







are a 35-year-old company in a 100-year-old corporation." So says BP Solar's chief executive, Reyad Fezzani. "Many people find that very surprising." In a world where the role of alternative energies is still a fledgling one, it's easy to forget just how long solar power, and BP Solar, have been around.

And yet, 35 years on, solar still manages to bring out the best, and worst, in commentators. For every person who recognises the merit of investing in the low carbon electricity that solar power provides, there is a naysayer ready to knock this renewable energy source.

Tough choices

In recent months, it seems as though those doom-mongers have got a little louder. Much like the rest of the global economy, the solar sector has suffered a decline in demand for the first time in many years, with consequent reductions in prices. But the third quarter saw a strong rebound.

BP Solar has had to make some tough choices to position the company to become more cost competitive, including the closure of three panel construction factories in Europe and Australia. Fezzani notes that the past 12 months have been a period of extreme volatility for solar power, just like every sector of industry, in light of global financial uncertainty. But BP was first to act to restructure and has reinforced its commitment to solar.

Before the economic crisis last year, ever-lower costs for solar energy spurred increased demand of 86% in 2008 and, says Fezzani, there was a sense that this could last forever. But, as he explains: "If you are a consumer who wants to put a solar system on your roof and it costs you \$25,000 to do that, and you are worried about job security, you are not going to front the money, even if it will result in much lower energy bills. The result is that our industry, which had been powering away, found itself with excess capacity for the reduced demand that we experienced during the first half of 2009."

But a financially stable company with a long-term vision can ride the bumps. "In solar, when the price goes down, demand usually picks up because the return on your investment in a solar system gets better," he says. "We are beginning to see the effects of that now. After a tough first half, as the price has gone down, demand is up and, for BP Solar, the third quarter will reflect a new record for sales, with a more than 50% increase over the previous record."

Maximising investment

The company's 35-year reputation allows it to steal a march on fledgling competition, as clients want to know that the vendor can guarantee electricity production for the next 25 years, so maximising the potential from their investment.

"It is not like buying an electronic item, such as an iPod or a TV; you are buying something that is more akin to a home water-heating system, so you want to be sure that it is a product that will last a long time," says Fezzani. "If you buy a solar system, you want to know that, if something goes wrong in year 16, the company is going to be there to cover you and fix the problem. Unlike many other companies in the sector, BP has been around a long time and it has stood by its



obligations. A lot of our customers admire that because they do not want to take risks on such a big investment. It has led to this significant increase in sales."

However, the closure of three factories – two in Spain, one in Australia – and the elimination of a modular assembly line in Maryland, US, led some to believe that BP was exiting the solar business. "Nothing could be farther from the truth," says Fezzani. "In fact, our capacity this year will grow versus last year because we shut down relatively small factories that were not able to produce the product at a profit, and our Indian and Chinese sites are expanding much more rapidly." He adds that in the past 12 months, BP Solar has

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reduced costs by more than 25%, and expects to continue that as lower cost production facilities, including third party manufacturing, ramp up.

Far from witnessing a regression in solar power take-up, Fezzani has been inundated with requests from new commercial customers. Much of that growth is coming from retailer and logistics companies with ample roof space to install systems; and some is coming from information technology corporations chasing clean energy to power their super-servers, homebuilders who have found they sell houses quicker if they are pre-wired with solar, and utility companies with surplus land and grid connections who are responding to government mandates on percent renewables content.

That recognition has helped BP Solar develop some strong strategic partnerships, with governments, suppliers, customers and financiers. One such very successful "The Indian government has introduced a solar mission that is going to be scaling up solar to multigigawatt scale in a short period of time. We are very excited to participate through Tata BP Solar in the growth of the Indian market."

Reyad Fezzani

Close collaboration: BP Solar has developed some strong strategic partnerships, including one with US retail giant Wal-Mart.

partnership is with Wal-Mart. Formed in 2008 to help the US retail giant take steps towards its goal of acquiring all its power needs from sustainable sources, this partnership is enabling the generation of 4.3 megawatts (MW) of solar power by laying solar systems on seven Californian Wal-Mart rooftops, providing power equivalent to that used by 600 typical US homes.

Largest system

Meanwhile, across the Atlantic in Germany, the world's most advanced solar-powered country, BP Solar has joined forces with the developer RGE to build a farm of 250,000 solar modules on a disused air force base, generating 46MW for the next 25 years. This is the world's largest system being built today.

"RGE could have made their decision based on short-term financial gain," says Fezzani. "But they reasoned that our





sophisticated silicon crystalline products – which we were prepared to guarantee – would earn them more over the next 25 years. It is a very interesting project, high-profile in Germany, and the first of its kind."

Like all other parts of BP, the solar organisation takes its safety responsibilities very seriously and a fire in June in a small proportion of roof-mounted solar panel arrays on a warehouse complex near Mannheim in Germany raised important questions about that responsibility. "We are learning that our product is robust. It has been developed and optimised for 35 years," says Fezzani. "That product has to be put into the field and converted into a power system and we have learnt that the standards and quality requirements for installation and operation need to be very, very high.

"We believe the causes of that fire were primarily around third party installation and operation of the system, rather than the product," he continues. "But we are keen to ensure that the lessons learnt from that are shared across the industry. We want to push for greater and higher levels of industry standards for installation, operation and maintenance. We are also doing a lot ourselves to set and define those standards, sharing our lessons with the industry."

Record sales

With record sales already forecast for 2009, Fezzani is buoyed by the future of solar energy production within BP. The Chinese government has prioritised solar as the next focus area for its energy policy, with the introduction of substantial incentives for 2010, and there are significant growth options in India, where BP has a 20-year joint venture with Tata Group. "The Indian government has introduced a solar mission that is going to be scaling up solar to multi-gigawatt scale in a short period of time. We are very excited to participate

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But perhaps the most encouraging sign of a global shift towards solar energy has come from the continued backing of alternative energy programmes by governments worldwide, despite the recent drop in the global oil price.

"The climate change agenda has really moved governments to take the issue of introducing low-carbon power much more seriously," says Fezzani. "Governments are gaining confidence in the experiments many countries have made in subsidising these technologies, and believe that they can scale them up. There is also the case for scale-up to eliminate the need for subsidies; I think that case is now clearly made. We can now see a path in a relatively short period of time to having grid-competitive solar power. That has changed the dynamic dramatically, and I believe this truly is the century for solar."

Innovation delivered: over the past couple of years, BP has worked in partnership with FedEx to install solar panels on some of its distribution hub rooftops.



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