



Friday, 06 April 2012

- Home
- Panorama**
- Wind
- Solar
- Bioenergy
- Other renewables
- Energy saving
- Electric/Hybrid
- Interviews
- Blogs



panorama

Part three of an on-going series

Want to finance big wind? Look at how they do nuclear

Wednesday, 28 March 2012

Dan McCue

Writers take an idea and commit it to the page. Painters gaze upon an scene and apply brush to canvas. But it's a decidedly rarer sort who can look at an open field or expanse of water, envisage a wind farm upon it, and then re-imagine it all in dollars and cents for sale to wary banks, investors and financiers.



That happens to be what Fintan Whelan, corporate finance director and co-founder of Mainstream Renewable Power, does on a regular basis. So it seemed entirely appropriate for him to be REM's next stop in the search for the answer to what makes renewables finance go even in otherwise harsh financial times.

"When you have an expertise in development it seems you're always in on the highest risk phase of a project," he said early on in our conversation. "Whether you're building a wind farm or a solar farm -- we do both -- or even an apartment complex for that matter, at some point you're standing on the side of a windy hill, analyzing whether or not it's a good proposition.

"At that point the project is about being able to visualize the economics, going for the consent of the regulators and authorities, pulling together grid connections, organizing your supply chain to build, organizing the sale of the electricity, and, not last nor least, organizing the funding," he said. "All of those things are part of the development process."

But even that's not the be all and end all of the financial considerations. At some point during the project gestation period -- often just before the commencement of construction -- a developer like Mainstream Renewable Power will decide whether they want to hold a long term equity interest in it.

"It's a question of, 'Do you want to sell at that time?' or 'Do you want to stay with the project?'" Whelan said. "Or, do you just want to sell a share?" In which case, we might decide we want to hold on to 10, 15 or 20 percent.

"There are a couple of reasons for all this, of course; one is that our core expertise is in early stage development -- although we also have operations and maintenance experience. The other thing we're looking at is the most effective use of capital throughout a project's life," he said.

"Now, as you can imagine, until something is built, it might not get built," Whelan said. "That's why a built and operating wind farm generating cash is rightly seen as a much lower risk proposition than if you are starting from point zero.

"So there are a couple of things you have to take as givens right from the start: The returns on invested equity in the development phase should be higher than during construction and operation, that's the first thing. And secondly, the capital intensity really picks up at the start of construction," he said.

Big plays in many markets

Número 109
Marzo 2012

Subscribe

DIGITAL MAGAZINE

blogs

ritesh pothan
A perspective on Indian renewables
India

Renewable energy, grid parity – myth today or tomorrow's reality!

See more

Latest | Most read

- Despite inconsistent government policies in the US, geothermal industry is seeing steady growth
- Sensus' £5 million investment in Navetas secures exclusive US license to smart grid technology
- Sapphire Energy secures \$144 million in backing for its Algae-based crude initiative
- Enel Green Power finalizes equity partnership with GE Capital subsidiary EFS Chisholm

VER

Earth Hour 2012

Kirsty Hamilton of Chatham House in London had said Whelan would be a wonderful person for Renewable Energy Magazine to speak with for this series, and despite his professed modesty -- "I only hope I can live up to that kind of billing, even in part," he said when he learned of the recommendation -- he did not disappoint.

Within moments of making his acquaintance, it was clear he loves to talk about the financial intricacies of the development side of the renewables business.

Many of the principles involved Mainstream Renewable Power were formally with Airtricity, an Irish energy company acquired by Scottish and Southern Energy pls in February 2008. Whelan himself was corporate finance manager for Airtricity, and Mainstream's CEO, Eddie O'Connor, was one of Airtricity's founders.

"When Airtricity was sold, Eddie and I set up Mainstream and we've been at it ever since," Whelan said.

Today the company has several projects in development, including wind farms in Canada, the US, Chile and Ireland, offshore wind farms off the Scottish, British and German coasts, and solar facilities in Ontario, Canada, the US state of California, Chile and South Africa.

The company made headlines in 2011 when it sold 106.5 MW Shady Oaks wind farm project in the US state of Illinois to Goldwind, the Chinese turbine manufacturer. The purchase marked Goldwin's entry into the North American market.

"We worked with them to win a PPA with the Illinois power agency, and having won the PPA, they needed a project to meet their newly acquired contractual commitments," Whelan said of the sale. "So the deal was, if they won the PPA, we would sell them the project at a pre-agreed cost."

In December 2011, Mainstream enjoyed another high profile success as leader of a consortium that was awarded 238 MW in wind and solar contracts in South Africa.

The award, which calls for the consortium to deliver a 138 MW wind farm and a 100 MW solar PV facility into commercial operation by 2014, was made under the first round of the South African Government's Renewable Energy Procurement Programme.

Besides Mainstream, Equity members of the consortium include Globeleg, a global power company, Thebe Investment Corporation, one of South Africa's most established broad based BEE Investment management companies, and local engineering firms Enzani Technologies and Usizo Engineering.

"It was an interesting process," Whelan said of the South African experience. "The government had started out with a proposal for a feed-in tariff, but it ultimately ended up with a competitive bidding process, with the standard for qualifying bids being almost financial close.

"That meant you had you had to have all of your funding arranged, your debt underwritten and your equity investors lined up. You had to have 40 percent South African equity involvement, you had to have your turbines or solar panels lined up, you had to have your engineering contractors lined up," he said, adding, "Effectively what they wanted was for the winners of awards to be ready to hit the ground running, which really suits everybody. So the bar was high, but we were delighted to participate in the process. We think South Africa is a very good market. It has great wind and solar resources, so that's where you want to build your wind farms and solar farms, of course."

