Global Corporate Xpansion - Online
December 8, 2011

The Future Of Renewable Energy Finance

« Back

by Mark Kleszczewski

After decades of ongoing research, development and implementation, the American renewable energy industry has attained a definite level of maturation, marked by widespread evolution in scale, technology and pricing. Renewable energy activities vary by geography, region, timing and risk profile, but they all share a need for investment capital and credit to fuel their current and future growth. Financing of renewables this year has been marked by policy changes, shifts in capital flows, and even political turmoil stemming from events such as the high-profile collapse of solar-panel manufacturer Solyndra, yet a broad range of financial institutions continue to lend money or invest in the renewable energy sector. The coming year will continue to be one of transition, risks and opportunities faced by investors, companies and communities across the country.

Funding Bounces Back

The financial crisis hit the sector heavily in 2008-2009, but funding levels and investor interest have since been rebounding. Bloomberg New Energy Finance (BNEF) reports that capital transactions in new energy totaled $243 billion in 2010 worldwide, with global investment in renewable energy jumping 32 percent in that time. Asset finance rose 19 percent to $128 billion and public market investment gained 23 percent to $15.4 billion. However, the sharpest percentage gains were in investment in small-scale projects, up 91 percent year-on-year at $60 billion and in government-funded research and development, up 121 percent at $5.3 billion, as more of the "green stimulus" funds promised after the financial crisis arrived in the sector. Among developed economies, the United States saw substantial activity, with new investment in renewables jumping from close to $16 billion to just more than $25 billion.

Renewable energy financing methods in the United States vary by subsector and project type, but often take the form of on-balance sheet financing – where a developer or utility uses its own cash or debt, secured by overall company assets – or project finance sought by stand-alone entities relying on the cash flows of the project itself.

Project finance markets may not have completely bounced back in the United States, but there is capital available for the very top projects, says Michael Butler, chairman and CEO, Cascadia Capital. "You're starting to see more and more people come back into the market. However, with demand for funds still greater than supply, investors or banks can be very discriminating, so they're picking the cream of the crop. It's the very top of the pyramid that's getting financed."

The good news is that although venture capital funds and some of the bigger European banks – traditionally at the forefront of financing renewable energy – have now pulled back somewhat, the bigger pools of capital, along with hedge funds and the larger private equity funds are stepping into the market and definitely putting money to work if they find the right projects, Butler says.

Shifting Markets

Although the attention and overall capital being invested in American renewable energy has been trending up, not all parts of the industry are seeing the same levels of financing activity and attractiveness.

At the Renewable Energy Finance Forum which took place in New York earlier this year, finance leaders outlined how the makeup of the renewable energy markets is changing. Wind power, once the stalwart of renewable energy in the United States, is now a mature market and seems to be undergoing momentary decline. One of the main questions facing the wind industry is how to overcome expiring support mechanisms, including the cash grant expiring at the end of this year and the production tax credit which expires at the end of 2012.

By contrast, the geothermal power pipeline is fragmented but growing, hydropower keeps moving ahead, ocean power is coming out of R&D into commercialization and even waste-to-energy deals are experiencing an uptick. Despite attracting huge loan guarantee commitments, the solar thermal electricity market has not gathered the expected momentum, with several major projects having been converted to photovoltaic (PV) at the eleventh hour.

Solar PV remains attractive to investors, reflected in impressive market growth that carried over into 2011. Indeed, according to BNEF, the United States saw significant new investment in solar, amounting to $5.5 billion across all classes of investment, as capacity installation jumped by 87 percent to 878 MW. Investment in the sector benefited from a range of subsidies and from low module prices caused by overcapacity and a declining cost curve.

Solar has a longer time horizon for its major public supports, yet a number of large projects are proving somewhat difficult to finalize and finance typically because they'll have more significant environmental impacts, notes Ken Locklin, managing director, Impax Asset Management (US) LLC. Consequently, there is a greater degree of attention being placed on some of the larger 100 MW to 200 MW projects that have relatively light environmental footprints compared to other technologies. "As a result," he says, "the number, size, and speed of certain new solar financings are growing in the U.S."

However, in other subsectors such as biofuels, Locklin says, investments in the United States are driven by incentives whose continuation and level of support, for example— ethanol, is quite hotly debated, making it more difficult to finance those kind of projects, especially when budget conditions are tight.

Government Involvement In Flux

The bankruptcy of Solyndra and several other solar companies this year brought mainstream attention to the now-expired federal loan guarantee program, though it doesn't appear to be hampering deal flow or future government involvement in renewables. Although the exact nature and extent of government incentives are subject to internal debate and external forces, government supports in the form of production tax credits, loan guarantees and similar initiatives are expected to drive demand and create a competitive market in the United States, while facilitating the flow of private capital.

In addition to federal policies and incentives which have been critical in supporting renewable projects, the implementation of renewable energy is also being backed at the state level. Preferred funding sources vary by state and region, but they can include public benefits funds, surcharges on electricity or gas consumption, bond issuances and allocation of tax revenue. They also feature a variety of mechanisms to deliver funding through revolving loans, energy performance contracts, lease-purchase agreements and grants.

Looking Ahead

The outlook for 2012 points to a spectrum of concerns and new opportunities. Investors still face a formidable array of financial, technological and political risks and have also gotten more sensitive to tactical issues, says Butler. Some of them have been burned putting money into projects which got delayed and saw IRRs go down. So right now, the timing of getting permits is one of the first questions he hears investors asking. "However, I think good projects with good input contracts and offtake agreements, with good economics and experienced developers, can get financing, Butler says. "If that's in place and the numbers pencil out, deals can get done."

Some suppliers are also developing innovative means of raising project funds, such as taking a traditional project finance route but "wrapping" it in an insurance policy, which provides investors a guarantee against potential losses. Manufacturers are also expanding their reach into the financing realm. "There's a lot of interest from strategic investors who want their products specified – solar panel and renewable equipment manufacturers, for example – who are engaging financing mechanisms in their business in ways they probably haven't done before," says Lee Barken, energy and cleantech practice leader, Haskell & White. "They're extending what are essentially very favorable terms to finance their own equipment."

Long-Term Prospects Abound

Despite uncertainty about the economy and renewable energy policies and initiatives, investors, developers and communities stand to gain from the continued growth of renewable energy. "The more time that goes by and the more of a track record we have, the more comfortable the investment community is becoming with these kinds of transactions," Barken says.

"The longer-term view is that the costs of renewable energy – wind and solar, in particular – are coming down dramatically, making investments more attractive," adds Ed Feo, managing director, USRG Renewable Finance. "There may be periods of disruption in 2012 and beyond, but I'm not really worried about capital going away from this sector."

Mark Kleszczewski is president and CEO of GoBusiness Group, LLC and a freelance writer on critical business topics. He can be reached at mark@gobusinessgroup.net.

For complete details on the organizations featured in this article, visit:

Bloomberg New Energy Finance, http://bnef.com/

Cascadia Capital, www.cascadiacapital.com

Haskell & White LLP, www.hwcpa.com

Impax Asset Management (US), www.impaxam.com

USRG Renewable Finance, www.usrgrf.com