



Becalmed?

Is it all over for the global wind markets?

We have cut our five year wind industry global demand CAGR estimate to 7.0% from 7.5% previously and our 10-year CAGR estimate to 5.5% from 6.7%

We remain cautious on the wind OEMs, and see few near term catalysts for share price performance. Our favourite part of the value chain is still the wind farm developers, and Acciona and EDP R, both rated OW(V), are our highest conviction investment ideas

We cut target prices on Acciona, Hansen Transmissions, Iberdrola Renovables, EDP Renovaveis, EDF Energies Nouvelles, Vestas, Gamesa, Repower, and Suzlon, and increase our target price on Clipper. We have downgraded Gamesa and Repower to N(V) from OW(V) and upgraded Clipper from N(V) to OW(V)

By James Magness and Robert Clover

Summary

Weak electricity demand resulting from energy efficiency measures and recessionary forces have made national wind installation targets easier to achieve. We have therefore cut our five year wind industry global demand CAGR to 7.0% from 7.5% previously and our 10-year CAGR to 5.5% from 6.7%. We remain cautious on the wind OEMs, and see few near term catalysts for share price performance. Our favourite part of the value chain remains the wind farm developers as we feel that that the developers offer a more compelling combination of earnings visibility and valuation and our preference for this part of the value chain has now increased. Acciona and EDP R, both rated OW(V), are our highest conviction investment ideas

What's going on with the markets?

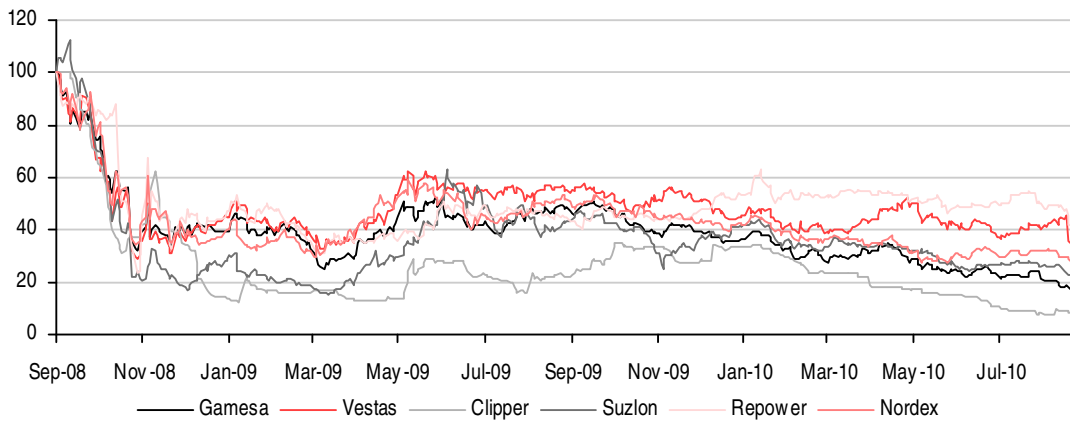
Why has the wind sector been so weak?

The wind sector has been weak since the start of the credit crisis in September 2008. Until this point it had held up pretty well, when most other sectors had already been selling off. However, in the two months following the collapse of Lehman Brothers, the sector more than halved in value; the wind farm developers lost 50-60% and the wind turbine manufacturers lost 60-70%. The focus at this time was lack of availability of project finance.

The sector then recovered some of its share price losses during the March 2009 bear market rally, but subsequently spent a year in the doldrums, with share prices moving sideways. The main reason for this was lack of order flow during 2009 due to US regulatory uncertainty and only a modest improvement in project finance markets throughout the course of 2009. Order flow has finally started to pick up in H1 2010, double the H12009 level, but importantly it remains around 70% below H12008, and the recovery is less strong than we had hoped for due to the Sovereign debt concerns in Southern Europe, increasing the possibility of tariff reductions (see our note dated 21 June 2010, entitled '*Carbon default – real of imagined?*'), and at the same time the Clean Energy regulatory rollercoaster in the US Senate started heading for derailment. From mid-April onwards, the sector sold off along with the wider Southern European markets, but whereas the Southern European markets have recovered some 20% since early June, the wind sector has not; some stocks have recovered slightly but most have not. This, we believe, is due to continued uncertainty over clean energy legislation in the US, which is now unlikely to pass the Senate before mid-term elections in November.

In our view, the sector weakness gives rise to some attractive long-term investment opportunities, but on a selective basis. We continue to favour the wind farm developers, with our preference for this part of the value chain increasing. In this note, we reiterate our cautious stance on the OEMs due to regulatory risk and the impact of energy efficiency measures weighing on our longer-term growth assumptions for the wind turbine market.

Wind turbine manufacturers – price relative chart since the beginning of September 2008



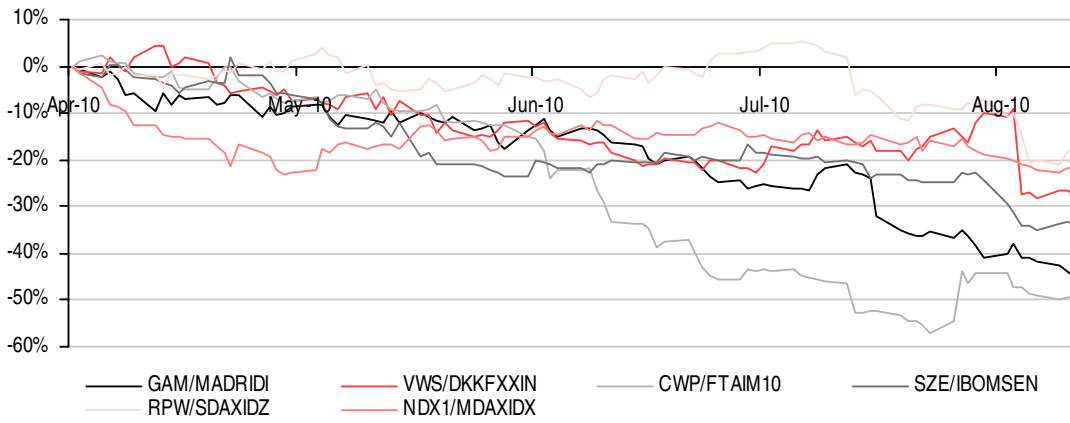
Source: Thomson Financial DataStream, HSBC

Utility wind farm developers – price relative chart since the beginning of September 2008



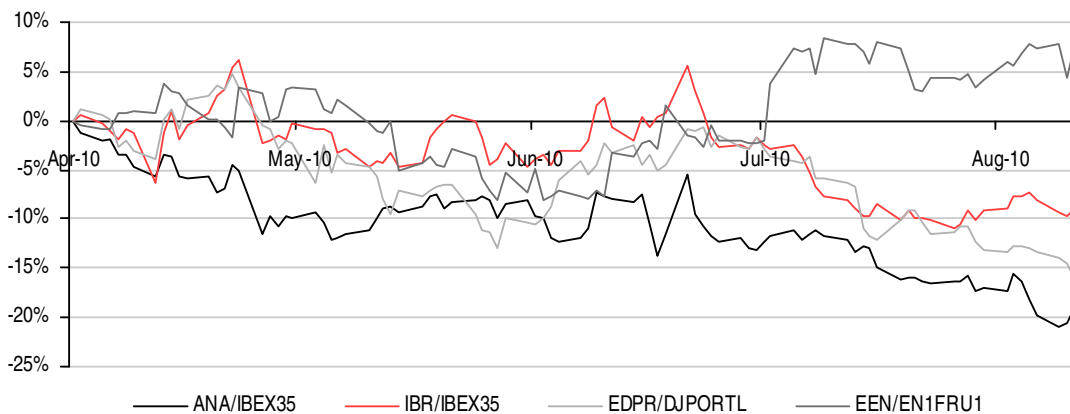
Source: Thomson Financial DataStream, HSBC

Wind turbine manufacturers – price relative chart of each stock relative to its local market since mid-April 2010



Source: Thomson Financial DataStream, HSBC

Utility wind farm developers – price relative chart of each stock relative to its local market since mid-April 2010



Source: Thomson Financial DataStream, HSBC

We see selective opportunities with the Developers...

The impact of regulatory uncertainty on the wind farm developers is more muted, in our view; they all have large existing operating portfolios of wind farms, which are unlikely to be affected by potential regulatory change (e.g. in the US, a majority of wind farms owned by the companies we cover are operating under long-term power purchase agreements with pre-determined electricity off-take prices). We maintain our positive stance on the wind farm developers and we highlight the valuation opportunities in the table below. Our highest conviction investment ideas are Acciona and EDP Renovaveis.

Utility wind farm developers – comparison of valuation of renewable assets (EUR/share)

Valuation (EUR/share)	Acciona	EDPR	IBR*
Operating assets	116.68	8.73	3.30
Construction assets	7.00	1.41	0.34
Other renewables	36.84	0.00	0.23
Less: Net Debt	91.14	4.33	1.35
Equity value per share (renewables)	69.38	5.80	2.52
Current share price (as of close of 25 August 2010)	60.70	4.33	2.52
% (discount)/premium to equity value of operating/construction assets	(13%)	(25%)	0%
Pipeline valuation	19.34	1.38	0.59
Total equity value (renewables)	88.72	7.18	3.11
% (discount)/premium to current share price	46%	66%	23%

*Note: we have possibly underestimated the equity value of IBR's operating/construction assets since we have not excluded the component of net debt relating to non-renewable assets (as the company does not provide a split).
Source: HSBC estimates

Thematic summary

Lower electricity demand due to the recession in Europe and the US is bad news for renewable electricity targets and hence for wind turbine demand

Due to the impact of the deep global recession, Europe and the US have both experienced reduced electricity demand growth over the last couple of years. This, coupled with energy efficiency savings, has caused us to lower our long-term electricity demand assumptions out to 2020, thus making the renewable electricity targets in Europe and the US easier to achieve. This is bad news for wind turbine demand. In the US, reduced electricity demand is compounded by a weak regulatory environment.

US regulation is weak – a potential federal LCES would still only provide a flat market out to 2020, with considerable downside in the absence of this

Even under our relatively optimistic regulatory scenario, i.e. that we get some form of LCES (Low Carbon Electricity Standard) in the US in 2011, we calculate that a potential federal LCES (assuming 13% renewable electricity) would support a wind market of under 10GW pa (average) over the period 2010e-20e. This would imply flat/no growth in the US market, which delivered record new installations of 10 GW in 2009. We note that these provisions are not law yet and indeed there is considerable uncertainty over the final form of a potential federal LCES, with no fewer than 12 draft pieces of legislation before Congress with quite different proposals. In our analysis, we adopt the Lugar version of the bill as the most likely version to be passed into law. This version gives 'clean' energy targets which include CCS (Carbon Capture and Storage) and nuclear installations, rather than just renewable energy targets (as per the House of Representatives' version of the bill), which we believe are necessary to appease the coal and nuclear lobby and therefore eventually see the bill passed in the Senate; it is a good general representation of most Senate versions of the bill. However, we consider it highly unlikely that

this will be passed before the mid-term elections in November. Furthermore, note that any provisions coming out of the Senate still need to be reconciled with the House of Representatives' version of the bill (the Waxman-Markey bill) before eventually moving for President Obama's sign-off. The Waxman-Markey bill gives renewable energy targets rather than 'clean' energy targets and is therefore more favourable for renewables and wind, in our view.

In the absence of federal legislation, the main support mechanism for the US market would be the State level legislation. Currently, some 31 states have their own targets for renewable electricity, known as state level RPSs (Renewable Portfolio Standards), and a further 6 states have some sort of informal target (ie not formally a state RPS). Based on states with an RPS or informal target alone, the US market would be only a 5GW pa (average) wind market until 2020. If we consider only states with penalty schemes to support their state level RPS targets (just 16 states), we calculate wind demand in the US of just 3.6GW pa (average) up to 2020. This eventuality is unlikely, but nevertheless would be disastrous for the wind companies, in our view.

In our view, GE, Mitsubishi and Clipper will suffer more than most players since these companies all have more than 85% sales exposure to the US market. Vestas, Gamesa and Suzlon all have around 25% of their sales from the US.

European regulation – most key markets are well on track to meet EU renewable electricity targets; bad news for renewables and wind

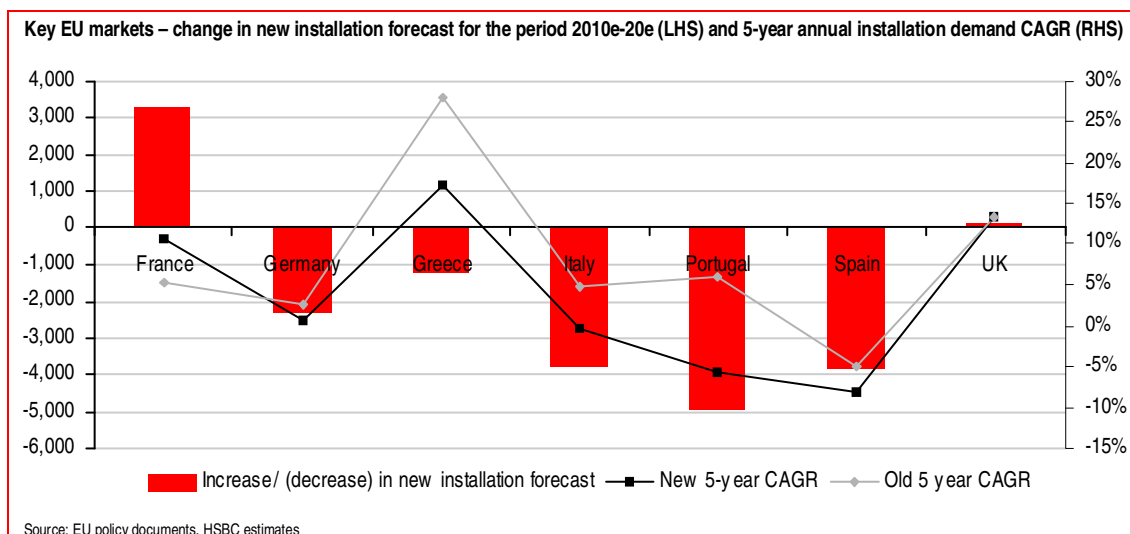
Due to reduced electricity demand in the EU following the recession, the EU 2020 renewable electricity targets (RES-E targets) have become easier to achieve, in our view. We have performed detailed modelling on the renewable energy mix out to 2020 in each of seven key EU countries (France, Germany, Greece, Italy, Portugal, Spain and the UK). We forecast wind targets out to 2020, based on each country's RES-E. Where National Renewable Energy Action Plans (NREAPs) have been submitted by member states, we have compared our forecasts with the target under the NREAP.

Summary of EU countries set to miss or exceed their EU 2020 renewable electricity (%RES-E) targets based on old renewable forecasts for 2020

EU Member State	Electricity consumption 2009 (TWh)	L/term annual electricity demand growth*	Forecast electricity demand 2020 (TWh)	% RES-E target 2020	Implied RES-E target 2020 (TWh)	RES-E forecast 2020 based on old HSBC forecasts (TWh)	% above/ (below) target	Comment
France	486	1.28%	559	26%	145	135	-7%	Miss
Germany	583	0.78%	635	30%	191	197	3%	Exceed
Greece	58	1.28%	67	29%	19	24	25%	Exceed
Italy	317	0.78%	345	34%	117	131	11%	Exceed
Portugal	51	1.03%	57	60%	34	46	34%	Exceed
Spain	267	2.02%	333	42%	140	151	8%	Exceed
UK	341	0.28%	352	30%	106	105	0%	In line
Rest of Europe	1,027	1.52%	1,212	36%	440	489	11%	Exceed
Total EU	3,130	1.2%	3,560		1,192	1,277	7%	Exceed

Note: * the long-term electricity demand growth rate implicitly assumes a 10% energy efficiency saving by 2020
Source: national policy documents, IEA, HSBC estimates

According to our analysis, all key Southern European countries and Germany are set to exceed their 2020 RES-E targets (based on our old wind forecasts). We believe this increases the risk of regulators in these countries cutting current attractive subsidies in such a way as to slow down growth rates (such that these countries just meet their respective RES-E targets), helping fiscal tightening. So far, we have seen potential moves in Italy and Spain. Spain has cut tariffs for a period of two years and Italy appears to



have shied away from making cuts, at least for now. In addition, the Spanish government has cut its wind target for 2020 to 38GW from 41GW. We find that the France is the only country that is set to miss its 2020 RES-E target (relative to our old forecasts). The UK is more or less on track to meet its target.

Enercon and Gamesa have the highest exposure to these markets, from which they both derive around 50% of their sales. Vestas, Nordex and REpower derive around a third of their sales from these markets.

Wind industry demand forecasts – we cut our forecasts in the US and Europe but increase forecasts in China

Due to lower electricity demand following the deep recession in Europe and the US, and weak regulation in the US, we cut our wind forecasts in these regions. In the US, we now forecast flat new installation growth over the next five years (from 7% pa previously) and in Europe, we forecast 5% pa growth (from 7% pa previously), although we see pockets of stronger growth in the UK (13% pa) and France (11% pa).

Global wind demand forecasts – summary of changes (MW)

	2010e	2011e	2012e	2013e	2014e	Total 2010e-14e
Old forecast	36,963	41,896	45,920	50,094	53,810	228,683
New forecast	36,325	40,275	45,950	49,275	52,450	225,275
Difference	-638	-621	30	-819	-1,360	-3,408
% increase/(decrease)	-1.7%	-1.5%	0.1%	-1.6%	-2.5%	-1.5%
Due to:						
Decrease in US	-1,693	-2,496	-2,995	-3,969	-4,460	-15,613
Decrease in Europe	-895	-550	-400	-800	-1,275	-3,920
Increase in China	1,000	1,000	1,500	2,000	2,500	8,000
Increase in RoW	950	1,425	1,925	1,950	1,875	8,125
Total change in forecasts	-638	-621	30	-819	-1,360	-3,408

Source: HSBC estimates

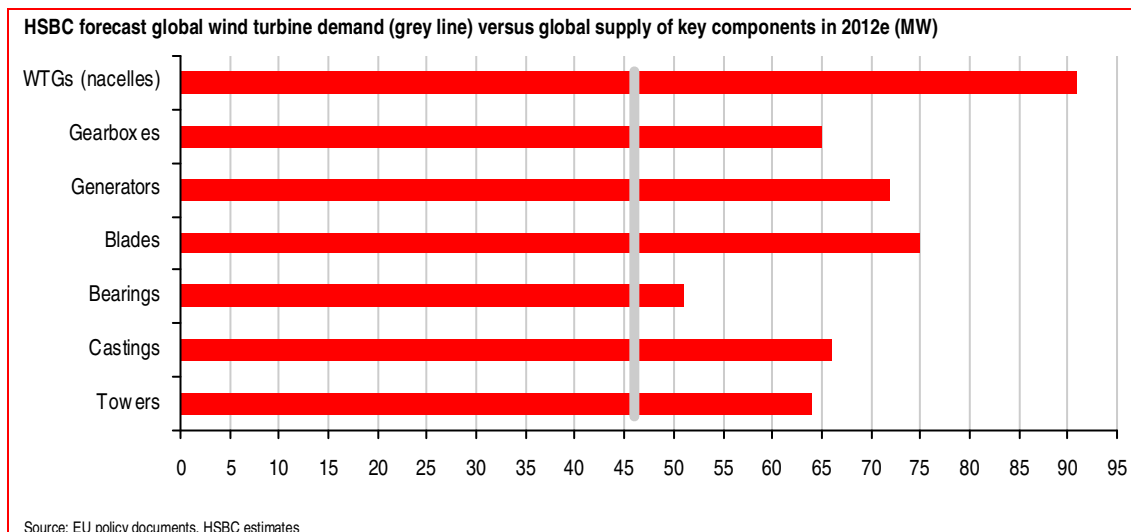
We cut our five year global demand CAGR to 7.0% from 7.5% previously and our 10-year industry demand CAGR forecast to 5.5% from 6.7% previously. We would have cut our global wind market forecasts by more but for support from a strong Chinese market and also pockets of growth in emerging markets in areas such as South America, Eastern Europe, Turkey and Canada. China will be the most significant driver of global growth, in our view. We forecast that it will account for 38% of the global market over the next five

years (2010e-14e) and will grow at 8% pa. The current National Development and Reform Commission (NDRC) target for wind in China is 150GW by 2020, but the goal post keeps moving (the target has been upgraded three times in the last five years). We forecast cumulative capacity of 241GW by 2020.

