# Windfall

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Babcock & Brown Wind Partners (BBW) has followed the holy grail of large infrastructure investors and attempted to mitigate risks at project-level by holding a diverse range of assets in a portfolio. The larger and the less granular the portfolio, the lower the risk and the more stable the revenue streams.

BBW was established in June 2003 as a private investment vehicle by Babcock & Brown and other foundation investors, and as a result of its rapid growth and increasing capital requirements, BBW listed on the Australian Securities Exchange on 28 October 2005 with an initial market capitalisation of A$692 million.

At the time of the IPO BBW had an installed capacity of 147MW and in under two years this has grown to 1676MW across 33 wind farms, with an enterprise value of just over A$2 billion.

**The first global wind portfolio refinancing**

This rapid accrual of assets has culminated in the first global wind portfolio refinancing. The Eu1.03 billion refinancing and releveraging takes out the project debt at wind farm level and provides funds for expansion. The deal was lead arranged by Banco Espirito Santo, Millennium BCP, Bank of Scotland (HBOS) and Dexia Credit Local.

The facility is a multi-currency structure with a single BBW borrower for each region (Australia, Europe & USA) and is divided between term facilities, construction facilities, working capital facilities, and letter of credit and guarantee facilities.

The financing comprises a Eu752.5 million term loan facility, a Eu237.0 million construction facility, a Eu12.8 million working capital facility, Eu14.6 million VAT/GST facility and a Eu13.8 million letter of credit and guarantee facility.

The multi-currency structure enables BBW to retain its natural currency hedge of revenues and debt service. BBW will also continue to fix a significant portion of its long-term interest rate exposure and to hedge distributions out to three years on a rolling basis.

A key outcome of the refinancing is cost of funding savings and flexibility: With a set of common terms across the entire debt portfolio the facility can easily be resized as acquisitions are completed on an ongoing basis.

Speaking just before financial close at a recent listed infrastructure fund event BBW CEO, Miles George, said: "A project financing typically has a term of between 12 and 15 years – that's not optimal given that the asset life is typically 25 years. Corporate level debt gives us more flexibility for acquisitions; the facility is structured as one which will step up in size each time we make an acquisition – it's driven by a DSCR ratio."

Recourse to the whole portfolio, as well as the mitigation of wind and regulatory risk also lowers the cost of a corporate loan opposed to independent project financings. George added: "We typically pay between 100 and 200 points on project finance debt and we will probably pay closer to 100 on a corporate facility."

Prior to the releveraging, the fund operated at a net debt to enterprise value of 35.1%, then following the A$506 million debt-backed class B equity purchase of the US06 portfolio this stepped up to 51% – still fairly conservative compared with other infrastructure companies. (For more details search 'US06'). The refinancing and releveraging equates to an EBITDA multiple of 15.5x on the six months' figures to 31 December, and pushes the net debt to enterprise value to 81%. Taking out the existing debt and subtracting fees, BBW could be left with a cash pile of around Eu300 million, just under A$500 million.

Most acquisitions should be funded from increasing the size of the corporate loan, however portfolio acquisitions of the size of US06 (around A$500 million) will invariably require a further round of capital raising to ensure the fund does not become over leveraged. It is likely that the proposed Enersis portfolio acquisition could be financed from the proceeds of the releveraging, however the proposed US07 acquisition is likely to require a round of equity raising (see assets chart).

Because a sizeable portion of the management fee was predicated on the level of debt and the fund has been more highly leveraged than possibly first envisaged, on 24 April 2007, BBW agreed a revised base fee calculation with its manager, Babcock & Brown Wind Partners Management Pty Ltd (BBWPM). Under the revised structure the corporate level debt component of the base fee formula is capped at 14% of net investment value thus preventing a gain for BBWPM in the base fee arising as a result of the global refinancing.

**Risk mitigation**

BBW is concentrated on mitigating three main risks: wind risk, equipment/supplier risk, and revenue risk.

BBW's assets are in nine separate and distinct wind regions; there is no correlation between wind regions in different continents and there is very little correlation between wind regions in large continents such as the US. The refinancing is principally a culmination of successfully diversifying away a significant measure of wind risk through the acquisition of farms across wind regions creating a 'portfolio effect'.

The portfolio effect is the reduction in energy production variance of the portfolio compared with the sum of the energy production variances of the individual wind farms – that is, the portfolio P90 (90% certainty that generation will be above this level) is closer to the portfolio P50 (50% certainty that generation will be above this level) than the summation of each individual wind farm's P90. Independent analyst, Garrad Hassan estimates the P90/P50 ratio (using 1 Year P90) for the portfolio is 90.1% compared to 83.8% without the portfolio effect.

The two bell curves graphically depict the reduction in revenue variability due to the portfolio effect. It can be seen that the portfolio effect narrows the distribution curve which means that it reduces the likelihood of below P50 production over the operating life of BBW's wind farms. As new assets are added, the new facility is expected to be refinanced every two to three years as a larger, diversified portfolio provides a greater capability to service debt as there is an improvement in the annual debt service cover ratio under a P90 scenario. Also the variances decrease with time as more wind data is collated.

