

The following are two experts from Bloomberg News relating to feed in tariffs

By Jeremy van Loon wrote on 2<sup>nd</sup> June 2008

Germany is slashing the subsidies that built its solar industry up to \$8.8 billion in sales and made the country the world's biggest market for panels that capture the sun's energy.

Homes and businesses earn a government-guaranteed price of as much as 47 euro cents (\$0.74) for each kilowatt-hour of solar power they generate, enough to run a vacuum cleaner for 60 minutes and double the market rate. Spain and France are copying Germany's model as a way to nurture clean-energy industries that can reduce reliance on fossil fuels and cut gas emissions blamed for global warming.

Almost nine years of subsidized prices have made Germany the largest market for photovoltaic panels with 17 publicly traded solar companies, and about 40,000 employees, 13 times more than in 2000. While the government says it wants to keep the industry from growing too fast, manufacturers Q-Cells AG and Solarworld AG say that reducing the guaranteed prices will hurt profits and stall the technology's emergence.

"Pressure on margins would be very high," said Anton Milner, chief executive officer of Q-Cells, the world's largest maker of solar cells, in a May 14 interview. "Many smaller German companies would be squeezed out of the market. It's definitely too early for the proposed cuts."

Germany has installed about 1.5 million solar systems, including 500,000 photovoltaic modules, according to the Berlin-based Bundesverband Solarwirtschaft, a solar energy association. Solar offers the potential of generating about a quarter of the northern European country's electricity, even with the relatively scant amount of sunshine, said Carsten Koernig, president of the association, in a May 13 interview.

### **Deepening Cuts**

The country has trimmed subsidized prices by 5 percent a year from about 1 euro per kilowatt-hour nine years ago to spur the industry to control expenses and improve efficiency. The environment ministry proposes deepening that reduction to 9.1 percent next year, and some lawmakers are demanding a 30 percent cut. A decision may come as early as this week, according to renewable-energy lobby groups.

"Consumers in Germany are paying 5 billion euros additionally per year to subsidize renewable energy," said Claudia Kemfert, the Berlin-based DIW Research Institute's chief energy economist. "It makes sense to lower these subsidies to exercise more pressure to cut costs."

Germany pioneered feed-in tariffs, as the subsidies are known. The tariffs guarantee the level of payments for solar power over 20 years, obliging utility companies to buy renewable energy from producers, households with panels and entrepreneurs who built solar farms as a result of the price guarantees.

### **Stocks**

Government policy is the "fundamental driver" of profit and valuations of companies specializing in renewable energy, including solar, said New York-based JPMorgan Chase & Co. analysts Thomas Lee and Marc Levinson in a note to advise investors on opportunities and challenges for the industry on May 15.

Q-Cells and Renewable Energy Corp. ASA rallied May 30 after Hermann Scheer, an SPD member of parliament, said Germany's ruling coalition government agreed to implement smaller-than-expected subsidy cuts of about 10 percent annually. The German environment ministry said May 30 that no official decision on the size of the cut had been made.

Thalheim-based Q-Cells surged 9.8 percent to close at 78.15 euros on the Frankfurt exchange, while Solarworld jumped 11 percent to 33.18 euros. Hovik, Norway-based Renewable Energy, the largest maker of polysilicon used in solar panels, rose 6.1 percent to 151.5 kroner in Oslo.

On May 29, Merrill Lynch & Co. analyst Matthew Yates wrote in a note to clients that the reductions could be as much as 25 percent. Bonn-based Solarworld fell 5.6 percent that day, and Q-Cells declined 5.3 percent.

### **Rising Costs**

Germany last year purchased 40 percent of the photovoltaic modules made worldwide, a demand that exceeds domestic production, according to the Merrill analysts in London.

The German system has become a model for 40 countries, mostly in the European Union, according to Deutschland-Hat-Unendlich-Viel-Energie, a Berlin-based renewable-energy group funded by the German government, Q-Cells and other companies. Spain, the second-largest market in Europe for solar cells, is following Germany in lowering tariffs to steer more money to plant-derived fuels and other alternative energy projects.

Without slashing the guaranteed price for solar power, consumers will be forced to spend an extra 120 billion euros (\$187 billion) on electricity in the next two decades and Germany will end up buying most of the world's solar modules, said

Joachim Pfeiffer, a lawmaker and energy spokesman for Chancellor Angela Merkel's Christian Democrats. That would benefit overseas producers, and the subsidies are meant to help only German companies, he said.

### **40,000 Jobs**

"The costs are threatening to explode," he said in a May 8 interview. "In the next three years, all this global solar panel production will be sucked up like a vacuum cleaner by Germany. This can't be in the interest of Germany or the industry."

"Mr. Pfeiffer has to ask himself whether he wants to threaten 40,000 jobs," Environment Minister Sigmar Gabriel, a Social Democrat, said in a May 14 interview, when asked whether he will have to compromise with the Christian Democrats and slash the subsidies more than planned. "The subsidies have been a success, clearly."