We analyse the exposure of key wind OEMs to three market groupings that we define as “high growth”, “growth” and “ex-growth”. The Chinese manufactures, Sinovel, Goldwind and Dongfang, currently have the best growth prospects in our view, on the back of domestic Chinese market growth. Furthermore they are all looking to internationalise, particularly into the US; any new market penetration will add to their growth profile. Clipper, GE and Gamesa are the least exposed to growth markets (roughly 0-25% of sales exposed to such markets). Vestas, Suzlon, REpower and Nordex all have good exposure to growth markets (roughly 40-60% of sales exposed to such markets). These are the best positioned of the non-Chinese players, in our view.

We expect no supply bottlenecks in the coming years, in fact we think the market is oversupplied

The wind industry dynamic has changed considerably since early 2008. In early 2008, due to strong growth in the industry over the period 2005-08 (4-year CAGR of 34%), there were bottlenecks in some parts of the supply chain. However, the credit crisis (from September 2008) led to a dry up in project finance for renewable projects and order flow slowed to a trickle. Due to this, today, wind turbine manufacturers and their sub-suppliers have found themselves with under utilised factory space, following a period of heavy investment in the run up to the credit crisis.



We do not see any bottlenecks of any key components in the coming years (2010e-12e), based on our global demand forecasts and MAKE Consulting’s supply forecasts. We see bearings as the tightest part of the value chain but still with 11% overcapacity by 2012e. We also note that increasing demand for larger turbines could create bottlenecks in some other large-sized (2MW or higher) components. There are, however, important differences between regional supply chains: Asia is in short supply of larger turbines, these will likely need to be exported from overseas (which is more expensive than sourcing from within Asia); the Americas are in short supply of gearboxes and generators, again these will likely need to be imported, probably from Europe.

It is not as important to be vertically integrated as it was pre-2008, when there were shortages in a number of key components. That said, we still believe it is beneficial for a global wind turbine manufacturer to have in-house capacity in most key components and ideally with a global spread. This will help quality control and also reduce transportation costs due to proximity to regional markets, in our view. In the case of Vestas and Gamesa (and other Western wind turbine manufactures), which have integrated facilities in China, in-house capacity should also give access to cheaper manufacturing costs. Vestas, Gamesa and Suzlon all have a good level of in-house manufacturing capacity, although Vestas and Suzlon both have no in-house gearbox capacity. Vestas has the mostly globally spread manufacturing capacity with factories in six European countries, the US, India and China.

We expect M&A to return to the sector

Following a period of industry consolidation in the early 2000s, globally, the competitive landscape for the wind sector is becoming more fragmented once again. This is driven by the emergence of a large number of domestic, Chinese players, of which a small number (Sinovel, Goldwind and DongFang) are taking significant global market share on the back of a strong Chinese market. We see further fragmentation in the coming years due to the emergence of Korean players such as Daewoo, Hyundai, and Samsung. This increased fragmentation, coupled with anaemic growth (relative to previous years) in the US and Europe increases the chances of M&A in the coming years.

We see the Chinese and Korean players as potential acquirers as they internationalise. In particular, acquisition of a European player to penetrate Europe, where the grid codes are more stringent and thus require higher-tech turbines (with power control electronics), would make sense, in our view.

Long-term (ie ten years out), we see the top 10 players comprising Vestas, one other European player, GE, and Siemens, with the remainder split between Chinese and Korean players.

Order flow data supports our industry forecasts (near term) and suggests most manufacturers are on track to meet our 2010 volume sales forecasts

We have analysed order data since the start of 2007 for a selection of leading wind OEMs, which publicly announce their orders (albeit only material ones). We have analysed a total of 49GW worth of orders, which correspond mostly to 'global ex-Asia' orders (44GW). Of the 'global ex-Asia' orders, 12.3GW correspond to 2010 projects, which equate to 67% of our 'global ex-Asia' forecast for 2010 (18.4GW). This compares to 2009 announced orders, which represented just 55% of the wind turbine market (22.3GW) in that year. Thus, bottom-up data suggests the wind industry is well on track to meet our 2010 market forecast. We note that wind OEMs typically announce c70% of their actual orders for a given year. The remaining 30% relate to smaller projects that creep under the radar.

We extend our analysis to look at individual wind OEMs' announced orders versus our volume sales forecasts. Gamesa, Suzlon and Clipper are all on track to meet our 2010 volume sales forecasts. Vestas is off track: in 2009, Vestas announced projects relating to 73% of its full year sales; thus far in 2010 it has only announced projects relating to 53% of our HSBC volume sales forecast (and this is with our cut 2010 forecasts to match the company's revised EUR6bn revenue target).

Investment ideas

Our sector stance

Our preference is for the wind developers and we are cautious on the OEMs. Our highest conviction investment ideas among wind farm developers remain Acciona and EDP R (both Overweight (V)). However, in this note we have lowered our lower tariff expectations going forward and this has resulted in reductions in price targets for the developers. We have cut our target price for Acciona to EUR94 (previously EUR120) and for Iberdrola Renovables to EUR3.50 (previously EUR4.00). We have also cut our target price on EDP Renovaveis (OW(V)) to EUR7.25 from EUR8.00 and on EDF Energies Nouvelles (N(V)) to EUR34.00 from EUR40.00. We maintain our rating and target price on Terna Energy (Overweight (V), TP EUR5.00).

We have developed a qualitative scorecard to rank the wind developers on a number of criteria.

Qualitative scorecard

We have developed a performance scorecard for the wind farm developers. EDPR is our highest conviction idea and Acciona is second as per this scorecard (see table on page 12).

EDPR and Acciona are our highest conviction ideas

EDPR provides the best disclosure and is second best (after IBR) in terms of portfolio size, financial strength and quality of management. EDPR currently provides the most potential return out of the wind farm developers.

Acciona is amongst the top-three ranked stocks on 4 out of the 6 criteria, and provides second-best potential return out of the wind farm developers.

We note that based on the first-stage score, IBR is the strongest company but in our view its share price does not offer as high return potential as EDPR and Acciona, thus overall it is ranked number 3 behind EDPR and Acciona.

Methodology

Our two-stage scorecard takes into account a) a performance metric (comprising of various qualitative and quantitative criteria) and b) potential return on the stock.

At the first stage, the quantitative criteria include the portfolio size, grants/allocations received, electricity pricing risk/ regulatory risk, financial strength, and the future growth profile. For the qualitative criteria, we include strategic targets/ quality of management and the level of disclosure provided by a particular company.

To the ranks of each company on every criterion, we then apply different weights (which we assign based on our view of their relative importance to the company's performance) and arrive at first-stage score.

The second-stage ranks the stocks on the potential return offered by a stock and multiply the rank with a multiple (10x) to arrive at the second-stage score.

We apply equal weights to the two scores from the end of each stage and the sum total of the two weighted score gives us our overall ranking.

The scores are given in descending order (from 5 to 1), meaning better a company is on a particular criterion, the higher the score it gets. For example, the level of disclosure is best for EDPR so it gets a score of 5 on that criterion while Terna Energy is weakest in disclosures and hence it gets the lowest score of 1.

Stage I – Performance metric

In stage I, we compare the major wind farm developers on various qualitative and quantitative factors, which we believe are important when making an investment decision on their stocks:

- ▶ **Portfolio size:** IBR is the largest wind player in the world with 11GW of operating assets. Acciona has the largest non-wind renewable business in the world with 1.1GW of STEG, Solar PV, small hydro/hydro and biomass operating assets.
- ▶ **Recent market developments:** we focus on (i) US Treasury grant disbursement (USD4.8bn in cash), (ii) Spanish project pre-registration (9GW of renewable projects allocated out to 2012) and (iii) recent large offshore development right allocations in the UK totalling 32GW (enough to power a quarter of the UK's electricity). IBR was a winner in all three markets.
- ▶ **Electricity pricing risk:** how secure are the wind farm developers' cash flows? Acciona is most exposed to electricity prices, with 73% exposure to Spain (unhedged). IBR and EDPR are both hedged. EDF EN has no exposure to Spain.
- ▶ **Financial strength:** IBR and EDPR have strong financial support from their parent groups, which provide credit for the financing of nearly all of their wind farms. EDF EN and Acciona raise project finance, which has made financing difficult over the last year or so; however, the project finance markets are now starting to improve.
- ▶ **Growth profile:** EDPR offers the most attractive earnings (EPS) growth with a three year EPS CAGR of 24% over 2010e-13e. EDF EN has the best three year EBITDA CAGR of 20%.
- ▶ **Strategic targets and detailed disclosure:** Information disclosure is good at EDPR and IBR at all levels. Acciona and EDF EN give their long-term new installations (wind and other renewables) as well as their financial targets but limited or no information on capacity factors and wind tariffs across geographies.

Stage II – Valuation

The stage II ranks the stocks on the basis of the potential return currently provided by it. The more potential return a stock has, the higher score it gets. Out of the wind farm developers, EDPR currently has the most potential upside while Acciona is the second best.

Wind farm developers – Relative valuation scorecard

INPUT

Stage I – Performance Metric	IBR	EDPR	Acciona	EDF EN	Terna Energy
Portfolio size	5	4	3	2	1
Grants/allocations	5	3	4	2	1
Electricity pricing risk/regulatory risk	3	2	1	5	4
Financial strength	5	4	3	2	1
Growth profile	5	3	2	4	1
Strategic targets/management	3	4	2	5	1
Disclosure	4	5	3	2	1
Score	30	25	18	22	10
	1	2	4	3	5
Stage II – Valuation					
Potential return (%)	39%	67%	55%	10%	46%
	2	5	4	1	3

OUTPUT

Stage I – Performance Metric	Weighting	IBR	EDPR	Acciona	EDF EN	Terna Energy
Portfolio size	10%	5	4	3	2	1
Grants/allocations	10%	5	3	4	2	1
Electricity pricing risk	30%	9	6	3	15	12
Financial strength	20%	10	8	6	4	2
Growth profile	10%	5	3	2	4	1
Strategic targets/management	10%	3	4	2	5	1
Disclosure	10%	4	5	3	2	1
Score – Performance metric	100%	41	33	23	34	19
Stage I ranking		1	3	4	2	5
Stage II – Valuation						
Score – Potential return (%)	100%	20	50	40	10	30
Valuation ranking		4	1	2	5	3
Total score		61	83	63	44	49
Overall ranking		3	1	2	5	4

Source: HSBC

Among wind turbine manufacturers we downgrade Gamesa from OW(V) to N(V) due to the cuts in our industry growth expectations. We decrease our target price for Gamesa to EUR5.50 from EUR14.00. We also cut our target price for REpower to EUR115 from EUR150 and rating from Overweight (V) rating to Neutral (V). For Vestas, the 27% share price reduction in its value after the August 18th profit warning has meant that we still see value in Vestas, although short term catalysts for re-rating are harder to see. We decrease our target price for Vestas to DKK300 from DKK425. We maintain our target price for Nordex of EUR10, and our Overweight (V) rating. We have increased our target price for Clipper to GBP1.00 (from GBP0.9) and upgrade our Neutral (V) rating on the stock to OW(V), based on our expectation of potential new orders. We cut our target price for Suzlon to INR42 from INR50, but maintain our Underweight (V) rating on the stock.

Valuation summary

Wind coverage – summary target prices and ratings (Price as close of 25 August 2010)

Stock	Bloomberg	Currency	New TP	Previous TP	% potential return	New rating	Previous rating
Wind farm developers							
Acciona	ANA SM	EUR	94.00	120.00	55%	Overweight (V)	Overweight (V)
Iberdrola Renovables	IBR SM	EUR	3.50	4.00	39%	Overweight (V)	Overweight (V)
Terna Energy	TENERGY GA	EUR	5.00	5.00	45%	Overweight (V)	Overweight (V)
EDP Renovaveis	EDPR PL	EUR	7.25	8.00	67%	Overweight (V)	Overweight (V)
EDF Energies Nouvelles	EEN FP	EUR	34.00	40.00	10%	Neutral (V)	Neutral (V)
Wind OEMs							
Vestas	VWS DC	DKK	300.00	425.00	32%	Overweight (V)	Overweight (V)
Clipper	CWP LN	GBP	1.00	0.90	130%	Overweight (V)	Neutral (V)
Nordex	NDX1 GR	EUR	10.00	10.00	47%	Overweight (V)	Overweight (V)
Gamesa	GAM SM	EUR	5.50	14.00	8%	Neutral (V)	Overweight (V)
REpower	RPW GR	EUR	115.00	150.00	17%	Neutral (V)	Overweight (V)
Suzlon	SUEL IN	INR	42.00	50.00	-15%	Underweight (V)	Underweight (V)
Hansen Transmissions	HSN LN	GBP	0.95	1.35	76%	Overweight (V)	Overweight (V)

Source: Bloomberg, HSBC

Valuation data (price as of close of 25th Aug. 2010)

	New rating	Previous rating	C'cy	New TP	Previous TP	Current Price	Potential Return	EV/sales			EV/EBITDA			HSBC PE			PEG			P/BV 2010e	
								2010e	2011e	2012e	2010e	2011e	2012e	2010e	2011e	2012e	2010e	2011e	2012e		
Wind farm developers																					
Acciona	OW(V)	OW(V)	EUR	94.00	120.00	60.70	55%	1.6	1.6	1.6	9.0	8.1	7.4	18.4	14.5	12.1	1.0	1.0	1.1	0.7	
IBR	OW(V)	OW(V)	EUR	3.50	4.00	2.52	39%	6.2	5.8	5.3	10.0	9.1	8.1	23.8	20.6	17.2	1.4	1.4	1.2	0.8	
Terna Energy	OW(V)	OW(V)	EUR	5.00	5.00	3.43	46%	6.8	6.1	4.4	17.4	12.0	7.3	31.9	18.0	9.9	N/A	N/A	n.m.	1.0	
EDPR	OW(V)	OW(V)	EUR	7.25	8.00	4.33	67%	6.8	6.3	5.8	8.4	7.7	7.0	30.8	26.1	19.7	1.3	1.0	0.8	0.7	
EDF EN	N(V)	N(V)	EUR	34.00	40.00	30.89	10%	4.7	4.6	4.4	14.5	12.8	11.8	21.9	16.8	13.5	0.9	1.0	1.1	1.7	
							Mean	5.2	4.9	4.3	11.9	9.9	8.3	25.4	19.2	14.5	1.2	1.1	1.1	1.0	
							Median	6.2	5.8	4.4	10.0	9.1	7.4	23.8	18.0	13.5	1.2	1.0	1.1	0.8	
Wind OEMs																					
Vestas	OW(V)	OW(V)	DKK	300.00	425.00	228.00	32%	1.1	0.9	0.8	10.8	6.5	5.4	31.5	11.6	9.2	0.6	0.8	0.9	1.8	
Clipper	OW(V)	N(V)	GBP	1.00	0.90	0.44	130%	0.1	0.0	0.0	6.2	1.1	0.7	n.m.	12.6	9.2	0.8	0.3	0.2	na	
Nordex	OW(V)	OW(V)	EUR	10.00	10.00	6.82	47%	0.2	0.2	0.1	4.1	2.9	1.9	18.5	11.4	7.1	na	n.m.	n.m.	1.2	
Gamesa	N(V)	OW(V)	EUR	5.50	14.00	5.10	8%	0.7	0.6	0.6	7.8	6.7	6.1	21.4	16.4	12.4	0.7	0.7	0.7	0.8	
REpower	N(V)	OW(V)	EUR	115.00	150.00	98.48	17%	0.5	0.4	0.3	6.0	5.3	4.2	15.8	14.8	12.4	na	na	n.m.	1.9	
Suzlon	UW(V)	UW(V)	INR	42.00	50.00	49.60	-15%	1.0	0.9	0.8	17.8	12.5	9.3	n.m.	n.m.	41.2	0.2	n.m.	0.7	1.2	
Hansen	OW(V)	OW(V)	GBP	0.95	1.35	0.54	76%	1.0	0.8	0.7	10.4	7.2	5.1	n.m.	30.6	10.6	na	0.7	0.2	0.7	
							Mean	0.6	0.6	0.5	9.0	6.0	4.7	21.8	16.2	10.2	0.6	0.6	0.5	1.3	
							Median	0.7	0.6	0.6	7.8	6.5	5.1	19.9	13.7	9.9	0.7	0.7	0.7	1.2	

Source: Bloomberg, HSBC estimates

Summary of changes to EPS estimates

HSBC wind stock coverage – Summary of changes in our EPS forecast for 2010e-12e

	Currency	2010e			2011e			2012e		
		New	Old	% change	New	Old	% change	New	Old	% change
Windfarm developers										
Acciona	EUR	3.30	5.60	(41%)	4.19	7.03	(40%)	5.00	8.44	(43%)
IBR	EUR	0.11	0.10	3%	0.12	0.12	2%	0.15	0.15	0%
EDPR	EUR	0.14	0.17	(15%)	0.17	0.19	(13%)	0.22	0.24	(9%)
EDF EN	EUR	1.41	1.23	15%	1.84	1.65	11%	2.29	1.67	37%
Wind OEMs										
Vestas	EUR	0.97	2.52	-61%	2.65	3.01	-12%	3.32	3.56	-7%
Gamesa	EUR	0.24	0.42	-43%	0.31	0.64	-52%	0.41	0.81	-49%
Clipper	USD	0.00	0.00	nm	0.06	0.06	0%	0.07	0.08	-14%
REpower	EUR	7.05	6.22	-12%	8.29	6.66	-20%	7.96	na	na
Nordex	EUR	0.37	0.37	0%	0.60	0.60	0%	0.96	0.96	0%
Suzlon	INR	-3.70	1.11	nm	-0.99	4.36	nm	0.42	6.99	-94%
Hansen	EUR	0.00	0.00	nm	0.029	0.031	-6%	0.07	0.08	-14%

Source: HSBC estimates. For Suzlon, REpower and Hansen above, 2010-12e refer to FY1-FY13e

Why change forecasts and valuations?

We have made changes to target prices for our coverage universe of wind OEMs and wind farm developers. The main catalysts are:

- ▶ Weaker electricity demand in the EU. We have undertaken a detail review of the renewable electricity (RES-E) targets for 2020 in the EU, including our own proprietary analysis of a possible renewable energy mix in seven key EU wind markets that will allow these markets to hit their RES-E targets for 2020. This has caused us to revise down our European market forecasts
- ▶ Weaker electricity demand and a weak regulatory environment in the US. We have undertaken a detailed review of the complex US regulatory environment, including an analysis of the state-level Renewable Portfolio Standards (“RPSs”) and a potential federal Low Carbon Electricity Standard (“LCES”). This has caused us to revise down our US market forecasts
- ▶ Detailed analysis of global market data for 2009. This has caused us to revisit our global market forecasts and market share model. In particular we consider the impact of the Chinese market and Chinese wind turbine manufacturers (now three top 10 players, albeit on the strength of their domestic market) on the global wind industry
- ▶ Detailed analysis of trends in wind order flow over the last three and half years. We have looked at spot project and framework projects pending in the coming years in order to match our top-down regulatory analysis to the bottom up data in the coming years. This has caused us to revise down our near term forecasts globally (in conjunction with our European and US regulatory analysis)

Although not the primary driver of this report, we have also updated our forecasts to reflect recent results released by a number of our companies.

So what has changed?