Enormous offshore projects in the offing

As for Mainstream's offshore wind projects, it's smallest undertaking is a 450 MW wind farm off the coast of Scotland. It's project off England is 6,000 MW, and its German project is 1,200 MW.

"Offshore wind is a completely different ballgame. Completely different. It's mega-scale," Whelan said.

That 6,000 MW project off England is a 50/50 joint venture with Siemens Project Ventures.

"They're a great partner, with a strong balance sheet," Whelan said. "But we're alone on the other two."

When it was suggested that those two project must represent an awful lot of money; to which Whelan replied, "the rule of thumb for a MW offshore at the moment is 3 million Sterling. So it's very big."

How then do you finance such a project?

"One thing you don't do is go looking for answers to that question based on past history," Whelan said. "You don't say, 'Well, we built a 20 MW wind farm onshore last year, how did we get the money for that? The scale of the project requires that you be much more creative."

"There's actually a very interesting pointer for us in how the two nuclear plants that are currently under construction in Europe are being funded, because they are large scale, and very, very big ticket pieces of infrastructure investment. And it's power, right?" he continued.

"So it's very helpful for someone like me to have a look and see how they got them into construction," Whelan said. "Where did the funding come from? 'How does that all fall together?' And it's amazing how few people look in the next field for ideas and inspiration.

"I'm in this business since 2000 and I know a lot of people around the space -- mostly in London, rather than on your side of the Atlantic -- and very few of those that I have spoken to know what has been happening in the funding of

255 0 0
Me gusta Tweet

Siguenos en **twitter**

Cien días de política energética del Partido Popular.
Cien días de ruleta rusa <http://t.co/8pVsscJy> 1 day ago

Abril, mes de la "revolución"
fotovoltaica <http://cort.as/1nj3> 2 days ago

0
Like

Renewable Energy Magazine on Facebook
Like You like this.

274 people like **Renewable Energy Magazine**.

 Helo	 Stilista	 Wll	 Nafarin	 Ramesh
---	---	--	--	---

Facebook social plugin

Siemens Wind Power
Highly efficient, solid & reliable wind power solutions - Siemens.
www.energy.siemens.com/WindFarms

Bank of America@
Fueling the Economy & Helping the Environment through Green Financing
www.bankofamerica.com/ahead

Fluke@'s Thermal Imaging
Wondering What Thermal Imaging Is? How Is It Helpful? Read This Blog!
Thermal-Imaging-Blog.com

Bridge Bank, N.A.
Get your solar project financing by Energy & Infrastructure Group
www.bridgebank.com



these nuclear projects," he said.

In the case of the first project that Whelan has been watching, in Finland, an equity consortium has been formed consisting of a Finnish utility and several members of the county's pulp and paper manufacturing industry.

"The reason is, they want the output from the nuclear power plant in its entirety," Whelan said. "They are in an energy intensive industry, and the plant provides them with the ability to have a predictable cost of power over the long term," he said.

"Energy intensive users who have grown tired of the price volatility of electricity generated from more traditional sources, are looking for a way of fixing their power price for the life of a generating asset; that's a real holy grail for a lot of these intensive users. And that's what's happening in Finland," he said.

Whelan described another nuclear project, in Flamanville, France, as a variation on the theme.

"A consortium of energy-intensive French corporates got together and formed a consortium called Exceltium, and they put some money in the pot together, borrowed some project finance, and they gave it to EDF as a pre-payment for 25 years output from a nuclear plant," he said. "EDF was then able to use that money to build at Flamanville.

"The interesting thing about this arrangement, of course, is that the corporates are one-step removed from the ownership and operation of the nuclear plant," he continued. "All the risks are passed across to EDF, who was well able to take them, of course.

"But it's just another example of how when the electricity generation asset is a very big lump of money and when its costs are known with a reasonable amount of certainty, well then, the solution that was sought out and found was the rock solid appetite of corporates, not just for electricity, but a long-term visible power price. What the corporates are looking for is certainty," he said.

Whelan sees a similar appeal in wind.

"Plus, there's no fuel at all to consider with wind, and there's no possibility of any tail risk like Chernobyl or Fukushima," he said. "The worst damage any offshore wind turbine can do is fall over and maybe hit a ship -- extremely unlikely, and a contained, insurable event."

But that doesn't mean that Whelan expects corporate entities to rely on running their factories via a direct connection to an offshore wind farm.

"Any energy-intensive user that currently has a secure way of getting electricity for its factories and facilities is going to leave that undisturbed," he said. "What I see is something more along the lines of a corporate investing in an offshore wind farm or in a fund that holds an offshore wind farm as an asset.

"Now, that's an investment that's decoupled from any particular corporate appetite, right?" he said. "But what you can envision is a situation where they'll take this 10 percent investment in a wind farm, thus 10 percent of the energy it generates, and go to the utility that supplies their power and say, 'What credit are you going to give me for this power against the bill for what I consume?' So it's an off-setting arrangement."

For additional information:

[Mainstream Renewable Power](#)

TAGS: [Wind](#) , [Offshore](#) , [Africa](#) , [Solar](#) , [Nuclear](#) , [Electricity](#) , [Canada](#) , [Renewable energy](#) , [PV](#) , [Grid](#) , [Fuel](#) , [France](#) , [Feed-in tariff](#) , [Europe](#) , [Wind turbine](#)

+ Add a comment

electric/hybrid



Global e-bike sales to exceed 47 million by 2018

wind



Multi-million pound wind power agreement signed in Northern Ireland

pv



Line finally drawn under long-running solar tariff case in UK

Share |



[Advertising](#) [Contact](#)

Created by: [Vaiintermedia.com](#)