

# Bloomberg

## NEW ENERGY FINANCE

MONTHLY BRIEFING

THE MONTHLY REVIEW OF  
CLEAN ENERGY INVESTMENT  
FOR SENIOR EXECUTIVES

VOLUME V - ISSUE 40  
AUGUST 2010

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# WATCH THE DEBT MARKETS FOR CLUES ON THE NEXT TWIST FOR CLEAN ENERGY

### MONTHLY VIP BRIEF



By Angus  
McCrone

Chief Editor,  
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"It's life, Jim, but not as we know it," said Mr Spock. 2010 looks set to be a record year for clean energy investment, but not as we know it.

At the start of the year, we predicted total new investment in clean energy in the \$180bn to \$200bn range, and with just over four months of 2010 to go, that still looks like the most likely range.

This would be a new record, above 2009's \$162bn and 2008's \$173bn, but only just. We are certainly not going to see anything like the sort of precipitous growth rates that we saw between 2005 and 2008.

Our solar team is predicting that between 13.7GW and 18.2GW of PV capacity will be installed worldwide in 2010, up sharply from 2009's record of 7.6GW. Behind the surge will be yet another hectic performance from Germany, where the certainty of tariff reductions ahead has spurred developers into a race for the line, plus increased activity in Italy, France, the Czech Republic, Japan and the US.

Even using average PV costs that reflect the savage falls in prices along the solar value chain since September 2008, and using conservative estimates for the cost of rooftop panels, that range for PV installation could equate to investment of more than \$43bn in 2010.

In wind, our sector analysts are forecasting total installations of just over 40GW in 2010, up 7% on 2009. This rise might surprise some observers, who have been hearing downbeat noises from turbine makers recently. Taken together with the fact that the Bloomberg New Energy Finance Wind Turbine Price Index is down 15% from its peak in 2008, it is clear that there is little if any growth in the market in dollar terms. This is clearly causing problems for turbine manufacturers that have invested heavily in growth, as we saw last week when Vestas had to reduce its revenue forecast.

The expected level of wind installation would involve total investment of some \$65bn, although the actual figure will depend as much on the precise timing of investment decisions as on their magnitude. With that caveat, it looks like PV and wind assets alone will take us over the \$100bn mark in 2010. Then you have to add contributions from other significant sectors such as biofuels, solar thermal electricity generation, small hydro, biomass

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# CLEAN ENERGY CORPORATE M&A MARKET SLOWLY GAINING IN CONFIDENCE

The volume of money spent buying clean energy companies increased in the second quarter, partly because of a general uptick in confidence and partly because of a handful of large deals in Brazil's fragmented sugar and ethanol industry.

By Rohan Boyle

M&A activity in the clean energy and energy smart technology sectors fell in the second quarter of the year. In all, Bloomberg New Energy Finance tracked 115 deals - covering the acquisition of both generating assets and equity stakes in companies - with a total estimated value of \$13.9bn. This was 15.3% less than in Q1 2010, and 23% down on the corresponding quarter last year (see Figure 1).

Clean energy was not the only sector to experience a decline in activity. Indeed, there was a global slowdown across all sectors in the three months to the end of June, according to data published by Thomson Reuters. It reported a worldwide total of \$454bn, which was a decline of 13% compared

with Q1, and 10% lower than during the same period last year.

Although these figures suggest that confidence is on the wane, Olav Junttila, a partner with Greentech Capital Advisors, argues that the opposite is true. "Despite fears of a double dip recession in the US and the debt problem in Europe, the clean energy M&A market is more confident today than it was 12-18 months ago," he says.

He cites a number of reasons for this renewed optimism. The first is that there has been a general return of confidence. "The M&A market has been battered by the economy over the last two years and in the renewable energy sector there was significant downwards adjustment, but the situation has improved as

appetite for M&A and confidence overall has increased."