Downgrading our global market forecasts

We downgrade our forecasts for the global wind power market, due to cuts to our US and European forecasts out to 2020, which more than offset the increase we made to our Chinese market forecast. Our

five year demand CAGR (2009-14e) for new installations decreases from 7.5% to 6.3% and the 10-year demand CAGR (2009-14e) decreases from 6.7% to 5.3%. Our terminal growth assumption remains the same at 4%. The key drivers for our downgrade are as follows:

- ▶ **In the near term:** weak order flow during 2009 has led to a decline in global installations during 2010 so far. We forecast the Americas (86% US in 2009) will display the weakest growth over the next 5 years (2010e-14e) of 3.5% pa (from 8.2% previously) driven by flat growth in US (from 7.4% previously) due mainly to regulatory uncertainty. We also forecast weak growth in Europe at 5.2% pa over the same period, due to regulatory uncertainty in some markets coupled with some markets becoming more mature. We believe Asia (85% China in 2009) will drive global growth with 9.3% over the same period.
- ▶ **In the longer term:** we base our long-term forecast on our top-down analysis of regulatory targets in the US and Europe. The regulatory targets set in each region are based on a percentage of renewables in the power generation mix (with the exception of US states, Texas and Iowa) (“RES-E” or renewable electricity) by a prescribed date, typically 2020. Thus, one needs to take a view on long-term electricity demand, including energy efficiency assumptions. As a result of the economic downturn of the last couple of years, the RES-E targets have become easier to attain as long-term electricity demand growth is from a lower base. Consequently, we have cut our forecast in Europe and the US. As with for near term growth, again, Asia – and more specifically China – is the major long-term global growth engine, in our view.

Global market – growth comparison for revised and previous forecasts (in MW)

	5-year CAGR (2009-14e)	5-year CAGR (2014-19e)	10-year CAGR (2009-19e)	Terminal growth rate
New	7.0%	4.1%	5.5%	4%
Old	7.5%	5.8%	6.7%	4%

Source: HSBC

We discuss the drivers of near-term and longer-term growth in more detail in the chapter, ‘Global wind market analysis’.

Revising our market share model – some win and some lose

We revise our medium-term market share forecasts (for 2014). We use these revised market share forecasts coupled with our revised industry demand forecasts to help drive our volume sale growth assumptions for each of our coverage companies (coupled with company guidance and a bottom up review of project pipelines).

Vestas to remain No.1 wind turbine manufacturer: we believe that Vestas will retain its No.1 position as the largest wind turbine manufacturer as it regains some of the market share it has lost in recent years (particularly in China where Vestas’ market share has declined from 23% in 2006 to c4% in 2009) and also due to its broad global spread including exposure to smaller, high growth markets.

Chinese wind turbine manufacturers are the top gainers: for the first time in 2009, three Chinese wind turbine manufacturers (Sinovel, Goldwind and Dongfang) ranked among the top 10, driven by a strong domestic Chinese market. We forecast the Chinese market will remain the number one market

globally over the next five years, which will help build the key domestic players' track records further giving them a good platform for international growth.

2014e global market share forecasts for our coverage companies (in MW)

	Vestas	Gamesa	Suzlon	Clipper	REpower	Nordex
Updated 2014e forecast	16.5%	6.0%	5.1%	1.8%	4.8%	3.0%
2009 market share	14.5%	6.0%	5.9%	1.8%	3.4%	2.5%
Updated 2014e ranking	1	8	9	12	10	11
2009 ranking	1	7	8	14	11	10

Source: HSBC estimates

Contents

Global wind market analysis	17	EDP Renovaveis (EDPR PL)	94
US regulatory analysis	25	EDF Energies Nouvelles (EEN FP)	100
EU regulatory analysis	32	Terna Energy (TENERGY GA)	106
Supply-side	39	Clipper (CWP LN)	110
Changing competitive landscape	44	Gamesa (GAM SM)	114
Wind OEMs – order flow	52	Hansen Transmissions (HSN LN)	118
Valuation	60	Nordex (NDX1 GR)	122
Comparing the wind farm developers	71	REpower (RPW GR)	125
Companies section	81	Suzlon (SUEL IN)	128
Acciona (ANA SM)	82	Vestas (VWS DC)	132
Iberdrola Renovables (IBR SM)	89	Disclosure appendix	137
		Disclaimer	140

“We would like to acknowledge the contributions of Ankit Sharma and Deepak Singhal to this report.”

Global wind market analysis

- ▶ We cut our five-year industry demand CAGR forecast to 7.0% globally from 7.5%
- ▶ We cut our new installations forecast for the US market by 27% (15.6GW) over the next five years due reduced electricity demand and a weak regulatory environment
- ▶ We cut our forecasts for Europe by 6% (3.9GW) over the next five years due to reduced electricity demand resulting in reduced renewable targets

Industry forecasts: China the main driver

We cut our five year global demand CAGR estimate to 7.0% from 7.5% previously and our 10-year industry demand CAGR forecast to 5.5% from 6.7% previously, primarily driven by the following:

- ▶ **Europe:** reduced electricity demand resulting in reduced renewable targets in most key European markets. We cut our five year demand CAGR estimate to 5% from 7% previously.
- ▶ **US:** reduced electricity demand resulting in reduced renewable targets, exacerbated by a weak longer-term regulatory environment. We cut our five year demand CAGR estimate to 0% from 7% previously.
- ▶ **Order flow:** order flow is picking up but continues to point towards a weak year in 2010. We cut our 2010 demand growth forecast to -3.0% from -1.3% previously.

- ▶ **Partially offset by:** continued strong growth in the Chinese markets driven by high demand for electricity and a willingness on the part of the Chinese government to be considered more green, and also pockets of growth from new emerging markets in areas such as South America, Eastern Europe, Canada and Turkey.

In this report, we have undertaken a detailed analysis of the regulatory environment in the US and Europe (see “US regulatory analysis” and “EU regulatory analysis” chapter). We have performed a top down review of these markets and derived long-term forecasts out to 2020 based on renewable targets in each region. We find that both regions are currently set to exceed their respective targets (draft target in the US) and thus we cut our wind forecasts in each region.

China will be the most significant driver of global growth, in our view. We forecast that it will

Global wind demand forecasts – summary of changes

	2010e	2011e	2012e	2013e	2014e	Total 2010e-14e
Old forecast	36,963	41,896	45,920	50,094	53,810	228,683
New forecast	36,325	40,275	45,950	49,275	52,450	225,275
Difference	-638	-621	30	-819	-1,360	-3,408
% increase/(decrease)	-1.7%	-1.5%	0.1%	-1.6%	-2.5%	-1.5%
Explained by:						
Decrease in US	-1,693	-2,496	-2,995	-3,969	-4,460	-15,613
Decrease in Europe	-895	-550	-400	-800	-1,275	-3,920
Increase in China	1,000	1,000	1,500	2,000	2,500	8,000
Increase in RoW	950	1,425	1,925	1,950	1,875	8,125
Total	-638	-621	30	-819	-1,360	-3,408

Source: HSBC estimates

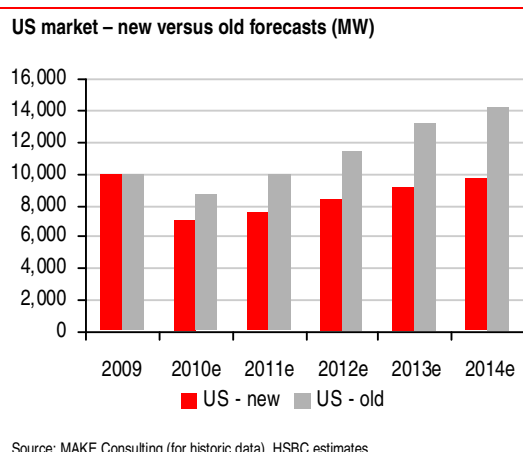
account for 38% of the global market over the next five years (2010e-14e) and will grow at 8% pa. The current NDRC target for wind is 150GW by 2020, but the goal post keeps moving (the target has been upgraded three times in the last five years). We forecast cumulative capacity of 241GW by 2020.

We cut our 2010 new installation forecasts to 36.3GW

Following a detailed review of order book data for the wind turbines manufacturers (see “wind OEMs – order books” chapter), we cut our global new installations forecasts for 2010 to 36.3GW, implying a negative growth rate of 3% (versus negative 1.4% previously), although off of a record base year in 2009 of 37.5GW. In fact, excluding China we are now forecasting negative growth of 13% in 2010, driven by negative growth of 29% in the US and 14% in Europe.

No growth expected in the US – even with new legislation

We have undertaken a detailed analysis of the existing state level Renewable Portfolio Standards (RPSs) available in the US and a potential federal Renewable Electricity Standards (RESs) (see chapter on “US regulatory analysis”). Under the current proposed federal RES, we forecast average new wind installations of 10GW pa over the eleven year period to 2020. This is c33% lower than the 15GW pa (average) we were previously forecasting over the same period.



Under these circumstances, we reduce our five year demand CAGR estimate for the US market to 0% from 7% previously. In terms of new installations over the five year period 2010-14, we cut our forecast by 27% from 57.6GW to 42.0GW. This gives the US market a 20% share of global installations.

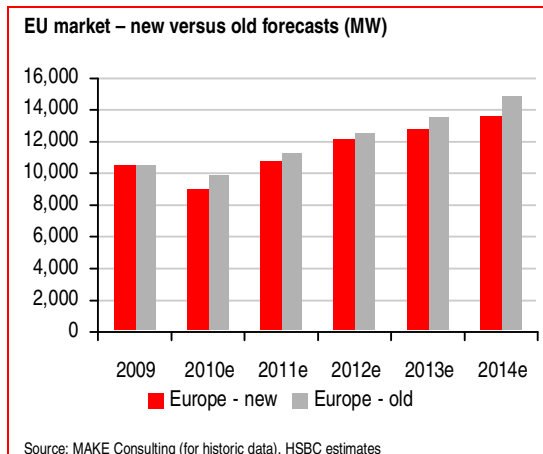
The state level RPSs alone are notably worse, with average demand of just 6GW pa over the eleven year period to 2020.

Europe – we cut our forecasts in Southern Europe and Germany

We have undertaken a detailed review of EU 20:20:20 targets for seven key EU markets and their implication for renewable electricity and wind markets. These seven markets accounted for more than 80% of wind turbine demand in Europe in 2009. Based on our analysis, we find that all

Southern European markets and Germany are set to exceed their renewable electricity targets for 2020; we thus cut our wind forecasts for these countries. We find that France is the only country likely to miss its target and therefore increase our wind forecast for France. We keep the UK more or less the same.

Under these circumstances, we reduce our five year demand CAGR for the European market to 5% from 7% previously. In terms of new installations over the five year period 2010-14, we cut our forecast by 6% from 62.0GW to 58.1GW. This gives the European market a 26% share of global installations.



China – the global growth engine

China will be the backbone of global growth over the next five years (2010e-14e), accounting for 39% of new installations over that period, in our view.

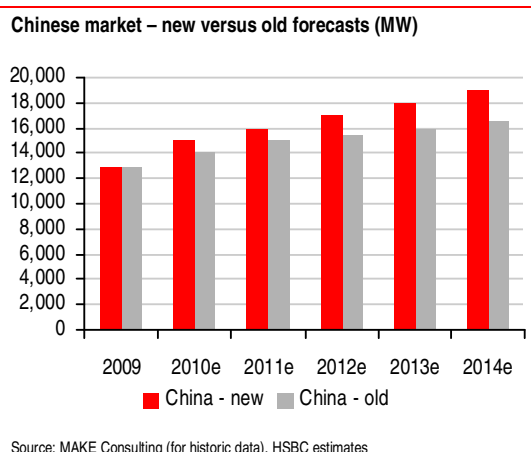
We believe the Chinese market will exceed the NDRC's wind target for 2020 which currently stands at 150GW. The NDRC has already upgraded this number three times in the last five years. Cumulative capacity in China at the end of 2009 was 25GW, so to meet the 150GW target, China needs to install on average 11.4GW pa. This is not particularly challenging in our view and would imply negative annual growth since China's market size in 2009 was 13GW. Given the current momentum in the Chinese market, we upgrade our forecast for 2020 to 241GW from 212GW previously.

Under these circumstances, we increase our five year demand CAGR estimate for the Chinese market to 8% from 5% previously. In terms of new installations over the five year period 2010-14, we increase our forecast by 10% from 77GW to 85GW. This gives China a 38% share of global installations over that period, on our estimates.

China – a summary of forecasts from various sources

	2009	2010e	2011e	2012e	Method
HSBC	13,000	15,000	16,000	17,000	Installed
BTM Consult	13,750	14,000	15,000	15,500	Installed
GWEC	13,000	n/a	n/a	n/a	Installed
MAKE Consulting	8,970	13,000	17,000	20,000	Grid-connected

Source: MAKE Consulting, BTM Consult, GWEC, HSBC



Grid-connection is one of the biggest challenges

One of the biggest challenges in China at the moment is connecting installed turbines to the grid; this issue is particularly pronounced in Inner Mongolia. This has caused a large mismatch between installed and grid-connected turbines; depending on whose numbers one looks at, up to a third of installed turbines in China are not grid-connected (ie running idle). MAKE Consulting bases its Chinese market forecasts on grid-connected turbines, whereas BTM Consult, GWEC (the Global Wind Energy Council) base their forecasts on installed turbines. We fall in the latter camp.

We believe turbines installed (rather than grid-connected) best represents the market for wind turbines (ie a turbine sales contract is typically complete when the turbines are installed, not necessarily grid-connected), although tallying turbines installed is more subjective.

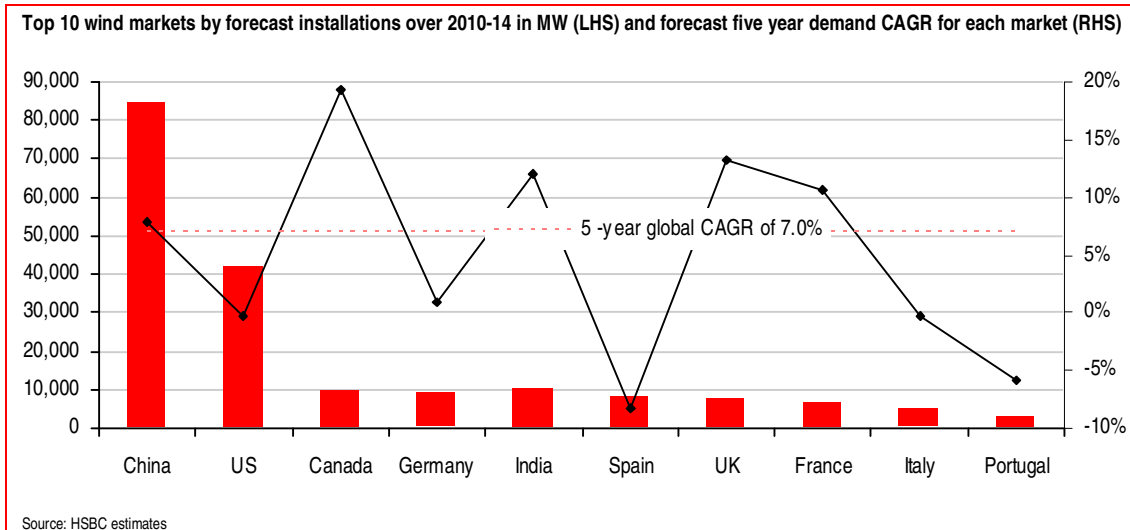
We believe that ensuring existing installed capacity becomes grid-connected will become more of a focus for wind farm developers in the coming years, which is one of the reasons for growth in the Chinese market slowing to a five year CAGR of 8%, on our forecasts (based on installed, not grid-connected capacity) compared to triple digit growth over the last five years. We note that grid-connected capacity will grow at a five-year CAGR of 20%, on our forecasts, due to the closing of the gap between installed and grid-connected capacity. The other reason being the fact China is now the world's largest wind turbine market thus the base year of 2009 is at a record high (for any wind market, ever) of 13GW.

Note that our Chinese market assumptions herein assume considerable investment in grid infrastructure to enable nearly all wind farms to become grid-connected by 2014e. This is particularly an issue in Inner Mongolia.

China – installed versus grid-connected capacity over the period 2010e-14e

	2009	2010e	2011e	2012e	2013e	2014e	2015e	5-year CAGR (2009-14e)
Grid-connected capacity								
Cumulative	19,223	32,424	47,695	65,158	84,935	107,146	126,412	41%
Annual (or new)	8,970	13,201	15,271	17,463	19,776	22,211	19,266	20%
% increase/(decrease)	92%	47%	16%	14%	13%	12%	-13%	
Installed capacity								
Cumulative	24,893	39,893	55,893	72,893	90,893	109,893	129,653	35%
Annual (or new)	13,000	15,000	16,000	17,000	18,000	19,000	19,760	8%
% increase/(decrease)	106%	15%	7%	6%	6%	6%	4%	
Grid-connected as % installed capacity								
Cumulative	77%	81%	85%	89%	93%	98%	98%	
Annual (or new)	69%	88%	95%	103%	110%	117%	98%	

Source: MAKE Consulting (for historic data), HSBC estimates



Market analysis: where's the growth coming from?

We have ranked 22 wind markets, worldwide, based on our forecast new installations over the next five years (2010e-14e) and also forecast "other Americas", "other Europe", "other Asia/Pacific and RoW. From this pool of markets, we form three groups:

- ▶ Growth markets (out of top 10 markets)
- ▶ Ex-growth markets (out of top 10 markets)
- ▶ High growth markets (remaining markets).

Top 10 markets: five growth and five ex-growth

We forecast that the top 10 markets will account for 85% of all new installations over the period. We identify two distinct groupings within the top 10 markets, five markets with zero or negative growth over the next five years and five markets, which are all growing faster than the global average of 7.0% pa over the same period:

- ▶ **Growing faster than the global market:** India (five year CAGR estimate of 12%), the UK (five year CAGR estimate of 13%) and Canada (five year CAGR estimate of 19%),

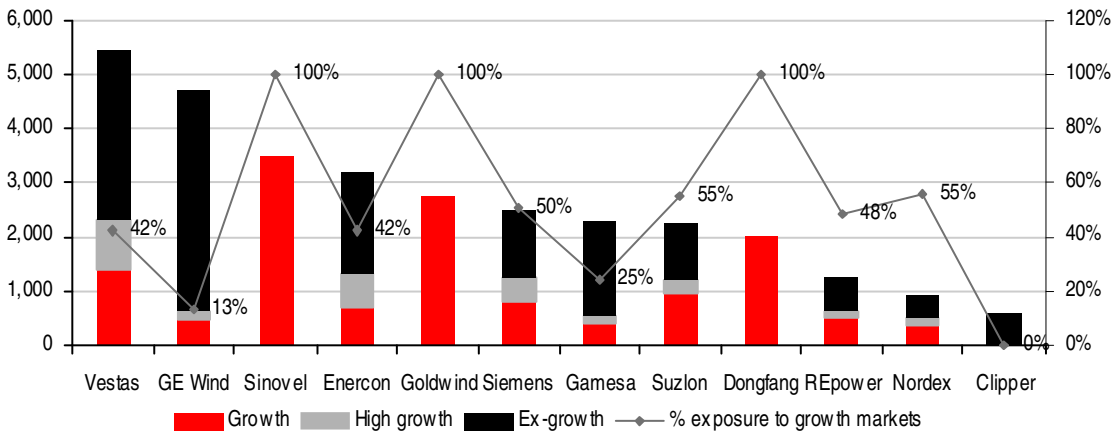
France (five year CAGR estimate of 11%) and China (five year CAGR estimate of 8%)

- ▶ **Negative or zero growth:** US (five-year CAGR estimate of 0%), Germany (five year CAGR estimate of 1%), Spain (five year CAGR estimate of minus 8%), Italy (five year CAGR estimate of 0%) and Portugal (five year CAGR estimate of minus 6%)

Remaining markets: high growth

The remaining 12 markets plus "other Americas", "other Europe" and "other Asia/Pacific" and RoW, we forecast will in aggregate account for just 19% of new installations over the period 2010e-20e. However, we believe these smaller markets will provide the strongest growth opportunity, mainly due to a low base effect due to their relative immaturity. We forecast a five year CAGR for these markets combined of 21%.

