Toth, Head of Human Resources, Pistor Ltd.

On the roof of Pistor Ltd. in Rothenburg, an Edisun Power facility with a capacity of 849 kilowatts produces solar electricity.

# The first facility under feed-in tariff

Switzerland: As of the end of 2010 Edisun Power owned and operated 52 facilities in Switzerland with total installed capacity of 3780.73 kilowatts (kW).



## Recent installations

A new facility was constructed in Switzerland in 2010 on the roofs of Pistor Ltd.'s company buildings in Rothenburg. The facility, which is installed on three roofs of the grocery wholesaler's premises, is the first Edisun Power has been able to construct under feed-in tariff. The retrofitted modules, with total installed capacity of 849 kilowatts, were produced in Sweden. They were tilted at an angle of three to six degrees so as to meet construction specifications; and while the lesser tilt means somewhat lower yield per module, it also allows more modules to be installed on the roof, which results in higher overall output.

## Facility operations

Solar radiation in Switzerland was much less intensive in 2010 in comparison with previous years, which also meant lower output. While a sunny autumn did bring some compensation for the lower power production between May and August, values were still below the long-

time average, and significant regional variations were identified: although facilities in Basel and Zurich met »only« 94 percent of prognoses, those in the Geneva region outperformed by 109 percent.

## Energy policy

There continues to be a long waiting list for feed-in tariffs. Once a facility is registered for feed-in tariff it can take up to three years for it to be built. On solar power exchanges, meanwhile, the weak demand for solar power is producing reservation. The Swiss solar power industry is still waiting for the kind of growth driver that has been observed in other countries, such as Germany, Italy and the USA where consistent national support buoys local sectors.

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1 The 74-kilowatt facility in Adlisberg

2 The 849-kilowatt facility in Rothenburg



# Active management of the investment portfolio

Germany: As of the end of 2010, Edisun Power owned and operated seven facilities in Germany with total installed capacity of 2105 kilowatts (kW). One facility, with capacity of 610 kW, was sold.



## Recent installations / sale of facilities

The 1039-kilowatt facility in Hørselgau in Thuringia was installed on the roof of a logistics firm whose premises are not overshadowed by any neighbouring structures. The challenge for Edisun Power there, however, was connecting the facility to the grid by the end of June before remuneration for feed-in was reduced – which, thanks to top performance by all participants, was achieved. Unfortunately, due to initial problems with inverters the facility did not generate full output during the first months. With the sale of the 610-kilowatt facility in Emsbüren in April, Edisun Power took the first step to actively managing its investment portfolio.

## Facility operations

Although output of the German facilities is slightly above prognoses, the year saw great fluctuation in weather, which was reflected in production: in May just 75 per-

cent of expected output was attained, while April saw outperformance of 125 percent. Operation of the German Edisun Power facilities has been problem-free.

## Energy policy

Germany is far and away the world's largest market for solar power, with 7 gigawatts of newly installed capacity in 2010, the equivalent of roughly half the capacity newly installed worldwide in 2010, or more than 700 times that of Edisun Power's total facilities. The overheated solar power market caused feed-in tariffs for new facilities to drop a further 18 percent over the course of the year. The Hørselgau facility went online prior to that point, however, and was thus able to profit from higher remuneration for feed-in. Rates were reduced a further 15 percent in early 2011, and it is to be expected that more reductions will be decided as the year wears on.

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1 The 1039-kilowatt facility in Hørselgau

2 The 610-kilowatt facility in Emsbüren

# Grid parity in sight

Spain: As of the end of 2010, Edison Power owned and operated five facilities in Spain with total installed capacity of 2152.3 kilowatts (kW).



## Recent installations

Edison Power did not build any new facilities in Spain in 2010.

## Facility operations

Facility operations developed very positively in Spain, with yield outperforming forecast values by 5 percent. Facilities were disruption-free, with the exception of small problems.

## Energy policy

After the solar power boom year of 2008, Spain made conditions for remuneration for feed-in so unattractive that the market completely collapsed. In addition, the government's announcement of its intention to limit new construction volume further heightened solar power sector insecurity. And although this decisive measure was actually announced just before Christmas, it applied

only to the years from 2011 to 2013. Feed-in is now being remunerated for a maximum amount of energy per year, with varying results depending on region and type of facility. We are predicting some 25 percent lower output over the three years. So as to compensate somewhat for the losses, feed-in tariffs are being paid out over 28 years rather than 25, and thus the shortfall in revenues will be largely made up over the facility's useful life.

Thanks to high solar radiation, Spain will be one of the first countries to achieve so-called grid parity, which means that solar power there is produced for the same amount as end customers pay for conventional electricity. This means in turn that support for solar power will effectively become obsolete in Spain. The next few years will show how the solar power market develops in view of grid parity.

