

First Commercial Non-recourse Project Finance in Uruguay and for the V126

Author: Rosa Tarragó

Position: Director

Affiliation: SOWITEC

Address: Westendstrasse 74, 60325 Frankfurt am Main, Germany

Phone: +49 09 47 86 63 93 / Fax: +49 69 47 86 63 86

Email: rtarrago@globalcapitalfinance.com

1. Abstract

As published by the Global Wind Energy Council (GWEC) in April 2016, Uruguay has experienced rapid development in the wind energy sector since 2010. At end-2015, the country's total wind power capacity amounted to 845 megawatts (MW), supplying 19.5% of the country's electricity demand. More wind energy is also set to be commissioned, with 950 MW tendered in the past to private companies and the state-owned electricity company, UTE, aiming to operate 632 MW in addition.

Pastorale, a near-shore wind farm with a capacity factor of 46.5% and a size of 52.8 MW, won the tender on 23 August 2012 and was granted a 20-year power purchase agreement (PPA) at a price of USD 63.5/MWp. On 23 February 2016 financial close was successfully reached on the debt and equity components for what will be the first large scale implementation of the new Vestas wind turbine type V126.

The close is the first in the country to be carried out with commercial lenders and on a non-recourse basis.

2. Keywords

Project finance, wind turbine type Vestas V126, Uruguay wind energy

3. Lessons learnt

3.1. New Wind Markets Are Supplied With the Latest Technology

Pastorale has been designed with a capacity factor of 46.5% and a size of 52.8MW. In order to reach the highest output possible, one of Vestas' newest and most advanced wind turbine types was used in the detailed design of Pastorale: the V126-3.3MW/117 metres height/IEC Class IIIB. At the time the commercial bank was mandated (two years ago), field tests were running with this machine.

The commitment of a lender with its own engineering department, a long track record on wind park financing and experience in entering new markets was crucial to gain support to install state-of-the-art technology in an emerging wind market. Moreover, the selection of a co-investor willing to provide O&M services, and with a utility like profile and several gigawatts already in its

care, was decisive in finding a bankable solution that met the preferences of the sponsors and lenders.

3.2. Reinforcing the Uruguayan Grid

The project needs a new 150kV line with a length of 45.4 kilometres. As is the usual practice in many countries, once built the line passes into ownership of the public utility company. The investment made in this 45.4 kilometre line may seem excessive for a 52.8MW project, but it is understandable when considering the potential to expand Pastorela with an additional 150MW wind park.

Tender requirements set the maximum size of a bid project to 49MW (considering curtailment) in 2012, so that the extension can be implemented based on wholesale prices as long as no new tender is announced. Wholesale prices have been at a level of around 75 US\$/kWh most of the time from 2010 to 2014 with high peaks at 208 US\$/kWh in 2012 (Bloomberg New Energy Finance) and a low in 2015 due to the decrease in marginal costs. With increased potential for power export, prices are likely to increase.

3.3. A Signed PPA Still Needs to be Bankable

Uruguay was the first Latin American country after Brazil to launch wind energy tenders. As a consequence, tender documents did not originally fulfil the international standard requirements for non-recourse financing. The PPA alone took three years to be reformulated. International financial institutions (such as the IADB, FMO and CAF) and commercial lenders played a crucial role in PPA improvements (see R. Tarragó, 'Negotiating the fine print', PV Magazine, January 2014).

The willingness of Uruguay's government and its state-owned utility to increase the share of renewables in the country was key to reaching the flexible solutions that were finally implemented. Multilaterals and commercial lenders continue to be the main drivers on reaching quality standards worldwide. Early engagement with the project was key to accelerate suitable wind energy deployment in a new nation that can profit from lessons learnt by countries and continents with more experience.

3.4. It Takes Time to Reach Financial Close

Commercial lending appetite needed to be stimulated, especially as Uruguay had no long-term operational track record in wind energy. In addition, Uruguay was considered an emerging economy from a banking perspective. The Pastorela investment grade note obtained from a well-known international rating agency was particularly helpful in making the banks feel more comfortable about project finance.