Top 10 wind turbine manufacturers plus Nordex and Clipper – sales exposure to growth, ex-growth and high growth (RoW) markets in MW (LHS) and % sales exposure to growth/high growth markets (RHS) in 2009



Source: MAKE Consulting, HSBC estimates

Implications for the wind turbine manufacturers

We have analysed the exposure of the top 10 wind turbine manufacturers plus Nordex and Clipper to the three grouping defined above, namely “high growth”, “growth” and “ex-growth”.

The Chinese manufactures, Sinovel, Goldwind and Dongfang, currently have the best growth prospects in our view, on the back of domestic Chinese market growth. Furthermore they are all looking to internationalise, particularly into the US; any new market penetration should add to their growth profile.

Clipper, GE and Gamesa are the least exposed to growth markets with 0%, 13% and 25% sales exposure to growth markets in 2009 respectively. In the case of Clipper and GE this is due to their very high exposure to the US market (100% and 85% of sales respectively), and in the case of Gamesa is due to its high exposure to Spain and the US (two-thirds of sales). We note that in the coming years Clipper is looking to expand outside of the US into growth markets such as Latin America and Canada.

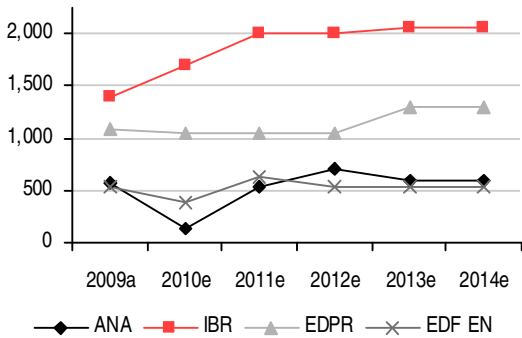
The remaining manufacturers, including Vestas, Suzlon, REpower and Nordex, all have exposure to growth markets in the range of 40-60% of sales. These are the best positioned of the non-Chinese players.

Implications for the wind farm developers

Exposure to high growth markets not essential...

It is not a prerequisite that the wind farm developers are exposed to the highest growth markets. Based on our forecasts, the wind farm developers will barely grow their annual installations over the next five years, with the exception of Iberdrola Renovables, which we forecast will growth annual installations at 7% pa over 2010e-14e). Iberdrola Renovables’ higher growth is due to a suppressed base in 2009 (just 1.4GW versus the 2GW pa targeted by the company previously). In fact, we forecast that all wind farm developers except Iberdrola Renovables will deliver a lower number of installations in 2010 than in 2009.

Wind farm developers – HSBC new installations forecasts over the period 2009-2014e



Source: HSBC estimates

...quality of pipeline much more important

What is more important for the wind farm developers is the quality of their pipeline, in terms of project viability, return, and geographical spread, and also their access to finance. The focus at the moment is on which developers are exposed to markets with high regulatory risk such as Spain, Italy and the US.

From April, investors have been discounting heavily developers exposed to Spain due to uncertainty over the tariff system, including the possibility of a retroactive cut to tariffs. In early July some visibility was given on the tariff cuts to wind in the form of a draft Royal Decree, which looks for temporary tariff (premium) cuts in 2011 and 2012; this is not

particularly unfavourable and importantly adds some visibility to an unclear situation. Iberdrola Renovables, EDPR and Acciona all have operating asset and pipeline exposure to Spain.

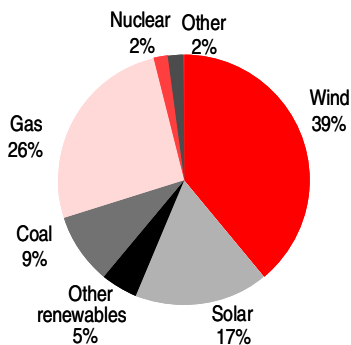
2009: wind power a mainstream technology

The wind industry had another record year in 2009 with new wind installations of 37.5GW worldwide. In Europe, wind was the power generation source of choice in terms of new installations for the second year running, accounting for 39% (2008: 36%) of all new installations with gas in second place accounting for 26% of new installations. Similarly in the US, wind energy accounted for 39% of new installations in 2009, marginally beaten by gas with 43%.

Who's number 1, US or China?

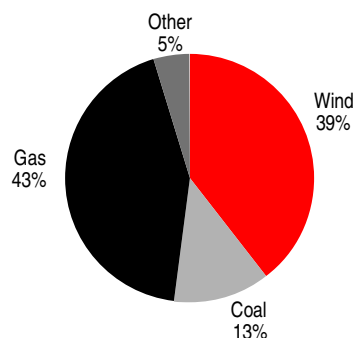
According to the Global Wind Energy Council (GWEC), in 2009, global wind turbine installations reached 37.5GW, an increase of 38% y-o-y (2008: 35%). GWEC's analysis suggests that China is the leading market with 13GW of new installations globally accounting for 35% of new installations globally (13GW). The global market for wind turbine installations in 2009 was worth about EUR45bn (~USD60bn) (source: GWEC). Cumulative total installations globally reached 157.9GW.

New power capacity installations in the EU in 2009 (Total 26GW) – by technology



Source: EWEA, HSBC

New power capacity installations in the US in 2009 (Total 26GW) – by technology



Source: AWEA, SEIA, SNL, Lawrence Berkeley Laboratory, HSBC

However, according to MAKE consulting, a leading wind industry consultant, global wind turbine installations reached c33GW in 2009, up 27% y-o-y. The main growth drivers were China (up 92% y-o-y) and US (up 16% y-o-y), which installed c9GW and 10GW of grid-connected wind turbines in 2009 respectively.

The difference between MAKE and GWEC numbers can be explained by the difference in their methodology. MAKE calculates installation numbers based on completed projects i.e. mechanically installed and fully commissioned wind turbines, grid available and connected, either operating or fully ready to operate, whereas, we believe GWEC numbers are based on installed capacity, irrespective of its grid connection status. The MAKE number thus understates the size of the wind turbine market, in our view, since we believe installed capacity is more relevant when talking about the market for size for wind turbine manufacturers as a completed wind farm (albeit not grid connected) represents a completed contract for a wind turbine manufacturer.

US: a positive surprise

In the US, new installations increased by 19% y-o-y to c10GW (2008: 8.4GW), bringing the total installed capacity to 35GW. At the beginning of 2009, it was widely expected that the US market will be weak due to a lack of adequate project financing (in particular tax equity in order to fully utilise the Production Tax Credit (PTC), the federal level incentive). However, the swift implementation of ARRA incentives and the disbursement of treasury grants in the second half of 2009 had a positive impact on the new installations with c4GW of new installations achieved in the fourth quarter.

China: stronger than expected

In China, new installations reached 13GW, more than double their level in 2008 (6.3GW). This brings total installed capacity to 25GW at the end of 2009 (2008: 12GW). Wind energy development was largely unaffected by the lack of financing which negatively impacted the rest of the world. It also overtook US as the world's largest market for wind turbines in 2009 (on an installed, not grid-connected, basis).

EU: robust growth

In the EU, new installations increased by 18% y-o-y to c10.5GW (2008: 8.9GW), driven by robust new installations in the UK, France and Italy, and better than expected new installations in the more mature markets of Spain and Germany. This brings the total installed capacity in the EU to 76.5GW and makes the EU by far the largest region from a total installed base perspective, with 48% of the global total installed base.

Electricity generation goes green in the EU

In the EU, wind energy was the no.1 electricity-generating technology, in terms of new installations, for the second year in running, with 39% of new installations in 2009 (2008: 36%). In fact, 61% of new installations during 2009 were from renewable sources (2008: more than 50%). Gas was the next most popular electricity generation source, with 26% of new installations.

US regulatory analysis

- ▶ We calculate that the state RPSs alone would support only a 5GW pa (on average) wind market until 2020
- ▶ We calculate that a federal LCES (assuming 13% renewable electricity) could support a 10GW pa wind market until 2020
- ▶ Based on a federal LCES (assuming 13% renewable electricity by 2020), we cut our new installations forecast for the US market by 27% over the next five years (combined)

Current US regulation is weak

The US wind industry recorded a record year of 10 GW in 2009 but was knocked off its top spot as the world's largest market (having been no.1 since 2005 – with c25% of the global wind turbine market over the period 2005-09) for the first time by China (13GW). The good news stops there. Compared to this level of new installations, the current potential regulatory scenarios in the US do not bode well for wind turbine demand growth over the next decade or so. We calculate that the state RPSs alone would support just a 5.7GW pa (average) wind market until 2020.

A potential federal LCES (assuming 13% renewable electricity by 2020) would support a wind market over the same period of nearly 10GW pa, we calculate. This is the best possibility, in our view, and implies only flat demand growth over the period to 2020. We note that there is considerable uncertainty over the final form of a potential federal LCES, and there are a number of draft pieces of legislation before Congress with quite different proposals. The House of Representatives have passed a bill (the Waxman-Markey bill) with

federal RES provisions but this still needs to be reconciled with any such provisions coming out of the Senate. Our federal LCES scenario adopts the Lugar version of the federal LCES (see assumptions below for detail). The Lugar bill is one of many versions of the legislation in the Senate right now. The Lugar bill gives 'clean' energy targets which include CCS (Carbon Capture and Storage) and nuclear installations, rather than just renewable energy targets (as per the House of Representatives' version of the bill), which we believe are necessary to appease the coal and nuclear lobby and therefore eventually see the bill passed in the Senate; it is a good general representation of most Senate versions of the bill.

The worst case scenario is unlikely to materialise

In what we consider the worst case regulatory scenario, which would entail no federal LCES, and a US market based only on those states with penalty schemes to support their state level RPS targets, we calculate wind demand in the US of just 3.8GW pa (average) up to 2020. We believe this scenario is unlikely, but nevertheless would be very negative for the Wind OEMs.

Implications for the wind turbine manufacturers

Flat demand in the US up to 2020 (and that is the best case of our three regulatory scenarios) will have a negative impact for most wind turbine manufacturers in, perhaps, the most competitive market globally. In our view, GE, Mitsubishi and Clipper will suffer more than most players since these companies all have more than 85% sales exposure to the US market. Vestas, Gamesa and Suzlon all have around 25% of their sales exposed to the US.

The US – the most exposed wind turbine manufacturers

	Sales exposure (MW)		Market share (MW)	
	Average 2007-09	2009	Average 2007-09	2009
GE	84%	85%	45%	40%
Siemens	53%	47%	12%	12%
Clipper	100%	92%	3%	6%
Mitsubishi	93%	100%	7%	8%
Vestas	25%	27%	16%	15%
Gamesa	24%	26%	9%	6%
Suzlon	23%	32%	5%	7%

Source: MAKE Consulting, HSBC estimates

REpower and Nordex both have under 15% sales exposure to the US market.

Competition fierce – Asian players trying to penetrate

In our view, the US market is already the most competitive market globally (China is the second most competitive). Many European turbine manufacturers have already set up manufacturing

US regulation - summary of current regulatory scenarios and implications for the wind market

	Federal RES (potential)	State RPS (all states with an RPS) (ii)	State RPS (penalty scheme only)
No of states	50	37	16
Renewable electricity as % total electricity in 2020 (un-diluted)	20.0%	11.3%	5.7%
Dilution to base due to exemptions for large hydro and MSW (ii)	1.5%	15%	10%
Clean electricity as % total electricity in 2020 (diluted)	18.5%	9.7%	5.4%
Energy efficiency saving (smart grid etc)	3.7%		
Clean electricity as % total electricity in 2020 (diluted)	14.8%	9.7%	5.4%
Dilution due non-renewable but 'clean' energy sources	1.9%		
Renewable electricity as % total electricity in 2020 (diluted)	12.9%	9.7%	5.4%
Wind as % renewable electricity	65%	54%	57%
Wind as % total electricity in 2020	8.4%	5.4%	3.1%
2020e wind produced electricity (TWh) (i)	370	232	136
2020e wind capacity (GW) (i)	141	88	52
2009 wind capacity (GW) (i)	35	25	10
New wind installations 2010-2020 (GW)*	106	63	42
Average wind installations pa (GW)	9.6	5.7	3.8
2020e cumulative installations (all states)	141	98	87

Note: (i) Summed over states in question only; (ii) Includes states with an informal target as well as a formal RPS; (iii) dilution is due to an exemption for small power producers for RPS schemes
Source: DoE website, IEA, EIA, HSBC estimates

facilities in the US. Despite the flat demand growth we forecast for the US market, we believe key Chinese players, such as Goldwind, Sinovel, A1 Power, and Ming Yang, will continue to penetrate the US market. We have already seen an Indian manufacturer, Suzlon, enjoy some success in penetrating the US market over the last couple of years, with 704MW of US sales in 2010e (c7% market share).

In addition, we expect a further wave of penetration from Korean manufacturers such as Samsung, Hyundai and Daewoo. Furthermore, these are all already trusted brands in the Western world and therefore could cause more of a threat to Western turbine manufacturers than the Chinese manufacturers, which are less well known.

The emergence of Asian players trying to penetrate the US market is likely to put downwards pressure on pricing as they under cut on price in order to win market share.

Investment in US manufacturing capacity

Many European wind turbine manufacturers, including Vestas, Gamesa, and Nordex, and also Suzlon, have invested in the US in recent years as improved regulatory visibility (ie a more stable Production Tax Credit (“PTC”)) allowed them to commit capital to the region. However, Gamesa and Suzlon have had to make redundancies at their US plants, which are currently significantly under-utilised. Vestas has made no redundancies at its US plants.

Implications for the wind farm developers

The wind farm developers we cover all have significant US exposure, with more than 50% of their respective wind development pipelines exposed to the US.

Wind farm developers – exposure to the US

	IBR	EDPR	Acciona	EDF EN
Wind - operating assets (MW)	11,010	5,665	5,363	2,145
Geographic split:				
Spain	47%	34%	73%	0%
Southern Europe (ex-Spain)	n/a	11%	4%	31%
Rest of Europe	8%	7%	3%	23%
Europe	55%	52%	80%	54%
US	35%	48%	8%	41%
RoW	10%	0%	12%	5%
Total	100%	100%	100%	100%

Wind - pipeline (MW)	49,901	30,951	23,728	14,314
Geographic split:				
Spain	18%	16%	29%	0%
Southern Europe (ex-Spain)	n/a	3%	n/a	14%
Rest of Europe	15%	15%	n/a	18%
Europe	34%	34%	n/a	32%
US	49%	61%	n/a	59%
RoW	17%	4%	71%	9%
Total	100%	100%	100%	100%

Source: HSBC estimates, company data

The weak regulatory position in the US will not impact the best positioned wind farm developers nearly as much as their wind turbine manufacturer counterparts. The reason for this is the wind farm developers we cover are looking for steady, flat growth in the US market in the coming years at best. Even in the absence of a federal RES in 2010, flat installation growth should be attainable for developers positioned in the most favourable states from an RPS and transmission perspective; typically North-west states.

In our view, Iberdrola Renovables is the best positioned in this respect, since it is maintaining guidance of a constant level of new installations in the US in the coming years (at c1GWpa). EDPR is also well positioned in the US but in the absence of a federal RES, the company has cut its new installation guidance by c600MW over 2010-12 (a cut of c15%). EDF EN has seen the postponement of a PPA for 140MW from 2010 to 2011 and will likely not replace this shifted demand in 2010 (hence it is effectively a cut to 2010 installations). Acciona is currently not making any wind installations in the US whatsoever.

Modelling assumptions

State RPS scenario

In the US, there are 31 states with a formal Renewable Portfolio Standard (“RPS”) and a further 6 states with an informal target. Of these states, only 16 have a formal penalty system to deal with non-compliance. The level of renewable electricity targeted under each RPS varies by state, typically ranging from 15% of total electricity generated to 25% (although there are some RPSs outside of this range), as does the timeframe for compliance, which typically ranges

from 2015-2025. However, in order to perform a consistent analysis, we have derived effective RPS targets for each state as at 2020. For states with an RPS target with a timeframe longer than 2020, we have used linear interpolation between the level of renewable in that state and the RPS target, and for states with a timeframe shorter than 2020, we have simply adopted the target at the earlier date and assumed that this level is maintained. The table below sets out the states which have an RPS, the RPS target, timeframe, and some other assumptions we have adopted.

Summary of assumptions and outputs for US states with an RPS

	State REN target (%)	Achieved by end of	Penalty system	2020 target (adjusted)	Exemption USED	2020 target (adjusted)	2009 % RES-E	*Electricity demand in 2020	2020 RES-E target			
									All states	Penalty only	After dilution (all states)	After dilution (penalty only)
Arizona	15%	2025	N	10%	41%	6%	0%	136	14		8	
California	33%	2020	Y	33%	2%	32%	12%	233	77	77	76	81
Colorado	30%	2020	N	30%	6%	28%	6%	65	19		18	
Connecticut	23%	2020	Y	23%	0%	23%	2%	32	7	7	7	8
Delaware	20%	2019	Y	20%	25%	15%	3%	8	2	2	1	1
Hawaii	25%	2020	N	25%	0%	25%	6%	0	0		0	
Illinois	25%	2025	Y	18%	44%	10%	2%	167	30	30	17	18
Iowa	105	2020	N	105	25%		15%	42	0		0	
Kansas	20%	2020	N	20%	12%	18%	5%	95	19		17	
Maine	40%	2017	Y	40%	7%	37%	23%	16	6	6	6	6
Maryland	20%	2022	Y	17%	2%	17%	1%	45	8	8	8	8
Massachusetts	15%	2020	Y	15%	14%	13%	3%	46	7	7	6	6
Michigan	10%	2015	N	10%	12%	9%	3%	129	13		11	
Minnesota	25%	2025	N	21%	0%	21%	12%	76	16		16	
Missouri	15%	2021	Y	14%	12%	12%	1%	76	11	11	9	10
Montana	15%	2015	Y	15%	37%	9%	4%	24	4	4	2	2
Nebraska	10%	2020	N	10%		10%	1%	45	5		5	
Nevada	20%	2025	N	15%	12%	13%	5%	27	4		4	
New Hampshire	24%	2025	Y	18%	0%	18%	6%	23	4	4	4	4
New Jersey	23%	2021	Y	21%	3%	20%	2%	56	12	12	11	12
New Mexico	20%	2020	N	20%	12%	18%	4%	43	9		8	
New York	30%	2013	N	27%	27%	22%	3%	158	47		35	
North Carolina	13%	2021	N	12%	0%	12%	2%	135	16		16	
North Dakota	10%	2015	N	10%	12%	9%	8%	43	4		4	
Ohio	13%	2025	Y	9%	12%	8%	1%	167	15	15	13	14
Oklahoma	15%	2015	N	15%		15%	3%	139	21		21	
Oregon	25%	2025	Y	20%	0%	20%	7%	46	9	9	9	10
Pennsylvania	18%	2021	Y	17%	3%	16%	1%	202	34	34	33	35
Rhode Island	16%	2020	Y	16%	1%	16%	2%	7	1	1	1	1
South Dakota	10%	2015	N	10%	12%	9%	5%	9	1		1	
Texas	5,580		N	5,580	25%	5%	5%	319	15		0	
Utah	20%	2025	N	14%	12%	12%	1%	38	5		5	
Vermont	25%	2017	N	25%	12%	22%	5%	6	1		1	
Virginia	12%	2025	N	9%	12%	8%	4%	81	8		7	
Washington	15%	2020	Y	15%	17%	12%	5%	89	13	13	11	12
Wisconsin	10%	2015	N	10%	0%	10%	4%	53	5		5	
West Virginia	25%	2025	N	18%	12%	15%	1%	101	18		16	
Rest of US								1,531	0	0	0	0
Total								4,508	479	239	410	229
% total US									11.3	5.7	9.7	5.4

Note: * the long-term electricity demand growth rate implicitly assumes a 6.7% energy efficiency saving by 2020
Source: US Department of Energy, HSBC estimates

Federal LCES

We have based our federal LCES analysis on the Lugar bill. This requires that utilities generate 20% of their electricity from 'clean energy' sources by 2020. We calculate that this target translates to a 'pure' renewable energy target of 13% due to dilution from a number of factors:

1) Large hydro and Municipal solid waste (MSW) excluded from "base"

The bill states that utilities must exclude electricity generated from large hydro and MSW when determining their total electricity generated (used to calculate the percentage of electricity generated from renewable sources). This adds a combined dilution factor of c1.5 percentage points to our calculation; thus, the 'clean energy' target becomes 18.5%.