In addition to macroeconomic factors, there are a number of sector-specific reasons. "The underlying view is that resource scarcity is a real problem and that finding ways to address this is a good business proposition in the medium to long term. This is pushing clean energy, if not to the forefront, then near to the top of the list of acquisition targets."

Finally, there is the basic fact that there are plenty of acquisition opportunities around at the moment. "There are a large number of acquisition targets, and there are many large companies with cash on their balance sheets," he adds.

Closer analysis of the M&A figures shows that the volume of money spent buying clean energy companies actually increased in the second quarter - further proof that confidence in the market is solidifying rather than being eroded. Bloomberg New Energy Finance estimates that \$6.2bn of corporate equity changed hands in 47 deals in Q2, an 18.8% jump on Q1 2010.

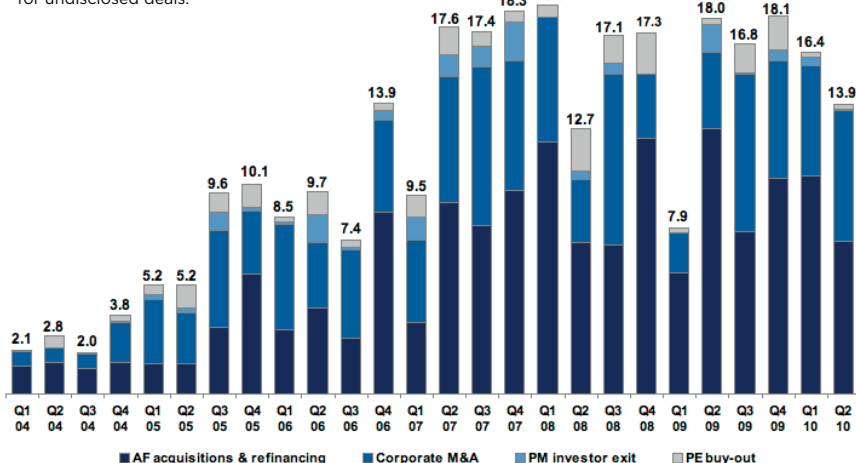
"In general it is a buyers' market rather than a sellers' market," says Junttila. "There are more young companies out there that have received VC funding than there are active buyers. Acquirers therefore have the opportunity to buy at prices without competition."

In contrast, the volume of money paid for clean energy generating assets (as opposed to corporate entities) fell quite sharply. It is estimated that there were 45 acquisitions and 16 refinancings worth a combined \$7.3bn, which was almost 30% down on Q1 and 42% lower than the same period last year. The decline in asset acquisitions explains why the headline M&A figures fell in Q2.

As in previous quarters, more money was spent buying wind projects than any other kind of

FIGURE 1: GLOBAL M&A DEALS BY TYPE (\$bn)

Note: Total values include estimates for undisclosed deals.



Source: Bloomberg New Energy Finance

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renewable generating asset. It is estimated that \$2.9bn changed hands in 26 wind transactions, compared with \$1bn in nine solar deals, and \$216m in two biofuel asset acquisitions.

Looking at corporate M&A in more depth, one sector stands head and shoulders above all others. The eight biofuel acquisitions had an aggregate value of \$3.7bn, whereas solar, the next largest sector by value, trailed far behind with just \$1.1bn, but was streets ahead of the wind sector's \$480m.

One very substantial deal in Brazil's fragmented ethanol industry – the \$2.1bn merger of ETH Bioenergia and Brenco – helped to inflate the biofuel total, yet even without this boost the sector would still have led the field.

The new company, which will keep ETH Bioenergia's name, will have ownership of some 3bn litres of nameplate ethanol production capacity by 2012, according to an ETH press release. Under the agreement, the former owners of ETH will hold 65% of the shares in the combined venture, with the remaining 35% held by Brenco shareholders.

Other Brazilian deals included Petrobras' purchase of a 26.3% stake in Acucar Guarani for \$393m in May, and the acquisition by Shree Renuka Sugars, India's largest sugar refiner, of a controlling 50.34% stake in Brazil's Equipav for \$250m.

