Feed-In Tariffs

A REGULATORY TOOL

BY LOIS BARBER

Lois Barber
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ALL ACROSS THE COUNTRY, WHETHER motivated by a concern for the environment, energy security, job creation, the economy – or just a desire to make a buck – Americans are looking outside our borders to see what's been fueling the global growth in renewable energy. They are finding that one type of legislation, in Europe and elsewhere called a feed-in tariff (FIT), has proven to be the world's most effective renewable energy policy.

FIT legislation is in place in more than 40 countries, states, and provinces throughout the world. The laws differ in details, but share essential principles. They require utility companies to provide access to the grid for anyone or any group producing renewable energy , and to buy all the renewable energy available at established prices per kilowatt hour for a set period of time, usually 15 to 20 years. The prices vary according to the type of technology, the size of the system and its location. The increased costs to the utilities are paid for by adjustments to all their customers' electricity bills. In Germany, this has meant an increase of about $3 a month for average homeowners – about the cost of a loaf of bread. A board is established that meets periodically to review the policy and adjust the rates for new contracts.

Germany introduced this type of legislation in 1991 and it has made them the world's leading producer of renewable energy technology, creating close to a quarter-of-a-million jobs. Renewable energy jobs increased 40 percent between 2004 and 2006 alone. Germany now has 1.3 million solar panels in place. It reached its target of producing 12.5 percent of its energy from renewable sources in 2007 – three years ahead of schedule. Now it is up to 14 percent. The country has already reduced its CO_2 emissions by 18.5 percent compared with 1990 levels, and is on track to meet its target of a 40 percent reduction by 2020. Dr. Hermann Scheer, a member of the German Parliament who played a key role in writing and enacting the law, points out how FIT laws allow everyone – people from all walks of life – to profit from producing renewable energy. "New players have stepped into the market who now no longer have to ask the established energy providers for permission to access the grid. Only in this way can a breakthrough for renewable energy take place," Scheer said. One-third of the solar energy produced in Germany is from farmers putting solar systems on their barn roofs.

FIT legislation has also made Denmark and Spain global leaders in renewable energy. Together, wind turbines in Denmark, Spain and Germany represent 53 percent of the total wind-generating capacity worldwide.

Until recently, this idea that has proved successful in creating jobs and reducing CO_2 emissions, while handsomely rewarding investors. But it has received little attention here in North America. Only Ontario has a basic FIT system in place. But now, eager to bring these benefits to their own states and provinces, legislators are lining up to get similar bills introduced. In September, Michigan Rep. Kathleen Law introduced House Bill 5218, the Michigan Renewable Energy Sources Act. It includes all renewable energy sources without discrimination: hydro, wind, solar, geothermal, biomass and biogas; sets 20-year contracts; and gives "reasonable returns" on investment. The rates for solar energy range from 50 cents to 71 cents per kilowatt hour depending on the type of technology and the size of the system. For wind, the rates range from 2.5 to 10.5 cents per kilowatt hour. Everyone who wants to participate must be connected to the grid within two months of their request. Any increase in price will be shared among all utility rate payers. Promoters of the legislation point out that over time any short-term rate increases will eventually turn into long-term savings as utilities switch from buying increasingly expensive fossil fuels to clean, free fuel like Michigan's wind and sunshine. Savings will also come from not having to deal with the health and environmental damages stemming from coal or nuclear plants. An FIT law could help Michigan meet its renewable portfolio standard goal, currently being set in the state legislature, and replace lost jobs with hundreds of thousands of new ones in the renewables industry.

In 2008, following Michigan's lead, legislators in Illinois, Rhode Island and Minnesota introduced similar bills. California, while it doesn't have a statewide FIT law, is expanding its use of FIT policies in specific areas. Washington state already has a limited FIT law that pays up to 54 cents per kilowatt-hour for a seven-year period for electricity produced from solar technology manufactured in the state. To help turn the state's famous sunshine into energy, the Florida Solar Energy Industries Association is recommending to state policymakers that they implement feed-in tariffs.

In addition to this burst of activity at the state level, Rep. Jay Inslee (D-Wash.) is working on federal legislation that he unveiled in March 2008 at the Washington International Renewable Energy Conference (WIREC). Inslee's bill will give incentives to American consumers and businesses that generate electricity from renewable sources, and will guarantee producers of clean energy connection to the grid and predetermined rates for their power. His bill is expected to be introduced this spring.

Rep. Bill Delahunt (D-Mass.), the prime co-sponsor of Inslee's bill, said, "As the former chairman of the Congressional Study Group on Germany, it is clear to me that the single most important step we can take in order to promote a rapid growth of renewable energy in the United States is to adopt our own version of the German feed-in-tariff. In my travels to Germany I have been amazed at how this very simple policy has created an explosion of grassroots interest in the use of solar and wind energy. It is time to bring this renewable energy revolution to the United States."

Investors prefer feed-in tariffs over other policies because they create long-term market certainty and a stable investment environment. In a full-page ad in the issue of Politico that was distributed at WIREC, Goldman Sachs listed feed-in tariffs at the top of its list of "How to power alternative energy." With 15- to 20-year contracts and set prices for the energy produced, investors are eager to loan money for renewable energy projects. Predictability is essential, whether it is a family deciding to invest in buying solar panels for their roof, or a major bank deciding to invest in a megawatt installation. "With market certainty, innovators and inventors will turn out to compete in the market for renewable electricity," Inslee said.

For businesses, FIT laws have a lot to offer. For one, they are easy for customers to understand. When you generate power from a renewable energy system and feed it into the grid, the utility company sends you a check! This makes the business of selling, financing and installing systems much easier for the local professionals who no longer have to calculate the customer's expense through complicated payback charts based upon state grants, REC certificate values or federal income tax breaks. FIT policies, when done right, are simple and transparent. They do not need complicated government subsidies, paybacks or tax incentives. Unlike other renewable programs, FITs also provide a fair and open market mechanism so that customers of all sizes have an equal opportunity to participate. They recognize that every system owner deserves a "reasonable return" that corresponds to the size and technology of their system. This incorporates the market factors affecting the price of these technologies and ensures that ratepayers are not rewarding large system owners to the detriment of small ones. From an industry-building perspective, this is the best possible scenario for widespread adoption of green technologies.

Bringing FITs to North America will also strengthen our own industries and keep investment in renewable technologies at home – or even draw it from overseas. In the 1980s, the U.S. had an 80 percent share of the solar panel market; today, it has 25 percent. Denmark, Germany and Spain have taken over, thanks to their FITs. Most of the top wind turbine and solar manufacturers are now based elsewhere. By enacting FITs in North America, where we have enormous renewable resources and great innovators, we can again take the lead with regard to technology development and manufacturing.

Creating incentives for the rapid and widespread production of renewable energy is key to accelerating our shift from fossil fuels to renewable energy. Worldwide, FIT policies with their long-term stability and profit incentives for all green energy producers, have proven to be more effective at stimulating renewable energy investment and development than other types of legislation – especially short-term policies linked to the whims of policymakers that generate uncertainty.

FIT legislation encourages entrepreneurship, expands the green energy marketplace, creates jobs and wealth, and stimulates the economy – all the while significantly reducing pollution and greenhouse gas emissions. Legislators, businesses, investors and citizens are working together to bring these proven and successful policies to North America.

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