

# Norvind: Merchant movement

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SN Power and Centinela have closed the first project financing for a wind farm in Chile. The project follows an earlier, balance sheet-financed wind project from Endesa in Chile, and Brazil has been first in bringing wind farms to market. But the Totoral farm's lenders are taking on full merchant risk, a profile in the region that only the Chilean power market could support.

Totoral is a 46MW wind farm located 300km north of Chile's capital, Santiago, in the municipality of Canela, not far from the earlier 18.5MW Endesa project, which shares a name with the municipality. The developer of the project is domestic holding company Centinela, which acquired the land for the project earlier in the decade with the aim of building a beach resort.

Centinela found the area to be much too windy to attract tourists, but this realisation coincided with the interruption of gas deliveries from Argentina. The interruption has reshaped the energy sector in Chile, which has no domestic energy sources apart from wind and rain, and has led to a small boom in project finance in the country.

SN Power, a developer owned 60% by Statkraft and 40% by Norfund, already ran a joint venture with Centinela to develop a 600MW, \$600 million hydroelectric portfolio. Centinela had begun collecting wind data in 2004, and approached SN Power about helping finance a wind farm at the site in late 2006. The two formed the special purpose vehicle for Totoral – Norvind – in 2007.

The wind farm consists of 23 Vestas V90 2MW turbines, with Vestas responsible for installation and Skanska performing the balance of plant civil engineering works. The choice of supplier would have allowed Norvind to raise export finance from Danish export credit agency from EKF, which has some experience with emerging markets wind projects. But after a competitive selection process, in which several local and international banks participated, the sponsors went with more familiar names.

In July 2007 SN and Centinela mandated the International Finance Corporation (IFC) as A loan provider and DnB Nor as B loan provider for Totoral. The two had been lenders to SN's La Higuera and La Confluencia hydro projects, part of a joint venture with Pacific Hydro and located on the Tinguiririca River. The IFC has already participated in two wind financings, Ventos do Sul and Rio Fogo, in Brazil. The financing breaks down into a \$30.75 million A loan and \$30.75 million B loan, both with a tenor of 18 years.

The project, which is located in the province of Choapa, in the IV region of Coquimbo, dispatches into the Sistema Interconectado Central. This pool is the largest and most liquid in the country, and serves the bulk of the country's population. Totoral receives revenue from four sources: capacity payments, energy sales, carbon credits and renewable certificates.

The capacity payments, which are paid by the system's operator, are small because wind is variable, and are currently under review. Carbon credits can be more lucrative, and SN's two hydro projects in Chile are already eligible for such revenue. The sponsors have submitted the project for clean development mechanism eligibility, and do not expect power production variability to discomfit carbon credit buyers.

The renewable certificates mechanism is newer. The Chilean government has mandated that generators procure 5% of their power from non-conventional sources (hydro smaller than 20MW, wind, solar, geothermal and biomass) from 2010. Those that do not are subject to stiff fines, though they can make up any shortfall by buying spare credits from renewables producers. At least in the near term, and assuming that the larger generators do not abandon their new-found love of coal, business should be brisk.

However, the largest source of revenue will be sales of power on the Chilean spot market. According to Nils Huseby, SN Power's executive vice-president for Latin America, the project might have been able to sign a power purchase agreement with a local utility, but the contract would have been inflexible with respect to output variability and completion date. "It was actually less risky to finance the plant on a merchant basis," he says.

Instead, Totoral participates in the spot markets, where generators trade power to meet their obligations to offtakers. Wind benefits from preferential dispatch, but receives the same price for power as any other generator. This price is set at the cost of the marginal producer, as in many other merchant markets, with imported coal and diesel usually setting prices. The Chilean market, while modified to take account of the Argentinean crisis, is considered robust by commercial and multilateral lenders, and prices are indexed to the US dollar.

The comparatively long period of wind measurements at the site serves to increase lender comfort, as does a cash sweep on the debt, which kicks in immediately. And the combination of wind and hydro also serves to smooth out SN's income from Chile, because there tends to be an inverse correlation between wind production in Canela and production from the Tinguiririca plants. SN Power could not, however, finance the wind and hydro assets as a portfolio because they have different joint venture partners. The forthcoming Trayenko hydro portfolio might be a more suitable candidate, because the SN and Centinela shareholdings in that venture are the same as for Norvind.

The financing did not get done without a flex between mandate and close, although Huseby declines to specify the final pricing level. But other Chilean producers, most notably Angamos, have had to contend with margin creep too. In a market where US wind producers with power purchase agreements struggle to close project financings, Totoral's achievement is important. Chile, which has witnessed the closings of the Angamos, CTA, and now Totoral power financings since the collapse of Lehman Brothers, now looks like the only source of project finance action in the region.

#### **Norvind SA**

Status: Closed 9 February

Size: \$140 million

Location: Canela, Chile

Sponsors: SN Power (80%) and Centinela (20%)

Debt: \$61.5 million

A loan provider: International Finance Corporation

B loan provider: DnB Nor

Maturity: 18 years

Market consultant: Synex

Wind consultant: Sgurr

Sponsor legal counsel: Noguera Larrain & Dulanto (Chile), Wikborg Rein (Norway)

Lender legal counsel: Claro

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