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1 The 217-kilowatt facility in Valle Hermoso

2 The 704-kilowatt facility in Salinas

# Capacity growth of 60% over 2009

France: As of the end of 2010, Edisun Power owned and operated seven facilities in France with total installed capacity of 1547 kilowatts (kW).



the project delays mentioned. The technical measures needed to improve performance have been taken, and we are now hoping that sunny weather will allow French facilities to keep pace with those in other countries in 2011.

## Recent installations

In France Edisun Power commenced operation of two solar power facilities with total installed capacity of 600 kilowatts, which amounts to growth of 60 percent year on year. Both facilities were installed directly onto rooftops, one on a farm building in Haréville, the other on the premises of a commercial enterprise in Poussan. Unfortunately, the performance of the power grid to which the Haréville facility is connected is quite poor, which means that the electricity produced cannot be fed into the grid without disruptions. A technical adjustment will now permit us to feed in power normally despite the poor quality of the grid. In France Edisun Power is planning to build three solar power facilities with capacity of more than 2000 kilowatts; approval for the plants has already been secured.

## Energy policy

Feed-in tariffs in France during the year in review were also cut by 8 percent; in fact, a three-month moratorium was imposed at the end of the year, during which period no new solar power plants are to be approved. It was unclear at the end of 2010 how support plans would develop, although a variety of solutions were discussed.

## Facility operations

Output in France was the lowest of all of Edisun Power's facilities, including those in Switzerland, Germany and Spain, due to below-average solar radiation coupled with

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1 The 150-kilowatt facility in Poussan

2 The 446-kilowatt facility in Haréville

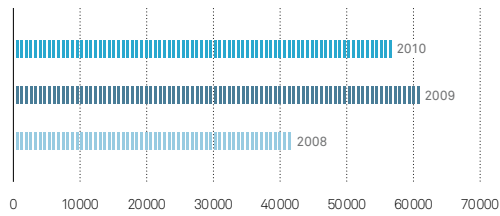


# 3-Year Overview

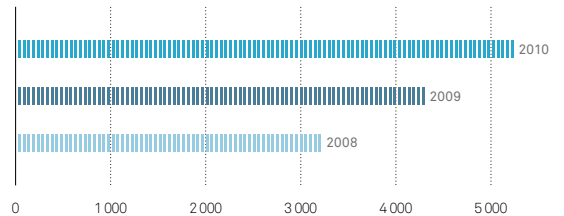
Key Figures Edison Power Europe Group	2008 TCHF	2009 TCHF	2010 TCHF	CAGR <sup>1</sup> (%)
<b>Balance Sheet</b>				
Land, plants and equipment	41 168	60 580	57 713	18.4 %
Total assets	62 229	73 758	69 441	5.6 %
Equity	30 689	30 339	21 744	-15.8 %
in % of total assets	49.3 %	41.1 %	31.3 %	
<b>Income Statement</b>				
Total Revenues	7 150	7 127	15 703	48.2 %
Sale of electricity	3 208	4 280	5 252	28.0 %
Revenues other	3 942	2 847	10 451	62.8 %
EBITDA	1 479	2 145	2 920	40.5 %
in % of total revenues	21 %	30 %	19 %	
Depreciation and amortization	-1 499	-1 813	-2 132	19.3 %
EBIT	-20	332	60	n/a
in % of total revenues	-0.3 %	4.7 %	0.4 %	
Net profit / (loss)	-931	-120	-1 073	n/a
in % of total revenues	-13 %	-1.7 %	-6.8 %	
<b>Cash-flow</b>				
From operating activities	-14	3 020	992	n/a
From investing activities	-13 433	-22 008	-7 139	-27.1 %
From financing activities	21 307	8 800	6 162	-46.2 %
<b>Employees</b>				
Number per year-end	7	9	13	36.3 %
Revenues per employee	1 021	792	1 208	8.7 %
<b>Per share information</b>				
Nominal value	100	100	100	
Share price at 31.12.	94.10	93.40	57.00	
High	118.20	104.00	89.00	
Low	65.00	78.70	52.70	
Earnings per share	-4.45	-0.35	-3.03	