BBW also diversifies its portfolio by turbine manufacturer to ensure competitive pricing and size efficiencies to bring operation and maintenance (O&M) in-house or contract out to third parties. Smaller wind farm owners usually lack the bargaining power to separate the O&M contract renewals from the turbine supplier, which is unlikely to result in the best price. BBW's net average length of its O&M contracts is just over 4 years.

In terms of revenue security, the majority of the global portfolio (83%) is backed by long term fixed price power purchase agreements. At BBW's inception its aim was to contract out generation as long as possible, but George says that the fund would be comfortable with a higher percentage of generation, up to 20-25%, subject to market forces. It is uncertain whether covenants in the refinancing preclude a major shift toward accepting a large exposure to merchant risk.

**Regulation, regulation, regulation**

The nature of the beast is that returns on wind farms will be largely determined by the regulatory regime of the host jurisdiction – because BBW is focused on concentrating on regimes offering the highest EBITDA margins, and therefore host to the best incentives and wind sites, and with most of its assets in the US, Spain, Germany and Australia, the regulatory risks are much more difficult to diversify away.

However BBW's predictably bullish view on the regulatory environment is supported by current trends. Beyond the Stern report and Kyoto principles, there is now unanimous worldwide acceptance of the causality mankind's actions on global warming though an inter-governmental consensus. The global emphasis is manifesting itself on national and state levels, so that BBW sees support for wind farms, on the whole, growing not diminishing.

Babcock & Brown was one of the first companies to exploit the production tax credit (PTC) offered through a federal US scheme, and this structure has subsequently been copied by others. The PTC has been extended to 2008, when previously it had been extended year by year. There are now discussions to extend the PTC beyond 2008 to 2011. Also, the federal US regulatory regime is often supported at state-level, with 22 states now offering their own incentive schemes.

The Australian government, which has for several years been a global warming sceptic, has become more environmental in its policies preceding elections. Australia is now considering a carbon trading scheme, so the regulatory regime seems likely to become more favourable. Also, like the US, there is often support for wind farm development at state level.

Spain continues to be a good place to be a wind farm operator with the annual choice of a fixed tariff or market price plus subsidy option. BBW has reported that it has returned Eu100 per megawatt hour on some of its Spanish operations recently, some Eu20 above projections. A new Royal Decree has been passed that will moderate these returns; however, this has not been as severe as feared from the draft Decree issued in December 2006.

Under the modified Spanish regime, a transition period through to the end of 2012 will apply to wind farms that have entered into commercial operation before 1 January 2008. The tariff during the transition period will be exactly the same as the tariff under Royal Decree 436. This is an extended transition period to that announced in the November 2006 draft decree.

For wind farms that commence commercial operation after 31 December 2007 the fixed tariff option will be Eu73.2/MWh (2007 base price), reducing to Eu61.2/MWh (2007 base price) after 20 years of operation, and the market option premium is Eu29.3/MWh (2007 base price). The market tariff option is subject to a cap and floor mechanism ranging between Eu71.3 and Eu84.9/MWh (2007 base price).

Although mature there is still significant headroom in the Spanish, US and German markets: Germany is the largest market yet it was still the second largest market for new installations in 2006, Spain has recently revised its target upwards from 13,000MW to 20,000MW and the US is the strongest growth market.

BBW therefore sees no need to venture offshore or into the growing markets of India and China in the foreseeable future. "We are comfortable for others to go in there and do some of the early grunt work before we go into India or China," says George. BBW is actively looking at Portugal, France, Italy, Canada and Australia.

BBW is not considering offshore because it has proven more difficult and more expensive (as opposed to other sources of energy) than originally thought. "In any event," adds George, "there are many more opportunities for us without going offshore."

**Conveyor belts**

While some institutional investors may baulk at the management fees (in the six months to the year ending 31 December 2006, A$10.1 million was spent on corporate overheads and management fees while the EBITDA was A$53.6 million) BBW's association with the developing arm of Babcock & Brown means that the fund is predestined to grow substantially larger.

Babcock & Brown has A$1.5 billion operating wind assets on balance sheet and A$500 million under construction. The sites under construction are part of a 3,000MW Babcock & Brown development portfolio across US, Europe and Australia much of which is likely to end up in the BBW fund.

All investment decisions go before BBW's board comprising five directors. Each investment must meet a low to mid teens rate of return hurdle calculated after tax and in Australian dollars. The board will assess wind data, the regulatory regime and the turbine supply arrangements. For assets from the Babcock & Brown pipeline only the three independent directors consider the investment.