"Consolidation in the sugar and ethanol industry is being driven by a combination of the crisis that started in 2008 and the maturation of the industry," says Fernando Meira de Castro, head of M&A at Brazil's Itaú BBA Bank. "The majority of companies are family-owned and a significant part of them were leveraged and facing problems, such as restrictions from financial agents."

The consolidation process started with large companies acquiring small ones, he explains. "In 2006, the top five companies in Brazil had average capacity of 25m tonnes. Now, in 2010, the top five have average capacity of 50m tonnes. Five years ago, the top five were all Brazilian, now only one is pure Brazilian. Dreyfus, Shell and Bunge – they are all foreign companies."

There has been considerable M&A activity among the big players so

TABLE 1: ACQUISITIONS BY SECTOR, Q2 2010

Sector	Value (\$bn)	Number of Deals (Disclosed/Overall)	Change from Previous Quarter
Wind	5.8	(20/46)	-34.3%
Biofuels	4.1	(9/11)	43.4%
Solar	2.5	(11/28)	-18.2%
Energy smart technologies	0.6	(4/12)	202.6%
Biomass & waste	0.4	(9/11)	-54.9%
Geothermal	0.2	(1/2)	6.8%
Small hydro	0.1	(4/4)	40.5%
Low carbon services & support	0.1	(0/1)	-48.3%
Marine	0.0	(0/0)	-100.0%
<b>TOTAL</b>	<b>13.9</b>	<b>(58/115)</b>	<b>-15.3%</b>

Note: Transaction values include estimates for undisclosed deals.

far this year, yet there is still scope for further consolidation, at least among those at the smaller end of the spectrum, he says. "There will be more movement as the sector is still fragmented. There are 220 players now; however, there are only about 10 firms with capacity of more than 10m tonnes. There are not that many large opportunities left.

"We will see more transactions in the next 12 months in the 10-14m tonne range. These targets will attract a premium owing to increased competition."

*As the general economic situation picks up, there is likely to be an improvement in the volume of clean energy M&A activity, driven in part by venture capital and private equity investors eager to see some return on their investments.*

As consolidation continues, those looking to build up a presence in the industry may find it harder to persuade companies to sell up, adds Meira. "Some believe that the use of ethanol will be 'a must' in the future and that demand will increase and therefore their assets will gain in value. This is a real possibility and is why Petrobras and Shell entered

the sector. Other oil companies have also been visiting us."

Corporate M&A in the solar sector ranked a distant second to biofuel, at least in terms of the volume of money changing hands, but it produced more deals than any other area of clean energy. Bloomberg New Energy Finance tracked 12 transactions in the second quarter, with a combined value of \$1.1bn.

The largest deal of the quarter was US solar encapsulant maker Solutia's \$294m acquisition of German rival Etimex. This was followed by Liechtenstein-based Hilti Corporation's purchase of UniRac, a US PV solar mounting system manufacturer, for an estimated \$140m.

Consolidation has been slower than expected chiefly because demand for modules has remained strong, which has kept smaller, less financially robust players afloat. In addition, branding now matters more than ever so that if companies start snapping up their struggling competitors they may be considered less bankable, particularly as second-tier manufacturing assets are likely to be more expensive to run.

In wind, there were just eight corporate M&A deals in Q2, worth a combined \$480m. Among the more noteworthy were US-based AEI's acquisition of a 67% stake in NBT (Baicheng) New Energy Development Company, a Chinese wind project developer, for an undisclosed sum, and EDF Energies Nouvelles' acquisition of an additional 10% stake in Saint-Laurent Energies, a Canadian renewable energy project developer.