<sup>1</sup> Compound annual growth rate for the 3-year period

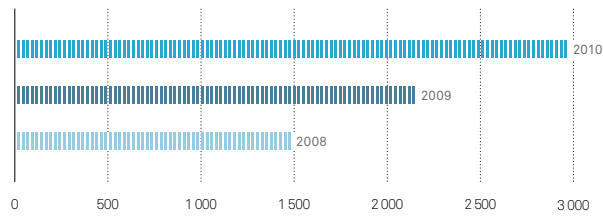
**Land, plants and equipment**



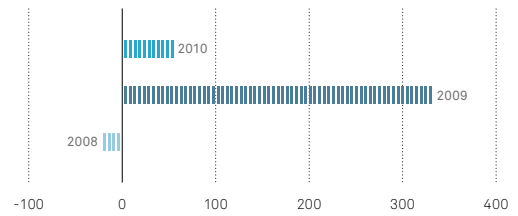
**Revenues from sale of electricity**



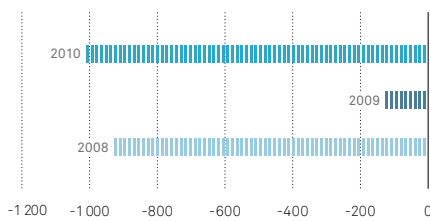
**EBITDA**



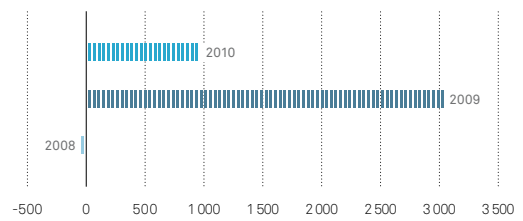
**EBIT**



**Net profit / (loss)**



**Operating cash-flow**



**Corporate Governance**

Further information on finances and corporate governance is to be found in a separate report (pages 4 – 23), available for download at [www.edisunpower.com/en/home-en/investors-en/corporate-governance-en](http://www.edisunpower.com/en/home-en/investors-en/corporate-governance-en).

# Marked increase in sales tarnished by currency losses

Edisun Power Group looks back on an eventful 2010. While we were able to post a striking increase in sales despite massive delays in connecting our French plants to the grid, one-off write downs and currency losses saw the Group close the year with a net loss.

## **One-off effects weigh on a good result**

The solar markets of relevance to our business developed positively during the year in review, and Edisun Power Group was able to build on this basis to post a marked increase in sales. Total sales rose year on year by 120%, while sales of electricity rose 23% (30% at constant exchange rates). Total installed capacity (in kWp) rose by 32.3% (40.2% gross including sales). Despite this striking growth, tangible assets diminished by CHF 2.9 million with the sales of a 610-kWp facility in Germany.

EBITDA rose by 36% to CHF 2.9 million (2009: CHF 2.1 million). The operating result (EBIT) dropped by 82% to TCHF 60 (2009: TCHF 331). The Group result after taxes, weighed down by the financial result and one-off write downs on projects and solar panels in storage, was TCHF -1073. Net loss, adjusted for extraordinary write downs of TCHF 728 and exchange rate losses, comes to TCHF -116. Cash flow analysis reflects the above: operative cash flow amounted to TCHF 992, capital expenditures occasioned liquidity outflows of CHF 7.1 million, and financing activities brought in CHF 6.2 million.

## **International profile strengthened**

Electricity sales abroad accounted for 64% of total revenues, as compared to 57% in 2009. As a result, the Group has become more dependent on the development of the euro. So as to reduce the attendant risk, we have for some time been building facilities abroad only with guaranteed local financing, thus ensuring a natural hedge. Our sale of the 610-kWp facility in 2010 was a first step in the direction of plant construction for third parties, and we will be developing this division in 2011 further in keeping with our new corporate strategy.

At year's end a bond issue brought us an additional CHF 5.8 million and bolstered our financing; in addition, two projects were refinanced to the tune of CHF 2.9 million. As per balance-sheet day the Group enjoyed a solid equity ratio of 31% (2009: 41%) and is thus well equipped to meet the future.