To add to the challenges, the rating agency had to run a release on wind tools in 2014. In the end, the finance structure to fulfil considered a P90 likelihood with 97% turbine availability and an average debt service coverage ratio (DSCR) of approximately times 1.35. The downside case assumptions included a P99 likelihood, lower turbine availability, higher O&M expenses and a spot price (market) stress. The results of the rating when applying the downside analysis were very robust.

3.5. Uruguay is the Switzerland of Latin America

Standard & Poor's (14 April 2015) increased the Gross Domestic Product (GDP) growth estimates for Uruguay for 2016 by 50 basis points to 3.5%. The economy is considered to be stable. These figures look favourable for Uruguay when comparing its economy with the key figures of its neighbour, Brazil. Under Ms Rousseff's watch, the Brazilian GDP sank from growth of 7.5% in 2010 to a negative 3.8% in 2016 according to the International Monetary Fund.

Uruguay's stable economy and healthy local capital market, coupled with the risks of investing in neighbouring countries not fulfilling compliance requirements, contributed to increased availability of capital for local infrastructure projects. Local institutional money already provides equity to several wind farms owned by UTE, Uruguay's national utility and electricity market regulator. The lack of good assets to invest in makes the long-term financing of Pastore attractive for both lenders and institutional investors. Interest rates remain low, which makes a second close attractive.

3.6. Committed to COP21 Objectives

On 1 February 2013 Pastore was authorised as a Clean Development Mechanism (CDM) project by the United Nations Framework Convention on Climate Change (UNFCCC). The project should lead to a reduction of at least 120,216 CO₂ tonnes annually. At present, low carbon prices and costs associated with monitoring CO₂ certificates make commercialisation unattractive, though analysts expect this to change with the reform of the trading systems. For now, the motivation is to support a country strongly committed to the Conference of the Parties (COP) to UNFCCC.

Worldwide, Uruguay's commitment is not that significant (8.4 million tonnes of CO₂ emissions in 2014) thanks to 65% of the country's electricity coming from hydropower (2011). Only 0.05% of the planet's greenhouse gas emissions are produced in Uruguay. But its lead is inspiring due to the country's ability to reach consensus within the Mercosur bloc. Uruguay is a prime mover on a large integration of renewables into the grid, which should allow it to reduce CO₂ emissions by 88% next year.

3.7. First Steps to Establish Standards for Resilient Infrastructure Projects

Rising global temperatures can pose significant health risks to workers from heat exhaustion. The construction company's Health and Safety Plan reflects the new norm. Climate change (with increases in intensity and frequency of earthquakes, floods, etc.) also affects the security of power supply. Uruguay relies on Brazil's hydropower, which is suffering from drought. Requirements for resilient wind farms are being standardised (e.g. by the Asian Development Bank and the World Energy Council). Pastore, within its fulfilment of the performance standards of the International Finance Corporation (IFC), carried on several activities on disaster risk management between 2012 and 2016. Capacity building will continue after commissioning. The aim is to reduce the insurance premium (US\$ 365,000 per annum), which currently accounts for more than 10% of the annual operational expenses.

In terms of disaster risk management, Uruguay is also a prime mover: it has obtained from the World Bank the largest ever weather derivative (US\$ 450 million) linked to drought and oil prices hedging in 2013.

4. Conclusion

It takes time to reach technical, commercial and financial standards in a new wind energy market. Being a prime mover and not choosing the easiest way, requires partnership with a lender willing to also be an innovator in a market and able to provide solutions. From a transaction point of view, the active role of experienced international partners was also a must-have.

It is easier to succeed when the country's government is willing to introduce a significant portion of wind power to the national power mix. If the trend continues, Uruguay will be transformed from a negative power balance nation to a positive one. In addition, surpluses of CO₂ emissions can be traded. Uruguay's positioning within Latin America is economically stable. Worldwide it is an example in terms of the ability to de-risk climate change events. Local and foreign

stakeholders have been right to contribute to the successful implementation of the first commercial wind financing project in Uruguay.