2) "Title I" energy efficiency savings of 4% (undiluted)

Utilities can offset up to 25% of the target using energy efficiency savings from demand-side management/smart grid implementation ("Title I" energy efficiency savings in the nomenclature of the bill), ie a maximum of 5 percentage points of the 20%. We have assumed that on average utilities make 4 percentage points worth of Title I energy efficiency savings (gross), this converts to a net figure of 3.7% (taking account of the dilution in 1) above); thus, the target becomes 14.8%.

3) Dilution due to non-renewable, 'clean energy' sources

The legislation allows carbon capture and sequestration (CCS), new nuclear plants, new large hydro plants, MSW and retirement of old power plants to contribute towards the 'clean energy' target. In our view, none of these factors will contribute much during the period to 2020 (nuclear and CCS should in the following decade), however, combined they do cause a further material reduction to the target. We estimate this reduction at c2 percentage points (combined). We note that we have been fairly conservative on CCS; we assume just nine power plants use the technology by 2020 contributing 0.4 percentage points of dilution. Under the Environment Protection Agencies (EPAs) analysis of the CCS potential up to three times more dilution (ie total of 1.6 percentage points from CCS alone) could occur under a more aggressive CCS scenario.

The 'pure' renewable energy target for the US is therefore 12.9% of total nationwide electricity generation in 2020.

Electricity demand forecasts

Excluding energy efficiency savings, we have assumed electricity demand growth of 1.5% pa over the period 2010e-20e from a forecast base of 3,991 TWh in 2009. The IEA's latest published base year is 2007. We have assumed electricity demand growth of 1% and -5% over 2008 and 2009 respectively. This gives a figure for 2020 electricity demand (unadjusted for energy efficiency) of 4,701 TWh.

"Title II" energy efficiency savings of 6.7%

We have assumed energy efficiency savings from more efficient electricity usage from

industry/buildings/agriculture of 6.7% ("Title II" energy efficiency savings in the nomenclature of the bill).

Total energy efficiency saving is 10%

Combining the "Title II" and diluted "Title I" energy efficiency savings gives a total energy efficiency saving of 10%. The diluted Title I energy efficiency saving is 3.3%, which is derived by adjusting the Title I energy efficiency saving target of 4% as it does not apply to exempt utilities (which account for 17% of electricity sales).

US – electricity demand forecasts up to 2020, including a split by those states which have an RPS scheme

	2007	2008	2009	2020e	CAGR (2009-20e)	2020e (incl 6.3% saving)	Implied CAGR (2009-20e)
Arizona	129	130	124	146	1.5%	136	0.9%
California	221	223	212	250	1.5%	233	0.9%
Colorado	61	62	59	69	1.5%	65	0.9%
Connecticut	31	31	29	35	1.5%	32	0.9%
Delaware	7	7	7	8	1.5%	8	0.9%
Hawaii		0	0	0	1.5%	0	0.9%
Illinois	159	160	152	179	1.5%	167	0.9%
Iowa	39	40	38	45	1.5%	42	0.9%
Kansas	90	91	86	102	1.5%	95	0.9%
Maine	15	15	14	17	1.5%	16	0.9%
Maryland	42	43	41	48	1.5%	45	0.9%
Massachusetts	44	44	42	49	1.5%	46	0.9%
Michigan	122	123	117	138	1.5%	129	0.9%
Minnesota	72	73	69	81	1.5%	76	0.9%
Missouri	72	73	69	82	1.5%	76	0.9%
Montana	23	23	22	26	1.5%	24	0.9%
Nevada	26	26	25	29	1.5%	27	0.9%
New Hampshire	22	22	21	24	1.5%	23	0.9%
New Jersey	53	54	51	60	1.5%	56	0.9%
New Mexico	41	41	39	46	1.5%	43	0.9%
New York	149	151	143	169	1.5%	157	0.9%
North Carolina	128	129	123	145	1.5%	135	0.9%
North Dakota	41	42	40	47	1.5%	43	0.9%
Ohio	159	160	152	179	1.5%	167	0.9%
Oregon	43	44	42	49	1.5%	46	0.9%
Pennsylvania	191	193	184	216	1.5%	202	0.9%
Rhode Island	7	7	6	7	1.5%	7	0.9%
South Dakota	8	8	8	9	1.5%	9	0.9%
Texas	302	305	290	342	1.5%	319	0.9%
Utah	36	36	34	40	1.5%	38	0.9%
Vermont	5	5	5	6	1.5%	6	0.9%
Virginia	77	78	74	87	1.5%	81	0.9%
Washington	84	85	81	95	1.5%	89	0.9%
Wisconsin	50	51	48	57	1.5%	53	0.9%
West Virginia	96	97	92	109	1.5%	101	0.9%
Rest of US	1,513	1,528	1,452	1,710	1.5%	1,615	
Total	4,159	4,201	3,991	4,701	1.5%	4,405	0.9%
% growth		1.0%	-5.0%	17.8%		-6.3%	

Source: IEA, HSBC estimates

US – estimated renewable energy mix in 2020

	Cumulative capacity 2009 (MW)	Load factor	RES-E 2009	%RES-E 2009	Cumulative capacity 2020e (MW)	11- year CAGR (2009-20e)	RES-E 2020e	%RES-E 2020e
Small hydro	3,000	30%	8	5%	3,000	0%	8	1%
Solar PV	1,224	18%	2	1%	55,899	42%	80	15%
Solar thermoelectric (CSP)	431	18%	1	0%	1,230	10%	2	0%
Biomass	11,176	66%	65	40%	13,376	2%	77	14%
Geothermal	2,396	75%	16	10%	4,548	6%	29	5%
Non-wind renewables	18,227		90	55%	78,053		196	35%
Wind	35,241	30%	73	45%	141,000	13%	349	65%
Total RE	53,468		163	100%	219,053		552	100%

Source: industry data, HSBC estimates

Replacement capacity

We have assumed that old coal fired stations coming off line will be replaced by combined cycle gas plants due to the low marginal cost of shale gas right now.

Renewable energy mix

Wind accounted for 45% of electricity from renewable sources in 2009. We estimate this will increase to c65% by 2020 as wind continues to be the most popular renewable power generation choice in the US.

Implications for Federal RES

This gives an effective wind target under the federal RES of 8.6% of total US electricity generation in 2020.

Implications for state level RPS

Some states include large hydro assets (typically added after a certain date) as part of their RPS target. This dilutes the percentage of wind assets in the renewable energy mix from 65% to 53% in aggregate for all states that have a state level RPSs and 57% for states which have a penalty scheme to support their state level RPS.

EU regulatory analysis

- ▶ Due to reduced electricity demand in the EU following a deep recession, the EU 2020 renewable electricity targets (RES-E targets) have become easier to achieve, in our view
- ▶ We find that all key Southern European countries and Germany are set to exceed their EU 2020 RES-E (renewable electricity) targets. France is the only major EU wind market likely to miss
- ▶ We cut our 2020 cumulative forecasts for wind installations in the EU to 230GW from 252GW previously; 5 year CAGR estimate decreases to 5% from 7% previously

We cut our wind forecasts to match %RES-E targets

Each EU member was required to submit a National Renewable Energy Action Plan (NREAP) to the European Commission by 30 June. The NREAPs should set out formal renewable electricity (RES-E) targets, expressed as a percentage of total electricity supply in 2020 (%RES-E) and include a split by renewable energy source of how the target will be achieved. Thus far nineteen countries have submitted their NREAPs.

The recession has effectively lowered renewable targets for 2020

Due to reduced electricity demand in the EU following a deep recession, the EU 2020 renewable electricity targets (RES-E targets) have become easier to achieve, in our view.

We have performed detailed modelling on the renewable energy mix out to 2020 in each of seven key EU countries. There are two strands to our analysis:

Summary of EU countries set to miss or exceed their EU 2020 renewable electricity (%RES-E) targets based on our renewable forecasts for 2020 (for wind, prior to publishing this report)

EU Member State	Electricity consumption 2009 (TWh)	L/term annual electricity demand growth*	Forecast electricity demand 2020 (TWh)	% RES-E target	Implied RES-E target 2020 (TWh)	RES-E forecast 2020 based on old HSBC forecasts (TWh)	% above/ (below) target	Comment
France	486	1.28%	559	26%	145	135	-7%	Miss
Germany	583	0.78%	635	30%	191	197	3%	Exceed
Greece	58	1.28%	67	29%	19	24	25%	Exceed
Italy	317	0.78%	345	34%	117	131	11%	Exceed
Portugal	51	1.03%	57	60%	34	46	34%	Exceed
Spain	267	2.02%	333	42%	140	151	8%	Exceed
UK	341	0.28%	352	30%	106	105	0%	In line
Rest of Europe	1,027	1.52%	1,212	36%	440	489	11%	Exceed
Total EU	3,130	1.2%	3,560		1,192	1,277	7%	Exceed

Note: * the long-term electricity demand growth rate implicitly assumes a 10% energy efficiency saving by 2020

Source: national policy documents, IEA, HSBC estimates

- ▶ Firstly, we forecast the level of RES-E in each country in 2020 based on our wind forecasts prior to publishing this report (ie 'old' forecasts), and our forecasts for solar, biomass, hydro and geothermal out to 2020. From this we can determine whether an EU country is currently set to exceed or miss its EU 2020 renewable electricity target
- ▶ Secondly, we backed-out wind (and solar) targets for 2020 such that each country just meets its RES-E targets. We used this as a basis for our 'new' wind forecasts out to 2020

We find that all key Southern European countries (Spain, Italy, Portugal and Greece) and Germany are currently set to exceed their RES-E targets (see table on top of next page) and thus we reduce our wind forecasts in these markets accordingly (see below). France is the only country (of the seven key markets we looked at in detail) that appears likely to miss its RES-E target. The UK is currently on track to meet its target. We increase our wind forecasts for France and (just slightly) for the UK.

We cut our forecasts in Southern Europe and Germany

According to our analysis, all key Southern European countries and Germany are set to exceed their 2020 RES-E targets (based on our old wind forecasts). Under these circumstances,

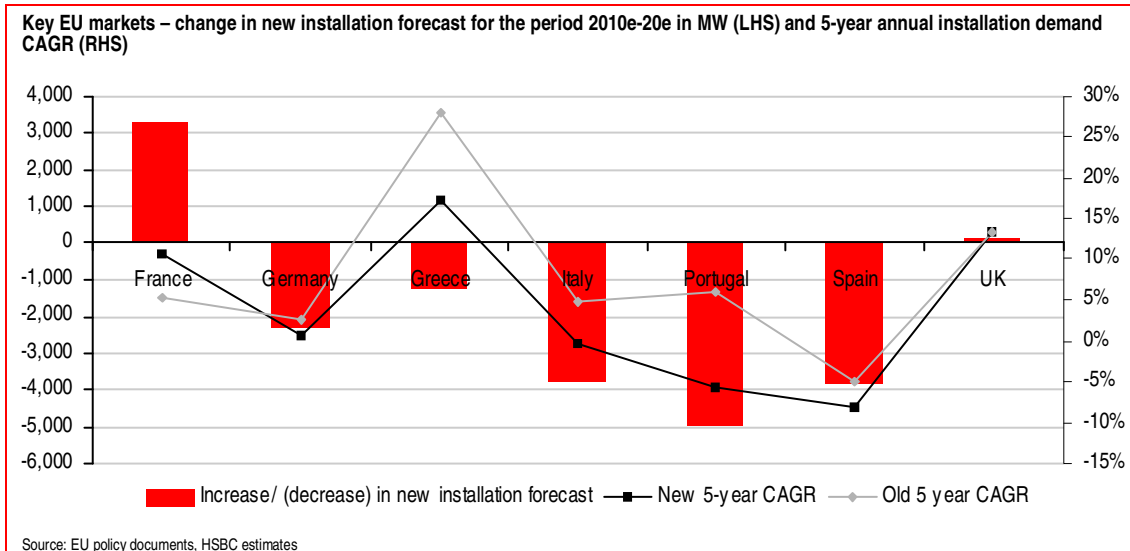
we believe that the regulators in these countries may cut current attractive subsidies in such a way as to slow down growth rates and ensure that these countries *just meet* their respective RES-E targets, especially in light of fiscal tightening in these countries. So far, we have seen such moves in Italy and Spain, which have both indicated possible future tariff cuts as part of austerity measures – Spain has already cut the current tariff for Wind for two years. In addition, the Spanish government has cut its wind target for 2020 to 38GW from 41GW.

On the assumption that each EU country *just meets* its RES-E target, we cut our 2020 wind forecast in Spain to 38GW from 42GW, which implies a cut to our new installation forecasts for the eleven year period 2010e-2020e by 17%, and indicates a 1.7GW pa (average) market over that period, rather than the 2.1GW pa market previously forecast. We note that our new 2020 forecast is in line with the Spanish government's revised wind target of 38GW. In Italy, we cut our 2020 forecast to 17.5GW from 21GW, which implies a 23% cut to our new installation forecasts for 2010e-2020e. In Portugal and Greece, which are the smallest of the seven markets we analyse, we cut our new installation forecasts for 2010e-2020e by 47% and 34% respectively.

Key EU wind markets – summary of changes to long-term wind forecasts based on EU 2020 RES-E targets for each country

EU Member State	5-year CAGR for annual installations (MW) (2009-14e)		New installations 2010e-20e (MW)			Cumulative capacity at end-2020e (MW)		
	New forecast	Old forecast	New forecast	Old forecast	% increase/ (decrease)	New forecast	Old forecast	% increase/ (decrease)
France	11%	5%	19,684	16,466	20%	24,175	20,957	15%
Germany	1%	3%	23,544	25,925	-9%	49,454	51,835	-5%
Greece	17%	28%	2,481	3,741	-34%	3,568	4,828	-26%
Italy	0%	5%	12,597	16,466	-23%	17,458	21,327	-18%
Portugal	-6%	6%	5,550	10,485	-47%	9,063	14,026	-35%
Spain	-8%	-5%	18,897	22,797	-17%	38,094	41,994	-9%
United Kingdom	13%	13%	22,248	22,123	1%	26,575	26,450	0%
EU key markets	1.8%	3.8%	105,002	118,003	-11%	168,387	181,417	-7%
Rest of EU	15.7%	17.5%	48,861	58,663	-17%	61,941	70,527	-12%
Total EU	5.2%	7.1%	153,862	176,666	-13%	230,329	251,944	-9%

Source: EU policy documents, HSBC estimates



We cut our 2020 wind forecast for Germany to 49.5GW from 51.8GW, which implies a cut to our new installation forecasts by just 9% over 2010e-2020e. We note that our new forecast of 49.5GW is above the figure of 45.75GW, which is the German government’s wind target under its NREAP. Adopting this target would cause us to reduce our German forecasts by a further 16% over the period 2010e-2020e. It is unclear at this stage, however, the energy efficiency savings assumptions that are embedded in this target.

We increase our forecasts for France and (very slightly) for the UK

We find that the France is the only country that appears likely to miss its 2020 RES-E target (relative to our old forecasts). The UK is more or less on track to meet its target. As with the Southern European countries and Germany, we assume that the UK and France *just meet* their RES-E targets. Under these circumstances, we increase 2020 wind forecast for France to 24GW from 20GW, which implies an increase to our new installation forecasts for the period 2010e-20e by 20%, and indicates a 1.8GW pa (average) market over that period, rather than the 1.5GW pa market previously forecast.

We increase our UK forecasts only slightly for now but note potential upside in future

We increase our new installation forecasts for the UK for 2010e-20e very slightly (by 1%) such that our wind forecasts reflect the UK *just meeting* its %RES-E target for 2020.

We note there is potentially some upside to our 2020 cumulative capacity forecast for the UK (new forecast of 26.6GW) as the UK market starts to realise more of its offshore wind potential. We shall wait to see how the UK offshore market develops in the coming years as round II, round III and Scottish development projects start to reach fruition. In total, these three rounds of project allocations could give rise to 46GW of offshore wind farms (if all development projects become operational wind farms).

Implications for the wind turbine manufacturers

In absolute terms, we have cut our forecasts in Southern Europe and Germany by a combined total of c16GW over the period 2010e-20e, or c1.5GW pa, on average (combined). Enercon and Gamesa have the highest exposure to these markets, from which they both derive around 50%

of their sales. Vestas, Nordex and REpower derive around a third of their sales from these markets.

Southern Europe and Germany – the most exposed wind turbine manufacturers

	_ Sales exposure (MW) _		_ Market share (MW) _	
	Average 2007-09	2009	Average 2007-09	2009
Enercon	55%	58%	28%	31%
Gamesa	49%	49%	25%	19%
Nordex	28%	38%	4%	6%
Vestas	30%	31%	27%	28%
REpower	35%	26%	5%	6%

Note: this analysis excludes Greece, which is the smallest of these markets by far
Source: MAKE Consulting, HSBC

We expect competition from Asia to be less intense than in the US

In the medium term, we believe the US market will be the focal point of Chinese and Korean wind turbine manufacturers' internationalisation efforts plus select emerging markets in South America, Africa and Asia. We believe there will be less focus on Europe, where the grid codes are typically more complex thus requiring more sophisticated, higher-tech turbines (basically variable speed turbines with more advanced power controls). We believe European market penetration will come in the longer term (ie 10+ years).

Implications for the wind farm developers

Acciona, Iberdrola Renovables, EDP Renovaveis and EDF EN all have some degree of exposure to Southern Europe and Germany. EDF EN's exposure is the lowest. Acciona's exposure is the highest. However, they are all internationalising and reducing their exposure in particular to Spain (except EDF EN, which already has no exposure there). Their pipelines are all diversified enough to support growth outside Southern Europe, in our view.

Wind farm developers – exposure to Southern Europe

	IBR	EDPR	Acciona	EDF EN
Wind - operating assets (MW)	11,010	5,665	5,363	2,145
Geographic split:				
Spain	47%	34%	73%	0%
Southern Europe (ex-Spain)	11%	4%	4%	31%
Rest of Europe	8%	7%	3%	23%
Europe	55%	52%	80%	54%
US	35%	48%	8%	41%
RoW	10%	12%	12%	5%
Total	100%	100%	100%	100%

Wind - pipeline (MW)	49,901	30,951	23,728	14,314
Geographic split:				
Spain	18%	16%	29%	0%
Southern Europe (ex-Spain)	n/a	3%	n/a	14%
Rest of Europe	15%	15%	n/a	18%
Europe	34%	34%	n/a	32%
US	49%	61%	n/a	59%
RoW	17%	4%	71%	9%
Total	100%	100%	100%	100%

Source: HSBC estimates

Modelling assumptions

RES-E targets

NREAPs will give formal RES-E, wind, solar and other renewables targets

The European Commission requested each EU member to submit a National Renewable Energy Action Plan (NREAP) by 30 June. Only two countries submitted their NREAPs by the deadline (Denmark and the Netherlands), but 19 member states have now submitted their NREAPs. The NREAPs set out formal RES-E targets and include a split by renewable energy source of how the target will be achieved. Thus, under the NREAPs, we effectively get a national target for wind, solar, biomass etc for all EU members.

We compare our wind forecasts with the wind targets under each NREAP below. Our forecast is in line with the Spanish target and a bit above the German target. We are a bit below the French and UK targets. However, we do not yet have detail of the energy efficiency saving assumptions embedded in any of these targets.