Mirjana Blume, CEO and CFO, Edisun Power Group



# The Board of Directors



Heinrich Bruhin, Chairman of the Board of Directors



Peter Toggweiler, Vice-Chairman of the Board of Directors

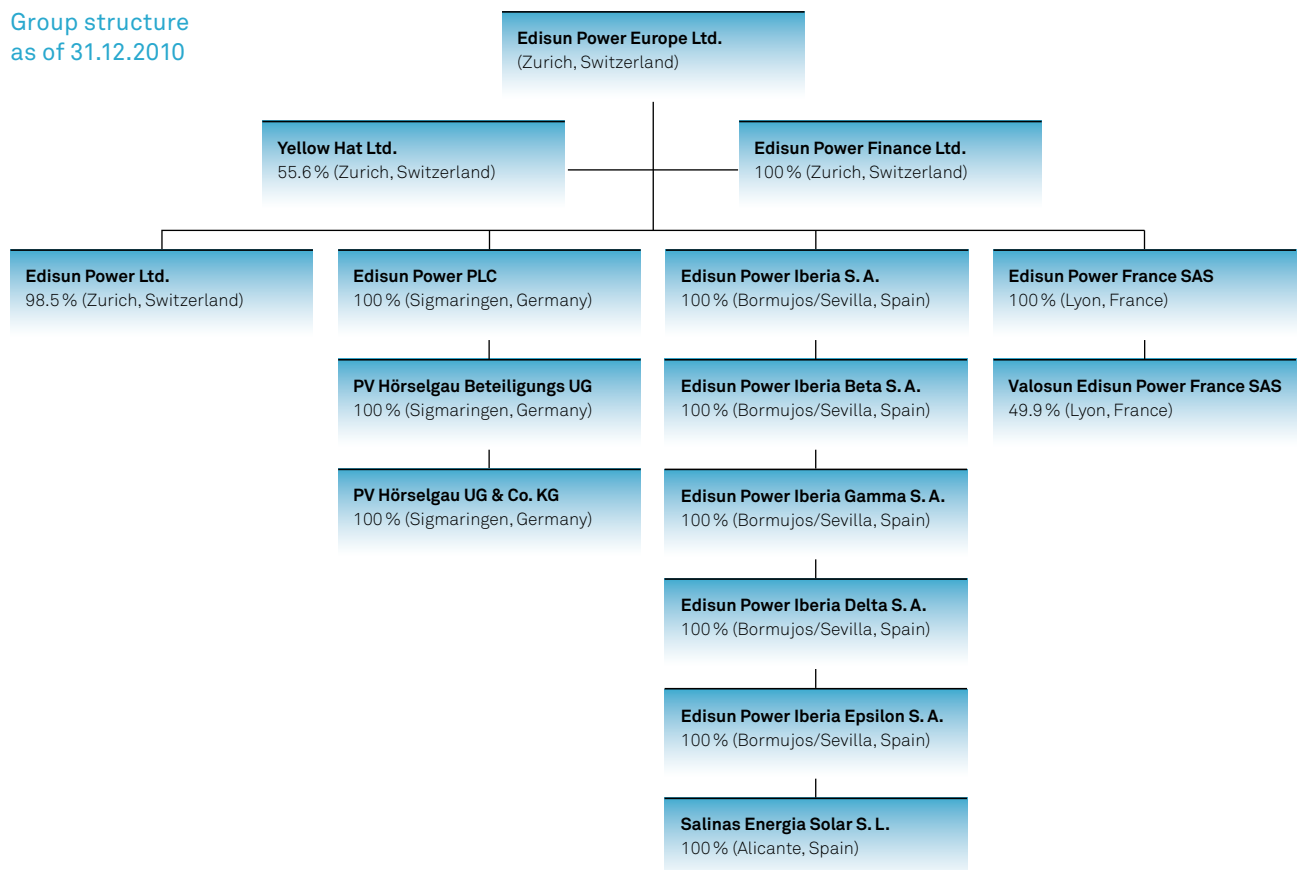


Pius Hüsser, Member of the Board of Directors



Dominique Fässler, Member of the Board of Directors

## Group structure as of 31.12.2010



# Grid parity driving demand and sales

Reductions in feed-in tariffs are currently being announced on a weekly basis with an eye to taking into account the sharp drop in component prices. Several countries are suffering the effects of the economic crisis and are also using a reduction in feed-in tariffs to contribute to the recovery of their national budget.

The solar power sector must expect further cuts in support in the years to come. Germany, for instance, has announced a flexible adjustment of support for 2011: if the volume of new construction has grown so sharply by mid-year that new installed capacity of over 3500 megawatts can be expected for the year as a whole, a further reduction in feed-in tariffs to the tune of between 3 and 15 percent will be imposed. This is intended to control growth of renewable energies while at the same time lowering the cost of support, and will principally accelerate competition among manufacturers of modules. A wave of consolidations leading to a shake-out of the market is to be expected.

Although market growth of some 10 percent is predicted for 2011, analysts agree that ensuing years will already see greater jumps in growth, with average annual growth of around 30 percent forecast for the period from 2009 to 2015.

The annual reduction in system prices is bringing grid parity, the moment at which solar power costs the same amount as end customers pay to purchase conventional electricity, ever nearer. In coming years a sustainable and efficient basis will have to be created for the sector, and investments made to date will need to be secured. Companies are preparing for grid parity, since it will be the solar power industry's key driver of demand and sales. In Spain, where a kilowatt-hour of household electricity costs around EUR 0.14, and in Italy, where it costs around EUR 0.16\*, grid parity is already a reality for households, or will be in 2011. As of 2013 solar power for households will be as affordable as conventional electricity from the grid in the countries of central Europe.\*\* This evolution can free the solar power sector of its dependence on volatile feed-in tariffs while offering power customers an attractive alternative to traditional energy supply.

\* Source: Eurostat 2007 Italy / 2010 Spain

\*\* Source: Sarasin





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