BBW also has a further two conveyor belts of assets beyond the B&B development pipeline under two separate framework agreements: one with Spanish turbine supplier and developer Gamesa and the other with a German developer, Plambeck. Under the framework agreements as long as the deal meets certain criteria the developers are obligated to provide the deals to BBW, and BBW is obliged to take them. The principal criterion is the expected long term A$ per megawatt hour, which therefore depends on the turbine pricing and the wind site (BBW currently has a capacity factor range across its portfolio of between 25% and 48%).

Under the Gamesa agreement, Gamesa has agreed, subject to certain conditions, to transfer 450MW of Spanish deals over the next two years. The first few deals are expected later this year with the remainder due 2008. In a separate agreement Plambeck will transfer 300MW of German wind farms to BBW over the next two years. The first project has already been transferred.

Because the price is locked in at the time of the agreements – the Gamesa agreement was concluded two years ago and the Plambeck agreement one year ago – BBW has benefited from protecting itself from the rising cost of turbines, some 15-20% over the last two years.

BBW's final source of deals is through competitive acquisitions. Fortunately, with a pipeline of deals that could see the fund triple in size to 4,000MW in the next three to five years, BBW can avoid the current bun fight over wind assets, particularly in the US.

An illustration of the competition is the recent acquisition of the Horizon portfolio by Energias de Portugal (EDP). The $2.15 billion price EDP paid Goldman Equity Partners for 559MW of operating capacity, and 997MW under construction is described by George as "phenomenal". Although it is not BBW's strategy to dispose of farms, it would consider selling if the price was attractive.

Given the abundance of assets knocking on its door, BBW will continue with its tried and tested formula of acquiring assets in Spain, the US, Australia, Germany and France. By continuing to diversify the fund through acquisitions such as the Enersis portfolio in Portugal and in other wind regions, BBW will continue to lower its cost of capital through the portfolio effect.

**BBW assets**

| | %BBW ownership | Total installed capacity | Turbine supplier | Offtake |
|---|---|---|---|---|
| **AUSTRALIA** | | | | |
| Alinta Wind Farm | 100 | 89.1 | NEG Micon | PPA |
| Lake Bonney 1 | 100 | 80.5 | Vestas | PPA |
| Lake Bonney 2 | 100 | 159 | Vestas | PPA + market |
| SPAIN | | | | |
| Sierra del Trigo Andalucia | 100 | 15.2 | Gamesa | Market option |
| La Muela Norte Aragon | 100 | 29.8 | Gamesa | Market option |
| El Redondal Castille & Leon | | 30.6 | Gamesa | Market option |
| Serra da Loba Galicia | | 36 | Gamesa | Market option |
| La Plata Castille La Mancha | | 21.3 | Gamesa | Market option |
| El Sardon | | 25.5 | Gamesa | Market option |
| Monte Seixo Galicia | | 35 | Gamesa | Fixed |
| Serra do Cando Galicia | | 29.2 | Gamesa | Fixed |
| **GERMANY** | | | | |
| Wachtendonk | | 12 | Nordex | Fixed |
| Bocholt Liedern | | 7.5 | Nordex | Fixed |
| Eifel | 100 | | | |
| Stages I, II & IV | | 28.5 | Nordex | Fixed |
| Stage III | | 8 | Enercon | Fixed |
| Kaarst (under construction) | 100 | 10 | Vestas | Fixed |
| Stage II (under construction) | | 2 | Vestas | Fixed |
| **FRANCE** | | | | |
| Fruges 1 (under construction) | 100 | 22 | Enercon | Fixed |
| Fruges 2 (under construction) | 100 | 30 | Enercon | Fixed |
| **USA** | | | | |
| Sweetwater 1 | 50 | 37.5 | GE | PPA |
| Sweetwater 2 | 50 | 91.5 | GE | PPA |

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|---|---|---|---|---|
| Caprock | 80 | 80 | Mitsubishi | PPA |
| Blue Canyon | 50 | 74.3 | NEG Micon | PPA |
| Combine Hills | 50 | 41 | Mitsubishi | PPA |
| Sweetwater 3 | 50 | 135 | SLE | PPA |
| Kumeyaay | 100 | 50 | Gamesa | PPA |
| Jersey Atlantic | 59 | 7.5 | SLE | PPA + market |
| Bear Creek | 59 | 24 | Gamesa | PPA |
| Crescent Ridge | 75 | 54.5 | Vestas | Market |
| Aragonne Mesa | 100 | 90 | Mitsubishi | PPA |
| Buena Vista | 100 | 38 | Mitsubishi | PPA |
| Mendota Mid | 100 | 51.7 | Gamesa | Market |
| US 06 (Remaining to be acquired) | | | | |
| Allegheny Ridge Phase I | 100 | 80 | Gamesa | PPA |
| Allegheny Ridge Phase II | 100 | 70 | Gamesa | PPA |
| GSG | 100 | 80 | Gamesa | Market |
| **Proposed Acquisitions** | | | | |
| Enersis Portugal | 50 | 524.8 | Various | Fixed |
| US07 | 50 (minimum) | 621.8 | Various | PPA + market |
| | **Total under BBW ownership** | **2076.3** | | |