Comparison of HSBC wind forecasts for 2020 (MW) with NREAP national wind targets (MW)

	HSBC wind forecast for 2020 (cumulative)	National wind target according NREAPs	% difference
France	24,175	25,000	-3%
Germany	49,454	45,750	8%
Greece	3,568	7,500	-52%
Italy	17,458	12,680	38%
Portugal	9,063	6,875	32%
Spain	38,094	38,000	0%
UK	26,576	27,880	-5%

Source: HSBC estimates

Electricity demand forecasts – long-term growth rates are subjective

We have adopted long-term electricity demand growth assumptions that are in line with HSBC Utilities team forecasts. Our base year is 2009. Our 2020 electricity demand forecast is in line with the IEA's forecast, which is 3,561TWh, but is below the EIA's forecast of 4,204TWh, which does not adjust for energy efficiency savings.

Comparison of 2020 electricity demand forecasts for Europe

Source of forecast	Electricity demand forecast 2020 (TWh)	Energy efficiency saving embedded in forecast
HSBC Clean Energy team	3,560	10%
IEA	3,561	20%
EIA	4,204	0%

Source: IEA, EIA, HSBC estimates

We assume energy efficiency savings from electricity of 10%

In our assumptions, we have reduced demand by 10% due to energy efficiency savings. This takes account of both demand-side management/smart grid implementation and from more efficient electricity usage from industry/buildings/agriculture. This is below the 20% target under the EU 20:20:20 plan as we believe a higher portion of energy efficiency savings will fall outside of the electricity sector. Clearly, increased energy efficiency savings will reduce the renewable energy targets.

Renewable energy mix

In order to back out wind forecasts for 2020, we took a view on the renewable energy mix in each country. The table below sets out our forecasts by renewable energy source for each country, including our capacity factor assumptions.

2020 electricity demand forecasts and RES-E demand forecasts for Europe split by key markets

EU Member State	Gross National Electricity consumption (TWh)*				Electricity demand forecast 2020 (TWh)				%RES-E 2020e	Forecast RES-E demand 2020e (10% EE)
	2006	2007	2008	2009	2020e (before EE)	11 year CAGR (2009-20e)	2020e (10% EE)	Implied 11 year CAGR (2009-20e)		
France	564	570	525	486	621	2.25%	559	1.28%	26%	145
Germany	637	637	557	583	706	1.75%	635	0.78%	30%	191
Greece	63	63	60	58	74	2.25%	67	1.28%	29%	19
Italy	314	314	356	317	384	1.75%	345	0.78%	34%	117
Portugal	47	47	41	51	63	2.00%	57	1.03%	60%	34
Spain	303	303	282	267	370	3.00%	333	2.02%	42%	140
United Kingdom	396	396	401	341	391	1.25%	352	0.28%	30%	106
Sub-total – key markets										752
Rest of Europe	1,030	1,031	1,053	1,027	1,347	2.50%	1,212	1.52%	38%	440
Total Europe	3,355	3,362	3,275	3,130	3,955	2.20%	3,560	1.2%	34%	1,192
%growth		0.2%	-2.6%	-4.4%						

Source: IEA, European Commission, national policy documents, HSBC estimates

Key EU countries – HSBC forecast renewable energy mix

EU Member State	Wind	Solar PV	Large hydro	Biomass	Geothermal	Small hydro	Total
Operating capacity (MW) - end 2020e							
France	24,175	18,692	18,844	3,000	36	2,561	
Germany	49,454	41,881	2,000	8,000	428	2,000	
Greece	3,568	2,700	2,328	300	0	117	
Italy	17,458	19,262	14,988	6,000	910	3,400	
Portugal	9,063	725	4,000	500	52	500	
Spain	38,094	12,473	11,500	900	0	2,400	
United Kingdom	26,575	3,016	1,462	4,000	0	158	
Total	168,387	98,749	55,122	22,700	1,426	11,136	
Capacity factor 2020							
France	24%	15%	29%	53%	77%	34%	
Germany	21%	11%	32%	61%	77%	34%	
Greece	30%	19%	20%	38%	77%	34%	
Italy	23%	16%	20%	25%	77%	34%	
Portugal	25%	18%	25%	60%	77%	34%	
Spain	25%	23%	20%	49%	77%	34%	
United Kingdom	33%	10%	23%	64%	77%	34%	
RES-E produced in 2020 (TWh) (estimated)							
France	51	25	48	14	0	8	145
Germany	91	42	6	43	3	6	191
Greece	9	4	4	1	0	0	19
Italy	35	27	26	13	6	10	117
Portugal	20	1	9	3	0	1	34
Spain	84	25	20	4	0	7	140
United Kingdom	77	3	3	23	0	0	106
	367	126	116	100	10	33	752
% Renewable energy mix (in TWh)							
France	35%	17%	33%	10%	0%	5%	100%
Germany	48%	22%	3%	22%	2%	3%	100%
Greece	49%	23%	21%	5%	0%	2%	100%
Italy	30%	23%	22%	11%	5%	9%	100%
Portugal	58%	3%	26%	8%	1%	4%	100%
Spain	60%	18%	14%	3%	0%	5%	100%
United Kingdom	73%	3%	3%	21%	0%	0%	100%

Source: HSBC estimates

EU: National Renewable Energy Plans (NREAP)

Country	Installed wind capacity end of 2009 (MW)	Planned installed wind capacity 2015e (MW)	Planned installed wind capacity 2020e (MW)	Wind - Average annual growth 2009 -2015e	Wind - Average annual growth 2009 - 2020e
Austria	997	1,951	2,578	14%	10%
Bulgaria	131	984	1,256	50%	25%
Cyprus	na	180	300	na	na
Denmark	3,408	4,180	3,960	4%	2%
Finland	117	670	2,500	42%	36%
Germany	25,813	36,647	45,750	7%	6%
Greece	1,198	4,303	7,500	29%	20%
Ireland	1,187	3,151	4,649	22%	15%
Italy	4,845	9,068	12,680	13%	10%
Lithuania	103	389	500	30%	17%
Malta	0	7	110	na	na
Netherlands	2,226	5,578	11,178	20%	18%
Portugal	3,474	6,125	6,875	12%	7%
Slovenia	na	60	106	na	na
Spain	18,784	27,997	38,000	8%	7%
Sweden	1,537	3,210	4,547	16%	11%
UK	4,340	14,210	27,880	27%	20%
EU - Submitted	68,160	118,710	170,369	12%	10%

Source: Vestas, HSBC

Supply-side

- ▶ We expect no major bottlenecks in the global wind value chain in the coming years
- ▶ There are, however, important differences between regional supply chains: Asia is over-supplied; the Americas under-supplied
- ▶ The most successful manufacturers will have a globally integrated supply chain with in-house capacity in most key components, in our view

From component shortage to excess supply

The wind industry dynamic has changed considerably since early 2008. In early 2008, due to strong growth in the industry over the period 2005-08 (4-year CAGR of 34%), there were bottlenecks in the supply chain. However, the credit crisis (from September 2008) led to a dry up in project finance for renewable projects and order flow slowed to a trickle. Due to this, today, wind turbine manufacturers and their sub-suppliers have found themselves with under utilised factory space, following a period of heavy investment in the run up to the credit crisis.

Wind turbines have nine key components (see table on following page) and thousands of smaller ones (5,000+) The main bottlenecks that had arisen in the supply chain by early 2008 were the following:

- ▶ Gearboxes and bearings
- ▶ Casting of large components, such as the hub, bedplate and gearbox housing
- ▶ Carbon fibre.

Bottlenecks? None expected

By the end of 2009, enough capacity had come on line to ensure that all key bottlenecks had eased. We do not see any bottlenecks of any key components in the coming years (2010e-12e), based on our global demand forecasts and MAKE Consulting's supply forecasts. We see bearings as the tightest part of the value chain with 14% over capacity by 2012e (see charts at the end of this chapter). We also note that increasing demand for larger turbines could create bottlenecks in some other large-sized (2MW or higher) components. There are, however, important differences between regional supply chains.

Asia – overcapacity in low MW-sized components, short supply of larger ones

Demand in China thus far has been driven mainly by kW-class and low MW-class turbines. There has been significant capacity built for all key components for this turbine class. We believe some consolidation is likely. However, demand in Asia is rapidly changing towards larger turbines (2+MW) and we expect the supply chain to come

under pressure in this area in the coming years, particularly with respect to large bearings, large blades and advanced gearboxes. In addition, there is an emerging offshore market in China that will need supply chain support in the coming years.

The Americas – shortage of some key components should be rectified by exports from Asia

Many European wind turbine manufacturers, including Vestas, Gamesa, Nordex and Acciona, and also Suzlon have invested in the US in recent years as improved regulatory visibility (ie a more stable Production Tax Credit (“PTC”)) allowed them to commit capital to the region. However, in the last year or so, regulatory uncertainty has returned to the US with various versions of draft clean energy/climate change legislation struggling to move through the Senate. Under these circumstances, we are forecasting a flat US market (on average), albeit from a high 2010e base of 10GW, over the period to 2020e (see chapter on US Regulation). We believe, there will be demand growth in the Americas as a whole, however, driven by emerging markets in South America and also Canada.

None of the European/Asian manufacturers we cover have a gearbox or generator facility in the

Americas. This has caused a shortage of capacity at this part of the value chain. This will, however, be rectified by exports from Europe and Asia where there is excess capacity. Hansen, for example, also does not have a US gearbox facility but is exporting to the US mainly from its European facility.

Europe – the most established supply chain

Europe is the birthplace of the wind industry some 30 years ago. It has the most established supply chain of any region and is the local region of the most integrated wind turbine manufacturers (Vestas, Gamesa and Enercon). There is a significant excess capacity in gearboxes and generators, but as noted above this is likely to be exported to the Americas to fill the supply shortage there.

Implications for the wind turbine manufacturers/wind farm developers

Integrated supply chain is still beneficial for a global manufacturer

It is not as important to be vertically integrated as it was pre-2008, when there were shortages in a number of key components. That said, we still

Top 15 wind turbine manufacturers – summary of level of in-house manufacturing of key components*

Company	Blades	Generators	Gearboxes	Bearings	Castings	Forgings	Towers	Control Systems	Converters	Level of vertical integration
Acciona	10%	0%	0%	0%	0%	0%	0%	0%	0%	Low
DEC	50%	70%	0%	0%	50%	0%	0%	0%	40%	Medium
Enercon	100%	100%	n/a	0%	15%	0%	50%	100%	100%	High
Gamesa	75%	30%	20%	0%	10%	0%	40%	50%	0%	Medium
GE	0%	0%	5%	0%	0%	0%	0%	80%	25%	Low
Goldwind	0%	0%	0%	0%	0%	0%	0%	30%	0%	Low
Mingyang	100%	0%	0%	0%	0%	0%	0%	0%	0%	Low
Mitsubishi	100%	80%	100%	0%	0%	0%	0%	100%	0%	High
Nordex	50%	0%	0%	0%	0%	0%	0%	50%	0%	Low
REpower	5%	0%	0%	0%	0%	0%	0%	20%	0%	Low
Siemens	100%	80%	80%	0%	0%	0%	0%	20%	0%	High
Sinovel	0%	0%	20%	0%	80%	20%	0%	0%	0%	Low
Suzlon	95%	25%	0%	0%	100%	60%	30%	60%	n/a	High
United Power	70%	0%	0%	0%	0%	0%	0%	100%	80%	Medium
Vestas	95%	50%	0%	0%	40%	0%	40%	100%	30%	High

Source: MAKE Consulting, Companies

believe it is beneficial for a global wind turbine manufacturer to have in-house capacity in most key components and ideally with a global spread. This should help quality control and also reduce transportation costs due to proximity to regional markets. In the case of Vestas and Gamesa (and other Western wind turbine manufactures), which have integrated facilities in China, this should also give access to cheaper manufacturing costs.

Vestas, Gamesa and Suzlon all have a good level of in-house manufacturing capacity, although Vestas and Suzlon both have no in-house gearbox capacity. Vestas has the mostly globally spread manufacturing capacity with factories in six European countries, the US, India and China.

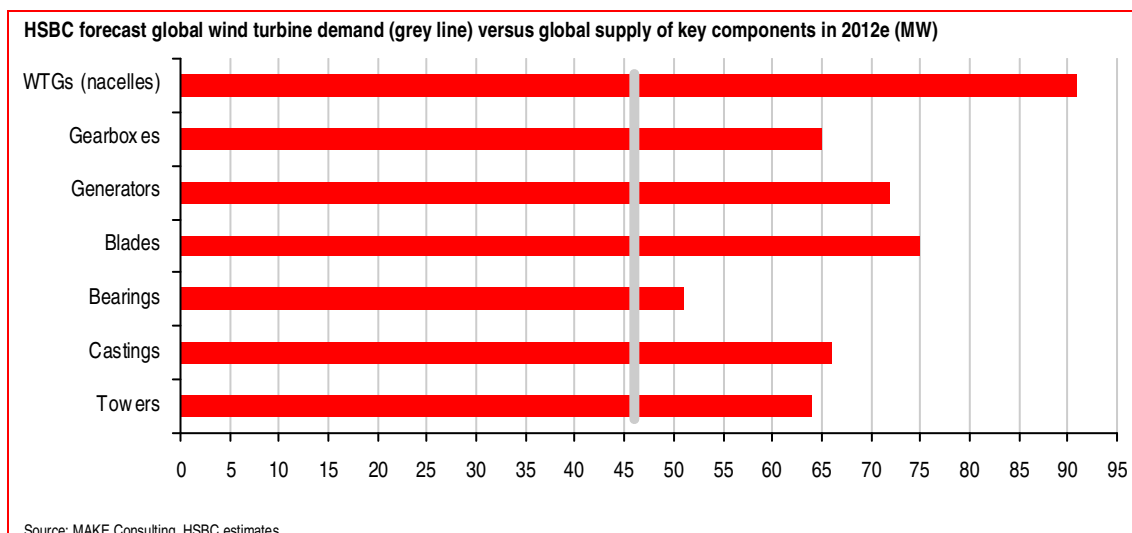
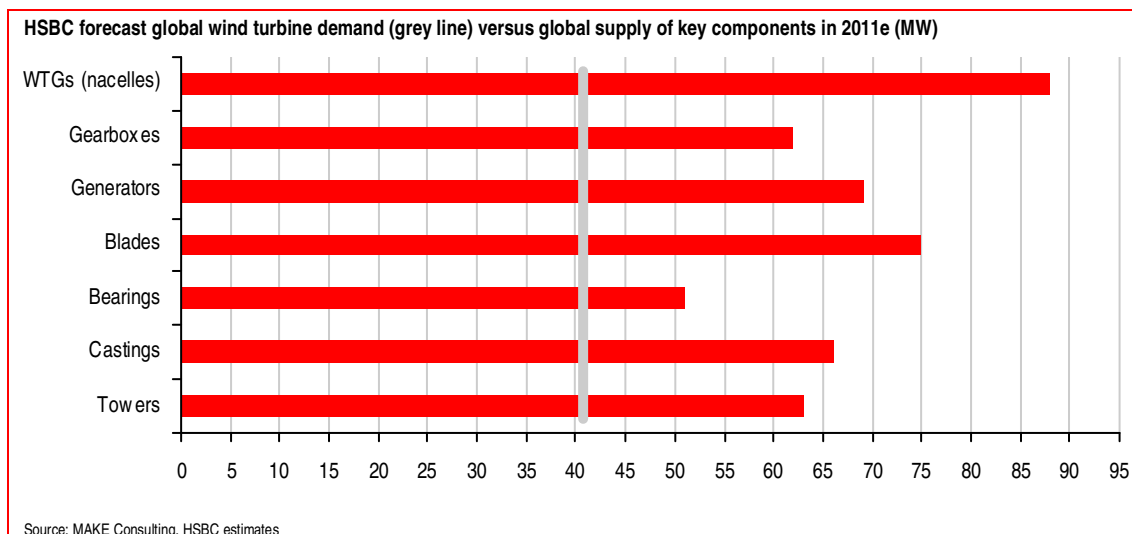
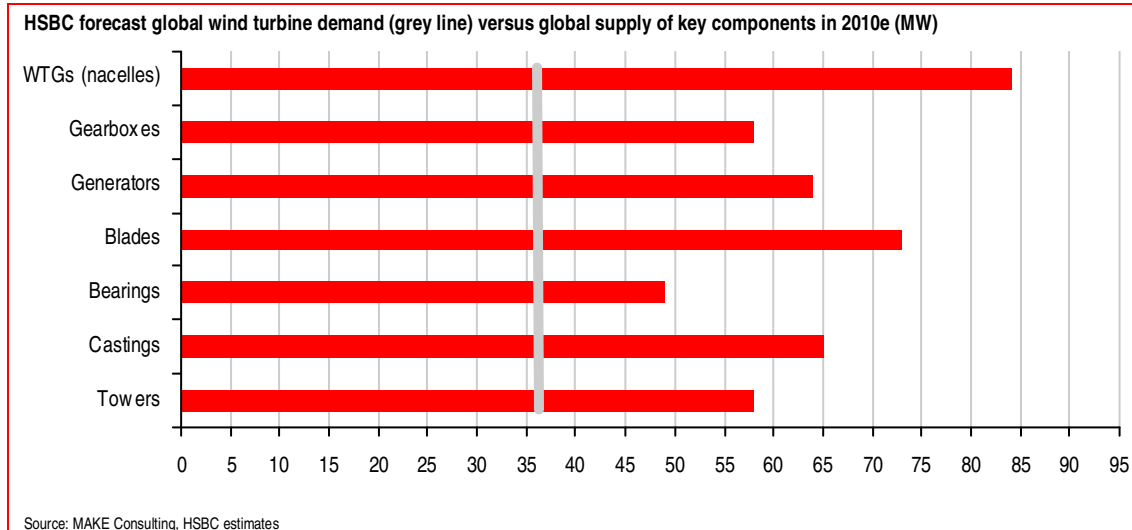
Pricing – pressure is on the downside

Turbine prices have already fallen by some 5-15% from their peak price in 2008 following a dry up in order flow due to the credit crisis. As noted above, we forecast that the supply chain will tighten but remain bottleneck free in key components. Under these circumstances, we see further downward pressure on wind turbine prices in our view, albeit only mild in comparison to the price falls the industry saw last year. We forecast price reductions for the wind turbine manufacturers we cover of c3-10% in total during 2010e-12e. Longer term, we see additional downward pressure on pricing due to increased competition, in particular from Chinese players expanding overseas.