Negotiations between the parties may result in "significantly" smaller cuts of about 10 percent annually, said Hermann Scheer, an SPD member of parliament. The environment ministry said there is no official decision yet.

### **German Rooftops**

Electricity generated from solar panels on German rooftops will be cheaper than power produced by coal and nuclear plants after 2016, Koernig said, citing his group's own research. Until then, some customers may stop using solar if the subsidies decline too far, too fast, he said.

"Only the top two or three companies will be alright, and even that assumes they have made meaningful improvements in costs," said Catharina Saponar, an analyst at Nomura International in London, adding that the subsidies have been critical in creating the industry. "The rest may not survive."

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Germany legislators voted for steeper cuts to subsidized prices for electricity generated from solar panels and wind turbines, after almost a decade of state aid made its renewable-energy industry one of the world's strongest.

Chancellor Angela Merkel's coalition in the lower house of parliament in Berlin today approved trimming the fixed price paid to most solar generators by 10 percent and reduce aid for offshore wind power after 2015. Last year the guaranteed price paid for solar-produced electricity was reduced by 5 percent.

Europe's largest power market is altering its renewable-energy law to spur the industry to control expenses and improve efficiency. Almost nine years of subsidized prices have spawned the world's biggest market for photovoltaic panels and created the largest exporter of equipment for wind energy. Renewable-energy companies were pleased the reductions weren't worse.

"We assess the new law as positive and it will spur new investment," said Bjoern Klusmann, who heads the Berlin-based BEE renewable energy lobby group, in an interview. "The cuts to solar are not as deep as we expected, but still mean that the industry will have to take considerable steps to adjust."

Some lawmakers had demanded a cut of as much as 30 percent in the subsidized rate. The law will help support new investment in the industry, said a group that represents the sector. The so-called feed-in tariffs, a concept pioneered in Germany, oblige utilities to buy renewable energy from a range of producers, from households with solar panels to entrepreneurs who built small plants to benefit from price guarantees.

### **Three-Year Horizon**

For solar energy, the price will decline between 8 percent and 10 percent annually over the next three years, for equipment generating less than 1 megawatt of electricity, or supplies for less than 2,000 average European homes. The law also creates a new level of prices for generating more than 1 megawatt of power that starts with a fixed tariff of 33 euro cents, or about 25 percent less than under the previous regime.

The guaranteed price ranges between 33 cents and 43 cents a kilowatt-hour, or the amount to power a vacuum cleaner for about 60 minutes, from a previous maximum of 47 cents.

"Only with massive efforts in research and development and considerable investment in new, highly modern facilities can we reach the ambitious targets politicians have set out," said Carsten Koernig, who heads the Berlin-based BSW German solar lobby group, in a statement on the organization's Web site.

"But the risk of the market collapsing has been exorcized."

The fixed price utilities pay for electricity generated at offshore wind turbines will stay level until 2015 and then decline 5 percent a year, while prices for power from geothermal, water and other sources will fall between 1 and 1.5 percent a year starting next year.

### **Wind Farms**

Owners of wind farms who replace older, smaller turbines with newer, more powerful models will also receive support, something the industry had been lobbying for, said BEE's Klusmann. The law comes into effect in January, an "mistake" on the part of the government that will hamper investment for the rest of the year, he added.

Shares of Q-Cells AG, the world's largest maker of photovoltaic panels, fell as much as 1.7 percent to 73.25 euros and were little down 1.1 percent to 73.70 as of 3:22 p.m. in Frankfurt. Nordex AG, a German windmill maker, fell 40 cents, or 1.3 percent, to 31.19 euros.

The measures will lead to an additional cost of 6.2 billion euros (\$9.7 billion) for energy consumers in 2015, declining to 600 million euros by 2030, according to a draft of the law on the parliamentary Web site. The goal of the law is to help increase the proportion of electricity from renewable sources to as much as 30 percent by 2020, increasing ``continuously" thereafter.

### **Pioneer**

``This is a good day for the energy in our country and for climate protection," said Environment Minister Sigmar Gabriel, in a speech to lawmakers in Berlin today. ``I don't know of any other country that is such a pioneer in climate protection and renewable energy."

Some lawmakers, including the Green Party's Hans-Josef Fell, criticized the new law for not supporting the renewable industry enough and threatening to damage it with the cuts. Some 522 parliamentarians cast votes today, with 413 members voting in favor of the new law, 52 voting against it and the remainder abstaining.

Global investment in renewable energy is expected to rise to 100 billion euros in 2010, almost doubling from 2006, according to the United Nations Environment Program. About a quarter of a million people, a figure that is expected to double by 2020, work in industries related to renewable energy in Germany.

The German government also voted to support a motion on increasing the use of cogeneration, a technique that produces both electricity and heat from power stations, to warm houses and buildings.