

Wind picking up?

Recent months have seen the renewables markets begin to pull themselves out of the doldrums. **Jess McCabe** finds the winners in the renewable energy categories of the *Environmental Finance* market survey in optimistic mood

It's been a tough year for the renewables sector, as the impacts of the wider economic decline hit home. However, it has not all been doom and gloom – markets for tradable Renewable Energy Certificates (RECs) have remained relatively insulated and, at the end of 2009, financiers in Europe and North America are optimistic that the worst is behind them.

As Ben Warren, partner at Ernst & Young's renewables business in London, puts it: "2009

has been a year characterised by the credit crisis and slow and gradual emergence from it." Ernst & Young was named Best Advisory Firm, for renewables finance in Europe, in the *Environmental Finance* market survey this year.

"A little over a year ago things were actually humming along fairly nicely," before the effects of the economic downturn really began to hit renewables projects, says Ed Feo, Los Angeles-partner at Milbank, voted Best Law Firm, re-



Martin Mugica, Iberdrola Renewables: building out at a gigawatt a year in the US

newables finance, North America. But, by March–April this year, as project pipelines dried up, it became clear that the size of projects financed was getting smaller and the total number of projects fewer. There have been just 22 wind financings in the US so far this year, he notes.

However, the US market has been boosted by the stimulus package, our survey winners say, particularly measures to allow wind projects to access a 30%, up-front investment tax credit, instead of the production tax credit.

Iberdrola Renewables, for example, voted Best Project Developer North America, "has received grants from nine projects recently placed in service totaling 1,041.6MW. We intend to use the grant funding to finance additional projects to be built in the US later this year and next year," says Martin Mugica, head of the firm's US wind business. Iberdrola has plans to build another 1,000MW in the US next year.

But the other notable support for renewables in the stimulus package – the availability of federal loan guarantees to provide a backstop to projects – has not yet filtered through to the market. Manish Taneja, New York-based global head of syndications and debt capital at WestLB, says there are "at least two large projects" scheduled to raise financing next year of more than \$1 billion, hoping to apply for the loan guarantees.

And, says Feo at Milbank, the outlook for next year and beyond is one of growth, both in the number and size of projects financed. "It's been just progressively getting back to the level of activity [seen in 2008]," he adds.

Lisa Frantzis, Burlington, Massachusetts-based managing director of energy at Navigant Consulting, named Best Advisory Firm in North America, agrees: "I'm actually quite optimistic about 2010 and beyond. [Although] we're probably not going to see the double-digit growth that we have had in the last five years or so."

In Europe, meanwhile, "If you compare the first half of 2009 against 2007 and 2008, it was rubbish," says Simon Currie, London-based global head of energy at Norton Rose, this



	Winner	Runner-up
Renewables Finance – North America		
Best Project Developer	Iberdrola Renewables	Horizon Wind Energy
Best Finance House	WestLB	Goldman Sachs
Best Advisory Firm	Navigant Consulting	ICF International
Best Law Firm	Milbank Tweed Hadley & McCloy	Chadbourne, Park
Renewable Finance – Europe		
Best Project Developer	E.on	Abengoa
Best Finance House	European Investment Bank	Credit Suisse
Best Advisory Firm	Ernst & Young	Garrad Hassan
Best Law Firm	Norton Rose	Baker & McKenzie
Renewable Energy Certificates – North America		
Best Broker	Evolution Markets	Spectron
Best Trading Company	Element Markets	3 Degrees
Renewable Energy Certificates – Europe		
Best Broker	GreenStream Network	Tradition
Renewable Energy Certificates – Australasia		
Best Broker	Next Generation Energy Solutions	MF Global
Best Trading Company	AGL Energy	–

Environmental Finance

MARKET SURVEY RENEWABLE ENERGY

year's Best Law Firm, Europe, for renewable energy finance. The first half of 2009 was characterised in particular by a lack of bank capacity to finance projects, he notes. The situation started to turn around in late July. "We were in Cyprus closing the financing for their first wind farm and people started to call to talk about new deals they hoped to close by the end of 2009 – the second half of 2009 has seen a very significant improvement in many markets across Europe."

Momentum was further boosted when the developers of the IGW London Array offshore wind farm announced the project was green-lit, Currie points out, and, in November, when Centrica announced its novel offshore wind financing plan to invest £725 million (\$1,190 million) in its 250MW Lincs wind farm, while refinancing existing wind assets.

Of course, the gloom has not affected everyone equally; utilities, which often finance projects off their own balance sheets, have been less affected.

"We've continued to grow at the same pace," says Düsseldorf-based Michael Lewis, European managing director of E.ON Climate and Renewables, voted Best Project Developer, Europe. In 2007, the German utility announced it would invest €8 billion (\$12 billion) in renewables until 2011. "We're still building right now in Europe round about 1,000MW, at various stages of construction. This year we'll continue to invest."

Indeed, E.ON has benefitted to a degree, from the economic climate, which has helped drive down wind turbine prices.

Crucial to the decision to go ahead with the massive offshore London Array project, off the coast of the UK, was the government's decision to introduce banding of its renewable energy certificate (REC) support scheme, so that offshore wind projects will receive two tradable Renewables Obligation Certificates for each megawatt hour of electricity produced.