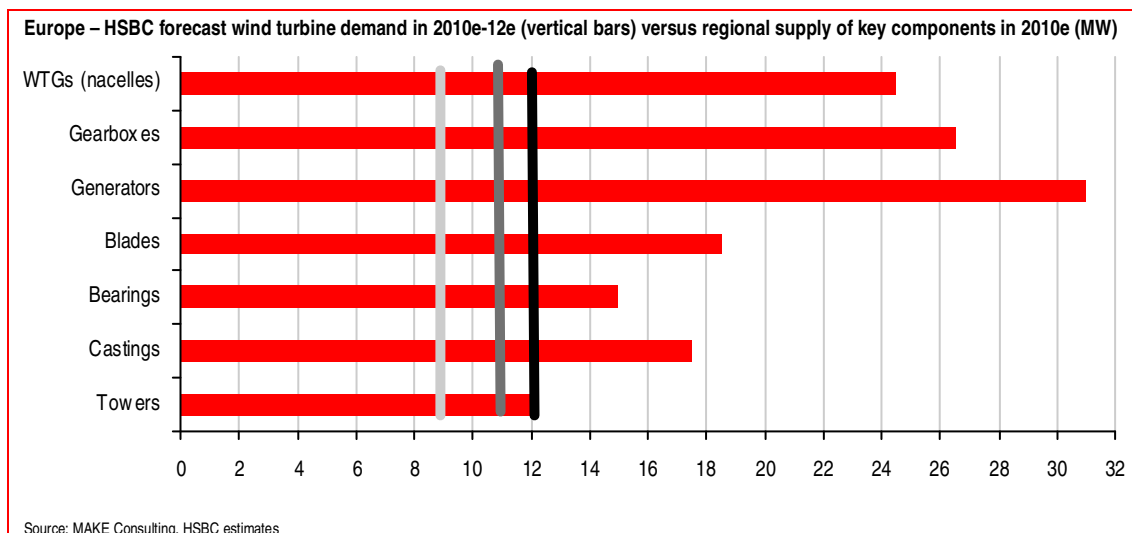
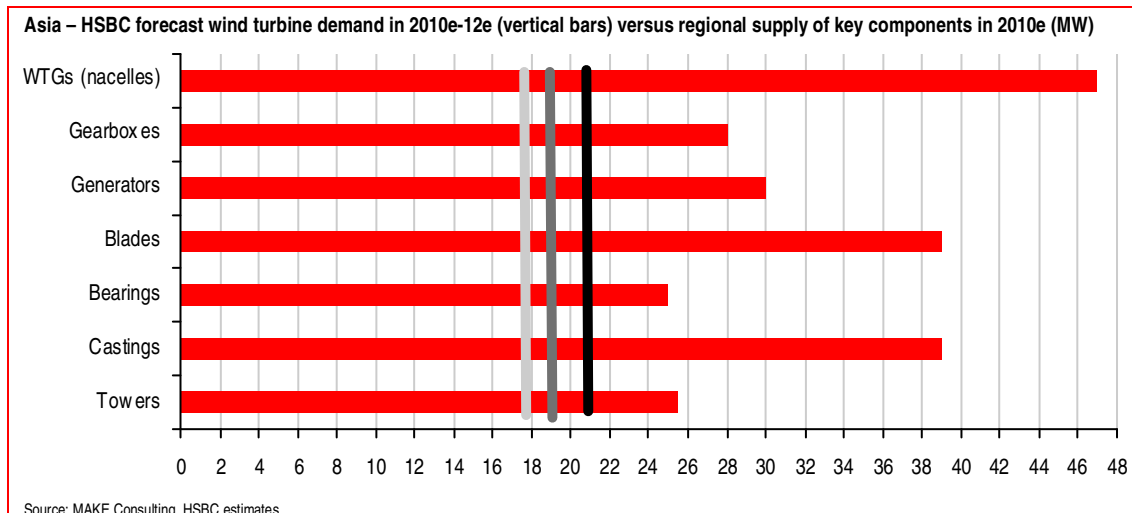
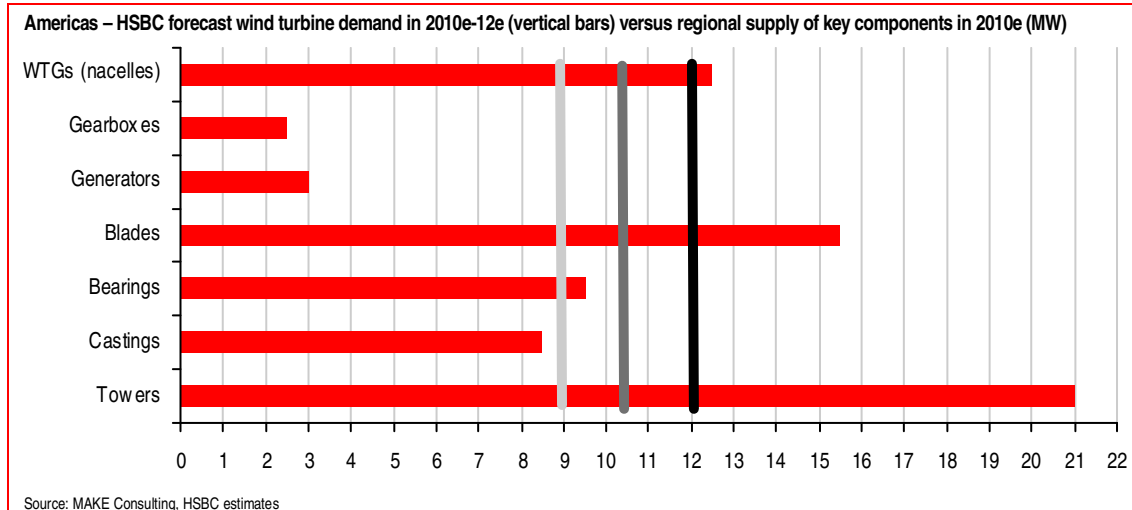
Chinese players' turbines are cheaper on a per MW basis but not on a 'cost of energy' basis

We have spoken to a leading wind farm developer, which has evaluated the possibility of sourcing turbines from Chinese players. It has said that although the Chinese players' turbines are cheaper on a per MW basis, when one takes into account reliability and efficiency in a total cost of energy basis (ie cost per MWh), Chinese players are typically more expensive than their Western counterparts.

HSBC forecast global demand versus global supply



HSBC forecast regional demand versus regional supply



Changing competitive landscape

- ▶ We expect Vestas to defend its position as global no.1 due to its broad global spread including exposure to smaller, high growth markets
- ▶ Chinese manufacturers, Sinovel, Goldwind and Dongfang, are set to gain the most share in the coming years, in our view, due to overseas expansion as well as strong domestic demand
- ▶ We see increased chances of consolidation in the coming years with Chinese and Korean players, potentially as acquirers

Updating our global market share model

In this section, we revise our medium-term market share forecasts (for 2014e). We use these revised market share forecasts coupled with our revised industry demand forecasts to help drive our volume sale growth assumptions for each of our coverage companies (we also take company guidance into consideration).

The main conclusions from our revised our market share forecasts (for 2014e) are:

The market has become more fragmented in recent years...

The wind turbine market is becoming increasingly more competitive, due in particular to the emergence of a number of key Chinese wind turbine manufacturers, such as Sinovel, Goldwind and Dongfang, which have dramatically increased their global market share on the back of a very

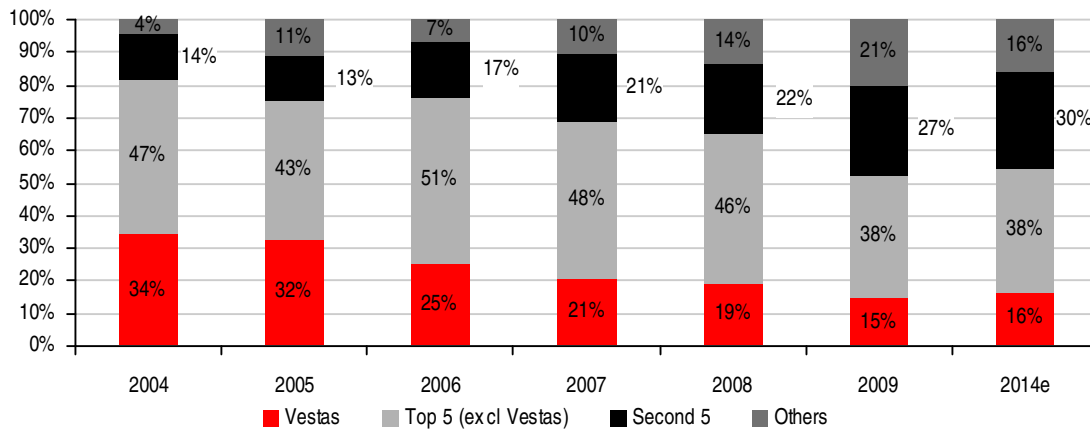
strong Chinese market. We see even more intense competition in the coming years due to the emergence of Korean players such as Daewoo, Hyundai, and Samsung, plus internationalisation of the Chinese manufacturers.

Following a period of consolidation in the early 2000s, the wind turbine industry is once again becoming fragmented. The top 10 players now collectively hold 80% market share compared to 96% five years ago; in particular Vestas' market share has declined from 35% to 15% over the last five years. There are now three Chinese players in the top 10 compared to none five years ago.

...increasing the chances of M&A, in our view

We see this increasing market fragmentation as a driver for increased M&A activity and see the Chinese and Korean players as potential acquirers as they internationalise.

Wind turbine manufacturers – trend in global market share over 2004-09 and our forecast for 2014 (MW installed)



Source: MAKE Consulting (for historic data), HSBC estimates

Winners and losers

In assessing our view of market share changes, we have derived these views using historic market share data from MAKE consulting and we project shares by company, including the companies that we do not cover from an Equity Research perspective, eg Enercon and GE: The key potential winners, in our view, are listed below.

- ▶ **Key Chinese manufacturers:** Sinovel, Goldwind and Dongfang should be the biggest markets share gainers over the next five years, increasing their shares by 2.0-2.1 percentage points to 11.3%, 9.4% and 7.5% respectively. They should all be top 5 players. We expect their growth to be driven by:
 - ▶ Overseas expansion into the US (primarily) and emerging markets in South America, Africa and Asia-Pac
 - ▶ Improvement of share in China as some of the smaller Chinese players drop out of the market
 - ▶ Offshore market exposure in China.
- ▶ **Vestas:** we estimate market share should increase by 1.5 percentage points from 14.5% in 2009 to 16.0% in 2014e. This should see

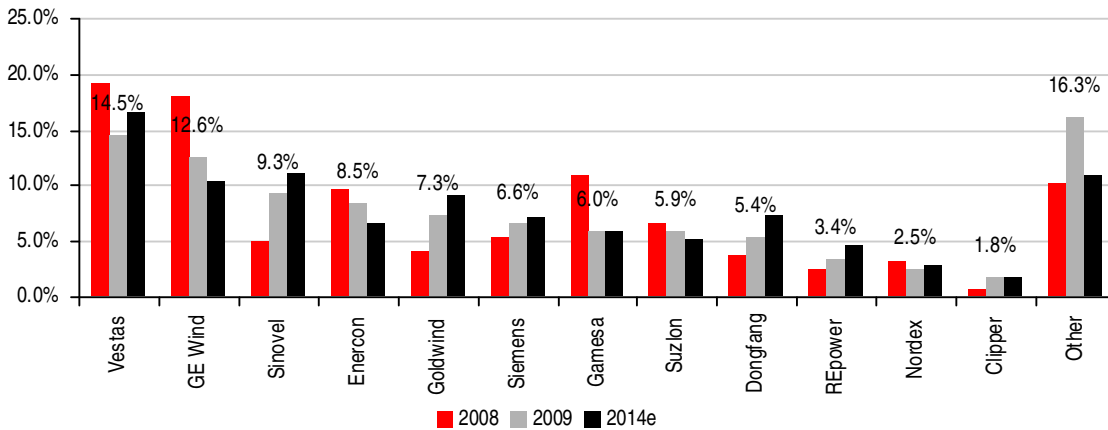
Vestas defend its position as no. 1 player. We expect this to be driven by:

- ▶ Its exposure to more than 60 markets worldwide, which positions Vestas well for penetration of emerging high growth markets
- ▶ Offshore market exposure in Northern Europe
- ▶ Improvement of share in China as some of the smaller Chinese players drop out of the market
- ▶ **REpower:** we estimate market share should increase by 0.9 percentage points from 4.3% in 2009 to 4.3% in 2014e. We expect this to be driven by:
 - ▶ Offshore market penetration in Northern Europe through sale of its 5MW turbine.
 - ▶ Leveraging on key relationships with RWE and Vattenfall
 - ▶ Continued international expansion, including penetration of new markets such as Canada (eg 945MW framework order placed by EDF EN)

The key potential losers, in our view, are listed below:

- ▶ **Suzlon:** we estimate market share should decrease by 0.8 percentage points from 5.9% in 2009 to 5.1% in 2014e. We expect this to be driven by:
 - ▶ A decline in share in domestic market (from 55% in 2009 to 45% in 2014) due to increased competition from Vestas and Gamesa, amongst others
 - ▶ A decline in share in some overseas markets such as the US, Spain and Portugal
 - ▶ We believe, however, Suzlon will have some success in South America and Australia where its lower tech turbine offering is better suited
- ▶ **GE Wind:** we estimate market share should decrease by 1.9 percentage points from 12.6% in 2009 to 10.7% in 2014e, pushing GE Wind into no.3 position globally (from no.2 previously) behind Sinovel and Vestas. We expect this to be purely driven by GE Wind's high exposure to the US market:
 - ▶ GE Wind is 87% exposed to its domestic US market
 - ▶ We forecast that GE will lose market share (from 40% in 2009 to 35% in 2014e) as Chinese manufacturers enter an already competitive US market
 - ▶ This is compounded by our forecast of flat growth in the US over the next five years due to weak regulation
 - ▶ We expect GE Wind to increase its penetration of overseas markets in Europe and the Americas but this will likely not be enough to offset the negative impact of its US market exposure
- ▶ **Enercon:** we estimate market share should decrease by 1.9 percentage points from 8.5% in 2009 to 6.6% in 2014e. We expect this to be driven by:
 - ▶ A decline in share in some key European markets (partly due to Enercon achieving higher than trend market share in some markets in 2009)
 - ▶ Compounded by the European market growing slower than the global market (5 year CAGR of 4.8% versus 6.3% globally) (Enercon is the market leader in Europe)

Wind turbine manufacturers – global market share of top 10 players plus Nordex and Clipper for 2008 and 2009 (value included for 2009) and our forecasts for 2014e (MW installed)



Source: MAKE Consulting (for historic data), HSBC estimates

Global market share in 2009

It is no surprise that three of our four underperformers (in terms of market share performance out to 2014e), GE Wind, Gamesa and Enercon, are all market leaders in their respective domestic markets, which we forecast to be ex-growth markets in the coming years. Suzlon is also set to be an underperformer in our view, but due to a loss of market share in its domestic market, not due to a weak Indian market itself (the Indian market is in fact one of our “growth” markets).

Domestic market leaders

	Domestic market	Global ranking*	Forecast installations during 2010-14e	5-year CAGR (2009-14e)	Market share in 2009
Sinovel	China	1	85,000	8%	25%
GE Wind	US	2	42,000	0%	40%
Suzlon	India	3	10,450	12%	55%
Enercon	Germany	5	9,500	1%	60%
Gamesa	Spain	6	8,200	-8%	37%

Note: * in terms of forecast installations during 2010-14
Source: HSBC estimates

Sinovel, one of our top performers (from a market share perspective), is the domestic market leader in China, the number one market and one of our “growth” markets.

It is noteworthy that Vestas is not a domestic market leader. In our view, this is an advantage to

Vestas right now as it protects against over exposure to domestic market downturns. Vestas has the most globally spread supply chain and is able to manoeuvre the best growth markets globally, and is well positioned to be a first-mover in early stage growth markets, in our view.

Vestas – position in the top 10 markets

	Global ranking*	1st place	2nd place	3rd place
China	1			
US	2		15%	
India	3			
Canada	4	50%		
Germany	5		20%	
Spain	6		34%	
UK	7			11%
France	8			15%
Italy	9	32%		
Portugal	10			15%

Note: * in terms of forecast installations during 2010-14
Source: HSBC estimates

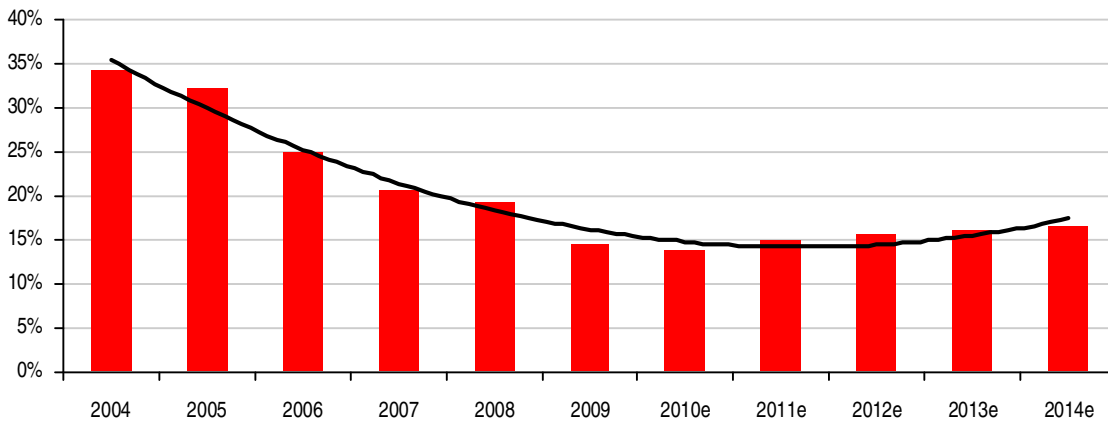
Vestas is a top three player in eight of the top 10 markets, including dominant market leader in Canada, which we forecast to be the strongest growing top 10 market with a 5-year CAGR of 19%.

Global market share matrix – updated forecasts for 2014e (in MW)