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TABLE 2: LARGEST DISCLOSED ACQUISITIONS, 01.04.10 - 24.08.10

	Target	Country	Sector	Acquirer/equity provider	Financing type	Value (\$bn)
01.04.10 - 30.06.10	Brazilian Renewable Energy Company	Brazil	Biofuels	ETH Bioenergia	Corporate M&A	2.1
	EPURON Orellana STEG project I	Spain	Solar	Acciona	AF acquisition: balance sheet	0.4
	Acucar Guarani	Brazil	Biofuels	Petrobras Biocombustivel	Corporate M&A	0.4
	London Array Offshore Wind Farm Phase I - DONG	United Kingdom	Wind	DONG Energy	AF refinancing: project debt	0.4
	Green Frontier Wind Farm Portfolio - Refinancing	United States	Wind	Duke Energy	AF refinancing: project debt	0.4
01.07.10 - 24.08.10	Climate Exchange	United Kingdom	Carbon Markets	Intercontinental Exchange	Corporate M&A	0.6
	London Array Offshore Wind Farm Phase I - DONG Refinancing II	United Kingdom	Wind	Dong Energy	AF refinancing: project debt	0.4
	China WindPower & Guohua Guazhou Ganhekou No.8 Wind Farm	China	Wind	China Windpower	AF refinancing: project debt	0.2

Note: Ranking is based on disclosed transaction values only.

Turbine manufacturers are adjusting to the post-financial crisis world, in which there is an understanding that demand is not simply going to leap back to 2007 levels. Many are expanding their roles - some are getting involved in the financing of projects, others are developing deeper relationships with key suppliers - but they are stopping short of active integration. Acquisition volumes are, for now, being maintained by gradual consolidation on the project development and power generation side of the business.

The other major area of activity was in 'energy smart technologies'. A wave of consolidation has swept through the sector since March, producing six significant acquisitions in smart grid and demand response. Among these, two are technology players in demand response and building management (Smallfoot and Akuacom), two are in the area of improving intelligence in the utility and grid (Eka Systems and Ventyx), a fifth lay in consulting and planning services for utility smart grid projects (Enspira), and the latest deal saw a grid equipment company (Areva T&D) being divided up between two other

multinational corporations - Alstom and Schneider Electric.

Of the seven acquirers, only EnerNOC can be described as a digital energy specialist - the rest are multinationals wading deeper into digital energy. The arrival of large corporations such as Cooper Power Systems, ABB and Honeywell - as well as IBM and others - is a sign that digital energy is starting to crystallise into a defined industry with clear segments and leaders. While some digital energy technology developers will achieve IPOs - as EnerNOC and Comverge already have and Silver Spring Networks is intending - M&A will be the more common exit route, as smart grid deployments accelerate and more multinational corporations enter the market.

The recent spell of consolidation is characterised by a number of trends. One of the most notable is the convergence of the areas of energy efficiency service provision, building management systems and demand response for commercial and industrial buildings - previously served by a number of different providers. Firms traditionally in facilities management are pursuing demand response more seriously, and curtailment service providers

such as EnerNOC are expanding services in building management.

Looking ahead, Junttila says that while the long-term view remains attractive - given the resource constraints - there is still uncertainty in the short term. "In Europe, changes to the subsidy mechanism in some countries are causing people to pause and this is having a dampening effect on the pricing of deals. In the US meanwhile, the low price of natural gas is making it harder for wind developers in particular to secure attractive PPA pricing."

As the general economic situation picks up, there is likely to be an improvement in the volume of clean energy M&A activity, driven in part by venture capital and private equity investors eager to see some return on their investments.

The increase in the number of IPOs has focused attention on how companies are going to exit, says Junttila. "Twelve to 18 months ago companies were just focused on keeping the lights on, now we're seeing investors wanting to recoup some money. Venture capital and private equity investors need to get some money back - they've put lots in, but not got much out." ■

*"Despite fears of a double dip recession in the US and the debt problem in Europe, the clean energy M&A market is more confident today than it was 12-18 months ago." - Olav Junttila, a partner with Greentech Capital Advisors.*