Although the schematics of REC trading vary depending on the country, the basic principle is that such programmes set a standard or obligation that utilities or energy generators must source an increasing percentage of supply from renewable sources each year. They comply with the scheme by handing in tradable RECs, created by renewable power producers for each megawatt hour of electricity generated.

In the US at least, REC trading has not been as affected by the economic downturn as renewables project development or finance, according to the winners in our market survey.

There is currently no nationwide, single Renewable Portfolio Standard (RPS) to set in motion a REC market in the US – instead, individual states have set their own RPSs, with their own targets and prioritising their own technologies. More states have continued to adopt standards, and tighten and extend existing targets. For example, California Governor Arnold Schwarz-

egger this year signed an executive order increasing the state's RPS to require 33% of electricity to be sourced from renewables by 2020, up from 20% by 2010. Notably, Connecticut now also issues RECs for energy efficiency improvements.

Prices in these markets vary widely. In the past year, prices for voluntary RECs have remained low, at around \$0.80–1.50/MWh, while in the regional New England mandatory REC market (composed of states in the north-eastern US, such as Massachusetts, Rhode Island, Connecticut, New Hampshire and Maine), prices have been around \$20/MWh.

"Pricing and trade volume is state-specific," based primarily on legislative regulations, says Angela Schwarz, president and chief operating officer of Element Markets, voted Best Trading Company for RECs, North America. "The US market will remain highly fragmented until a federal RPS is instituted. For now, market fundamentals are derived from rules based on regionally specific supply and demand models."

Again this year, however, eyes in the market were on the "potential for federal legislation", says Andrew Kulchins, managing director, renewable energy markets, at Evolution Markets, Best Broker for RECs in North America, based in White Plains, New York. "I think there's a general feeling [that in the next 12–18 months] federal legislation will develop," he adds. In comparison to the struggle to push climate regulation through the US legislative system, a federal RPS "could be a very easy win for the administration".

In Australia, meanwhile, the RECs market has experienced a dramatic year. Fernando Broder, head of Next Generation Energy Solutions in Melbourne, named Best RECs Broker, Australasia, says the past six months have been "perhaps the most volatile period since the market's inception".

The first half of 2009 was relatively stable, as prices in Australia's federal REC market stayed around the A\$50 (\$46) mark – the level of the buyout, which effectively caps prices. This was in part driven, says Broder, by expectations the government would succeed in passing legislation to strengthen and extend its REC market, increasing the target for renewable energy generation to 45,000MWh a year by 2020, up from 9,500MWh a year, and increasing the penalty for utilities which fall short.

However, in June 2009, the government's Renewable Energy Target bill failed to win parliamentary approval, partly because it was tied to the controversial Carbon Pollution Reduction Scheme bill, to introduce carbon trading to the country. Combined with growing awareness of a glut of REC supply in the market, as installations of heat pumps, solar hot water systems and photovoltaic panels powered ahead, prices slid to A\$40 per MWh in June.

"This has been driven by supply/demand fundamentals," says Ryan Callister, head of eco-markets at AGL Energy, Best Trading Company for RECs in Australasia. "In short, multiple state and federal subsidies to solar hot water and



Michael Lewis, E.ON: continuing to invest, despite the slowdown

solar PV, combined with a strong A\$50-plus REC price during the early part of 2009, resulted in a large amount of RECs being created relative to demand."

Although the legislation eventually passed when it was put to the Australian parliament again in August 2009, "the spot REC price paradoxically continued to slide as the oversupply of RECs weighed the market down", explains Broder. By mid-October, spot REC prices dropped to their lowest level since April 2007, at A\$28/MWh – although prices have recovered slightly to the low A\$30s in early December.

"The relatively low REC prices have created a situation in which other sectors of the renewable energy industry (such as wind, solar and landfill generation) struggle to get the prices required to get projects off the ground, thus halting the inflow of investments into renewable energy projects in Australia," says Broder. In response, analysts expect the Australian government to "do something to turn that around", he adds, with all eyes on a review to be carried out by the Council of Australian Governments. "To put it simply, the outlook for RECs is dependent to a large extent on regulatory development with the federal government ultimately controlling the levers of supply and demand," Broder concludes.

European markets for green certificates, or guarantees of origin, have been stable in comparison. Jussi Nykänen, chief executive of GreenStream Network, voted Best Broker for European RECs this year, says that market volumes have been affected little by the economic downturn. "There's no big difference between 2008 and 2009 in terms of market activity," he says.

European RECs have escaped, he adds, mostly because the companies operating in these markets are power companies looking to green their electricity supply, and they're "not moving away from the market".

Volumes across the board were around the same as 2008 and "clearly bigger than 2007", he adds. Prices also remained "quite stable – we haven't seen big differences", Nykänen says. Because European REC markets are fragmented – both by country and technology – prices range widely from €0.15–0.20/MWh for credits from large-scale hydropower, typically trading in large deals of hundreds of gigawatt hours, to €5–10/MWh for credits for small-scale wind generation. E