		Vestas	Gamesa	Suzlon	Clipper	REpower	Nordex	Enercon	GE Wind	Siemens	Goldwind	Sinovel	Dongfang	Others	Total
Top 5 markets															
China	2014	7.0%	4.0%	2.5%	0.0%	1.0%	1.0%	0.0%	4.0%	0.0%	22.5%	27.0%	17.5%	13.5%	100.0%
	2009	4.4%	2.0%	2.0%	0.0%	1.4%	0.8%	0.0%	2.3%	0.0%	19.8%	25.4%	14.6%	27.3%	100.0%
	2008	10.6%	8.0%	1.8%	0.0%	0.0%	2.4%	0.0%	2.7%	0.0%	17.9%	22.1%	16.6%	17.9%	100.0%
US	2014	12.5%	7.5%	5.0%	7.5%	3.0%	2.0%	0.0%	35.0%	12.5%	2.5%	3.0%	2.5%	7.0%	100.0%
	2009	15.0%	6.0%	7.1%	6.1%	3.3%	0.6%	0.0%	40.3%	11.7%	0.0%	0.0%	0.0%	9.9%	100.0%
	2008	14.7%	10.8%	4.7%	2.5%	1.2%	0.6%	0.0%	49.8%	8.1%	0.0%	0.0%	0.0%	7.6%	100.0%
Germany	2014	22.0%	1.0%	0.0%	0.0%	10.0%	5.0%	50.0%	2.0%	4.0%	0.0%	0.0%	0.0%	6.0%	100.0%
	2009	19.5%	0.0%	0.0%	0.0%	8.8%	1.9%	60.2%	1.2%	0.0%	0.0%	0.0%	0.0%	8.4%	100.0%
	2008	31.7%	0.1%	0.0%	0.0%	5.6%	2.2%	51.5%	0.7%	0.0%	0.0%	0.0%	0.0%	8.2%	100.0%
Spain	2014	35.0%	35.0%	5.0%	0.0%	2.5%	0.0%	5.0%	2.0%	5.0%	0.0%	0.0%	0.0%	10.5%	100.0%
	2009	33.9%	37.1%	10.4%	0.0%	0.6%	0.0%	7.8%	1.6%	1.1%	0.0%	0.0%	0.0%	7.5%	100.0%
	2008	26.5%	45.4%	0.0%	0.0%	0.0%	2.8%	0.0%	2.8%	3.2%	0.0%	0.0%	0.0%	19.3%	100.0%
India	2014	12.5%	5.0%	45.0%	0.0%	2.0%	0.0%	15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.5%	100.0%
	2009	7.2%	0.0%	55.1%	0.0%	0.0%	0.0%	15.6%	0.0%	0.0%	0.0%	0.0%	0.0%	22.1%	100.0%
	2008	10.2%	0.0%	61.7%	0.0%	0.0%	0.0%	14.4%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%	100.0%
Second 5 markets															
UK	2014	17.5%	1.0%	0.0%	0.0%	15.0%	15.0%	7.0%	2.5%	37.5%	0.0%	0.0%	0.0%	4.5%	100.0%
	2009	11.3%	0.0%	0.0%	0.0%	10.2%	17.0%	7.3%	1.0%	51.2%	0.0%	0.0%	0.0%	2.0%	100.0%
	2008	7.3%	0.0%	0.0%	0.0%	10.2%	20.8%	2.4%	1.0%	55.1%	0.0%	0.0%	0.0%	3.2%	100.0%
Canada	2014	35.0%	0.0%	0.0%	2.5%	2.5%	0.0%	15.0%	22.5%	15.0%	0.0%	0.0%	0.0%	7.5%	100.0%
	2009	49.6%	0.0%	0.0%	0.0%	0.0%	0.0%	10.7%	18.8%	20.9%	0.0%	0.0%	0.0%	0.0%	100.0%
	2008	32.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.4%	18.1%	0.0%	0.0%	0.0%	0.0%	100.0%
Italy	2014	37.5%	15.0%	0.0%	0.0%	10.0%	12.0%	10.0%	6.0%	5.0%	0.0%	0.0%	0.0%	4.5%	100.0%
	2009	31.6%	12.8%	0.0%	0.0%	6.7%	16.0%	19.8%	4.0%	3.7%	0.0%	0.0%	0.0%	5.4%	100.0%
	2008	34.0%	16.2%	0.0%	0.0%	14.6%	11.0%	12.5%	1.4%	0.0%	0.0%	0.0%	0.0%	10.3%	100.0%
France	2014	20.0%	12.5%	0.0%	0.0%	25.0%	10.0%	18.0%	5.0%	5.5%	0.0%	0.0%	0.0%	4.0%	100.0%
	2009	15.2%	12.5%	0.0%	0.0%	21.9%	8.2%	30.1%	0.0%	6.0%	0.0%	0.0%	0.0%	6.1%	100.0%
	2008	22.7%	14.8%	0.0%	0.0%	19.7%	16.8%	13.1%	0.0%	5.8%	0.0%	0.0%	0.0%	7.1%	100.0%
Portugal	2014	20.0%	7.5%	2.5%	0.0%	10.0%	8.0%	35.0%	5.0%	7.0%	0.0%	0.0%	0.0%	5.0%	100.0%
	2009	15.1%	6.1%	6.7%	0.0%	10.7%	21.5%	39.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	100.0%
	2008	3.3%	12.4%	2.8%	0.0%	4.4%	2.2%	74.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Tier 3 markets															
Tier 3 markets	2014	27.5%	5.0%	5.0%	0.0%	7.5%	4.5%	10.0%	7.5%	10.0%	3.0%	4.0%	2.5%	13.5%	100.0%
	2009	21.6%	4.0%	6.1%	1.3%	2.2%	3.5%	16.2%	3.2%	10.7%	4.0%	4.6%	3.1%	19.5%	100.0%
	2008	41.5%	13.5%	5.4%	-0.6%	1.0%	4.5%	22.1%	6.2%	3.7%	-0.5%	-0.3%	-0.5%	4.1%	100.0%
Tier 4 markets															
Tier 4 markets	2014	27.5%	5.0%	2.5%	0.0%	7.5%	4.0%	10.0%	7.5%	15.0%	2.5%	2.5%	2.5%	13.5%	100.0%
	2009	21.6%	4.0%	6.1%	1.3%	2.2%	3.5%	16.2%	3.2%	10.7%	4.0%	4.6%	3.1%	19.5%	100.0%
	2008	41.5%	13.5%	5.4%	-0.6%	1.0%	4.5%	22.1%	6.2%	3.7%	-0.5%	-0.3%	-0.5%	4.1%	100.0%
RoW															
RoW	2014	27.5%	5.0%	7.5%	2.5%	7.5%	4.0%	10.0%	2.5%	10.0%	3.0%	4.5%	3.0%	13.0%	100.0%
	2009	21.6%	4.0%	6.1%	1.3%	2.2%	3.5%	16.2%	3.2%	10.7%	4.0%	4.6%	3.1%	19.5%	100.0%
	2008	41.5%	13.5%	5.4%	-0.6%	1.0%	4.5%	22.1%	6.2%	3.7%	-0.5%	-0.3%	-0.5%	4.1%	100.0%
World															
World	2014	16.5%	6.0%	5.1%	1.8%	4.8%	3.0%	6.7%	10.4%	7.1%	9.2%	11.1%	7.3%	11.0%	100.0%
	2009	14.5%	6.0%	5.9%	1.8%	3.4%	2.5%	8.5%	12.6%	6.6%	7.3%	9.3%	5.4%	16.3%	100.0%
	2008	19.3%	11.0%	6.7%	0.7%	2.5%	3.3%	9.8%	18.0%	5.4%	4.1%	5.1%	3.8%	10.3%	100.0%
Gain/(loss) of share															
Gain/(loss) of share	2009-14	2.0%	0.0%	-0.8%	0.1%	1.4%	0.5%	-1.8%	-2.2%	0.5%	1.9%	1.8%	1.9%	-5.3%	0.0%
	2008-09	-4.8%	-5.0%	-0.8%	1.1%	0.9%	-0.8%	-1.3%	-5.4%	1.2%	3.2%	4.2%	1.6%	6.0%	0.0%
Ranking															
Ranking	2014	1	8	9	12	10	11	7	3	6	4	2	5		
	2009	1	7	8	14	10	11	4	2	6	5	3	9		
	2008	1	3	5	14	11	10	4	2	6	8	7	9		

Source: HSBC estimates

Vestas – trend in market share over the period 2004-09 and our forecasts from 2010e-14e (MW) including trend line



Source: MAKE Consulting (historic data), HSBC estimates

Market share analysis – our coverage companies

Vestas – will successfully defend its no.1 position, in our view

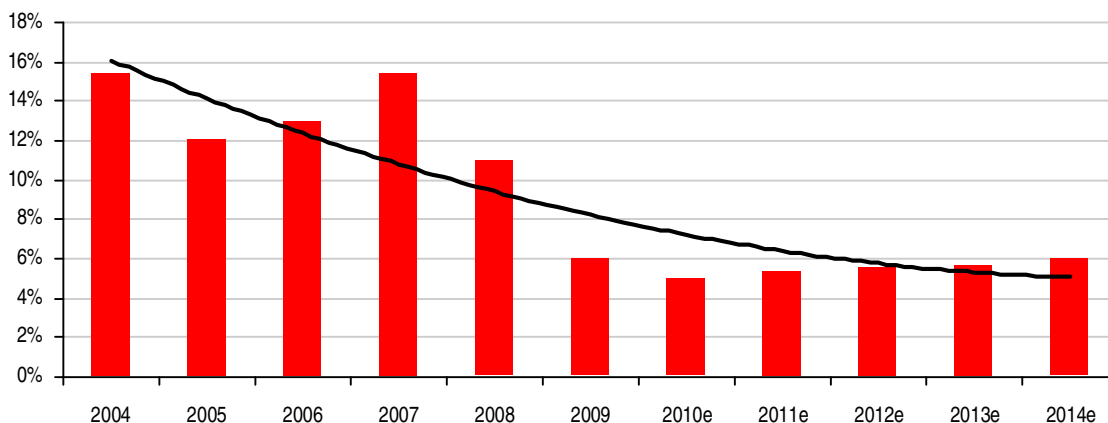
Vestas has been the market leader since the wind industry began back in the 1980s. Its market share has, however, been eroded over time due to increasing competition from GE and Siemens, amongst others, and more recently Goldwind, Sinovel and Dongfang.

In particular, since 2004, Vestas’ market share has decreased from nearly 35% to 14.5% in 2009.

However, we believe that Vestas will continue to

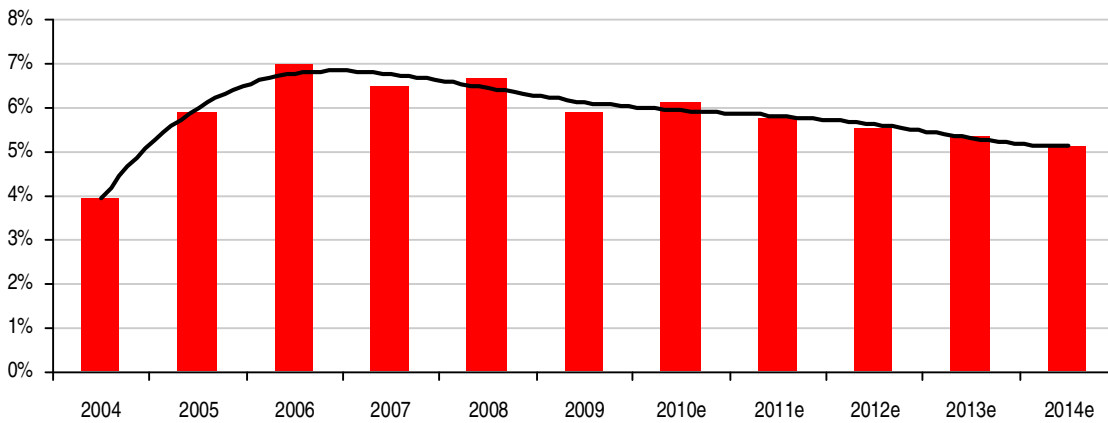
successfully defend its no.1 position and should increase its market share slightly over the next five years. It is the most globally spread manufacturer, with exposure to more than 60 markets worldwide, including good exposure to growth markets (see Global wind market analysis section); thus we believe Vestas is well positioned to penetrate some of the smaller, high growth markets. We forecast a market share of 16.5% in 2014e, an increase of 2 percentage points over 2009. We note that Vestas is likely to face tough competition from Chinese turbine manufacturers internationalising.

Gamesa – trend in market share over the period 2004-09 and our forecasts from 2010e-14e (MW) including trend line



Source: MAKE Consulting (historic data), HSBC estimates

Suzlon – trend in market share over the period 2004-09 and our forecasts from 2010e-14e (MW) including trend line



Source: MAKE Consulting (historic data), HSBC estimates

Gamesa – will struggle to improve market share, in our view

Gamesa dramatically lost global market share in 2009; its share almost halved to 6% (from 11% in 2008), due to a loss of market share in its three largest markets, Spain, the US and China, which collectively account for 85% of Gamesa's sales.

In our view, Gamesa will struggle to improve on this lower level of market share, due to its relatively high exposure to mature, ex-growth markets such as the US and Spain; three-quarters of Gamesa's sales is exposed to ex-growth markets, only GE and Clipper have higher exposure. Despite this, we forecast Gamesa's market share to remain flat at 6.0% over the next five years due to a slight increase in market share in China, where Gamesa was a top three player until 2008.

Suzlon – will continue to lose market share, in our view

Suzlon's market share peaked in 2006 (at 7.0%), on the back of a strong Indian market and ironically, before it really started to pursue its aggressive internationalisation plans. We forecast that Suzlon's market share will decrease by 0.8 percentage points to 5.1% (from 5.9% previously).

We expect this to be driven by Suzlon losing market share in its main market, India, due to increasing competition from Vestas and Gamesa, amongst others, in our view. We believe that Suzlon will compensate for this loss to some extent by further penetration of the Australian and of South American markets. However, its penetration in Europe is likely to remain low due to its lower tech turbine offering, which is not so well suited to the more stringent grid codes in Europe. We believe this could change if Suzlon manages to gain access to REpower's more sophisticated technology (it must first exercise a domination agreement, under German law; thus far Suzlon has been unable to do this).

We estimate market share loss of 0.8% for Suzlon over 2009-14e, which is the highest loss for any wind turbine manufacturer under our coverage. However, we expect that Suzlon/REpower will perform better together than on their own with a stronger product portfolio and with turbines more suited to the International market.

Clipper – mostly a US story

Clipper is currently a pure play US domestic turbine supplier and therefore we expect sales to be somewhat lacklustre in the coming years. We

expect Clipper to look for growth through international expansion and believe it will gain some traction in South America and Canada; however, only enough to maintain its global market share at c1.8%. In the longer-term, Clipper could make some traction in the UK offshore market with its Britannia, 10MW turbine, although we do not expect Clipper to have a commercial, proven model ready until much before the round three projects go out to tender (we expect around 2013-14), at the earliest.

We forecast a market share of 1.8% in 2014e, the same as in 2009.

REpower – momentum will continue

REpower increased its market share by 0.9 percentage points to 3.4% in 2009. We believe this momentum will continue in the coming years as it continues to internationalise. We expect increased exposure to the Americas (Canada and South America) and Asia-Pac (India and Australia). We believe parent company Suzlon's relationships will help

We forecast a market share of 4.8% in 2014e, an increase of 1.4 percentage points over 2009 (3.4%).

Nordex – share should increase but falling further behind REpower

We believe that Nordex will increase its market share over the next five years, albeit from a low base, as it continues to internationalise. We forecast a market share of 3.0% in 2014e, an increase of 0.5 percentage points over 2009 (2.5%).

Wind OEMs – order flow

- ▶ Vestas has announced c5.7GW of order YTD and we believe it is on course to meet its guidance of 8-9GW of order inflow in 2010
- ▶ Our 2010 industry forecast for ‘global ex-Asia’ looks achievable based on our bottom-up analysis
- ▶ We note signs of order flow picking up, in particular with a number of large US orders announced by Vestas

Announced orders – allocated by year

Methodology

In this section, we have analysed announced order data since the start of 2007 for a selection of leading wind OEMs, which publicly announce their orders (albeit only material ones). We have analysed a total of 49GW worth of orders. The only Chinese manufacturer where order data is readily available is Goldwind. We have split our analysis into two strands:

- ▶ **Spot orders:** these are announced orders that typically relate to a specific project, with specific delivery dates, typically in the current or following year but sometimes further out. These orders can be supply only, supply and installation or turnkey projects. We only include firm/unconditional orders in our analysis
- ▶ **Framework agreements:** these orders are typically for a larger number of turbines to be delivered over a pre-defined period. These orders are typically supply only, or supply and installation but can also be turnkey projects. They typically allow some flexibility for developers to shift turbines to different

projects and time periods but are essentially firm orders in terms of total turbines to be delivered over the pre-defined period. We have excluded any optional/contingent part of the agreement from our analysis.

Global order flow data – supports our 2010 industry forecasts

Of the 49GW of projects we have analysed, we believe that 15.2GW are for delivery in 2010e. This equates to 42% of our global industry forecast for 2010e (36.1GW) (see chart below). This does not seem a particularly high portion, given that there are just a couple of months left this year if a developer wants to order turbines for a 2010 project (ie lead times for turbines are around 3 months), however, in fact, a similar analysis indicates that 14.6GW of projects were for delivery in 2009, which is just 39% of actual demand in 2009 (see chart below). We note that our analysis does not include the Chinese manufacturers (with the exception of Goldwind) nor does it pick up all of GE, Siemens, Mitsubishi and Enercon’s projects. The seven pure play wind OEMs, which announce all material projects, represent a majority of projects

Summary – orders analysed by wind OEM type, including orders allocated to 2010

Type of wind OEM	Wind OEMs	2009 market share (MW)	Level of orders announced	Total orders analysed (MW)	Orders for 2010 (MW)
Quoted pure play	Vestas, Gamesa, Suzlon, REpower, Nordex, Goldwind, Clipper	41%	Material orders	28,959	9,566
Large industrials	GE, Siemens	19%	Most material orders	16,781	5,252
Smaller industrials	Mitsubishi, Acciona, Multibrid	4%	Rarely	580	
Private	Enercon	9%	Ad hoc	2,751	391
Other	Mostly Chinese domestic, also Spanish domestic, German domestic	31%	None	0	
Total		100%		49,072	15,209

Source: HSBC estimates

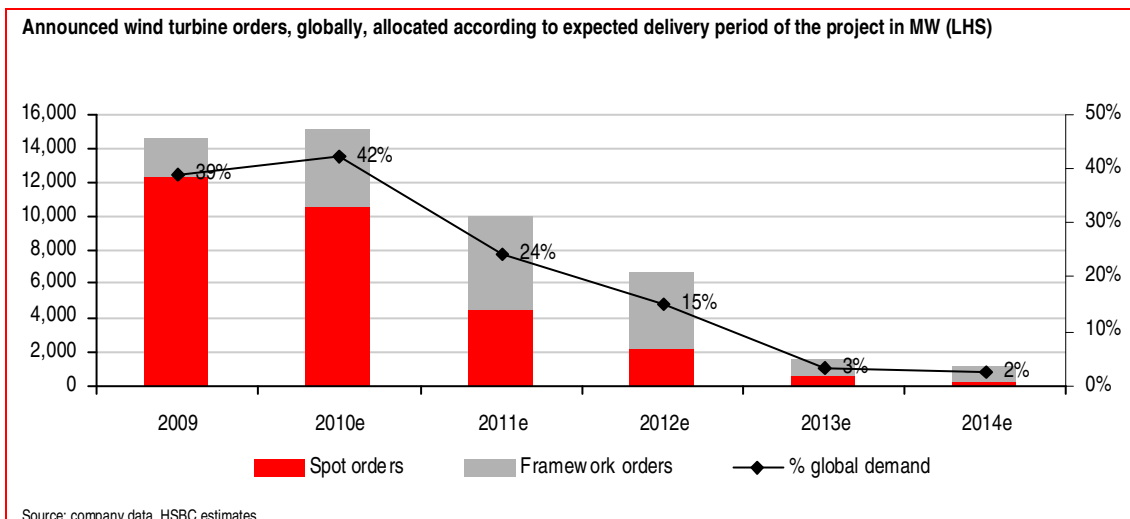
that we analyse in this section. These wind OEMs accounted for just 41% of the wind turbine market in 2009. The total pool of wind OEM for which we have analysed varying degrees of orders, accounted for c 69% of the wind turbine market in 2009 (see table above).

Global ex-Asia data – a more comprehensive analysis

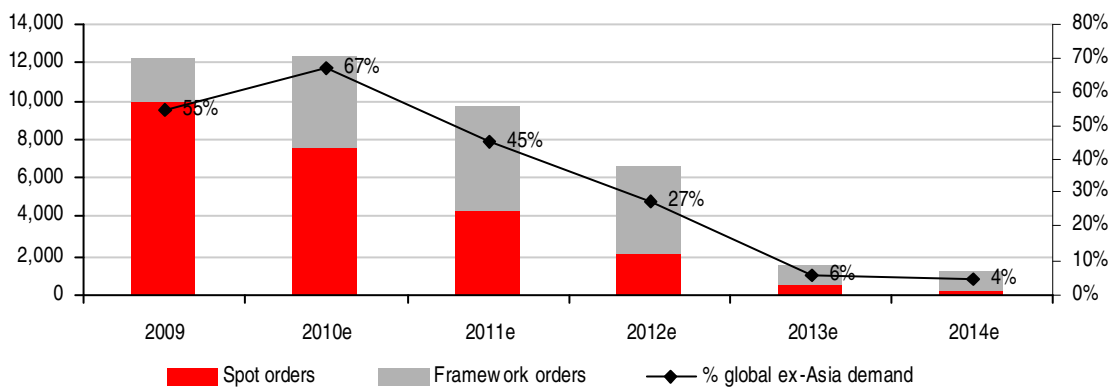
The limitation of the global order flow data we consider above is that Goldwind is the only Chinese wind turbine manufacturer picked up by our analysis. If we exclude all Asian projects from our analysis, we are considering a pool of projects that represents a higher portion of the wind turbine market in ‘global ex-Asia’ region.

In total we have analysed c44GW of ‘global ex-Asia’ projects. Of these, 12.3GW correspond to 2010 projects, which equate to 67% of our ‘global ex-Asia’ forecast for 2010 (18.4GW). This compares to 2009 where we allocated 12.2GW worth of projects, which equated to 55% of the wind turbine market (22.3GW) in that year. The fact that we have accounted for 67% of our forecast in announced orders for ‘global ex-Asia’ suggests there is upside risk to our 2010 industry forecast.

We note that wind OEMs typically announce c70% of their actual orders for a given year. The remaining 30% relate to smaller projects that



Announced wind turbine orders, 'global ex-Asia', allocated according to expected delivery period of the project in MW (LHS)



Source: HSBC estimate

creep under the radar. In particular, this was evident with Vestas in 2009, where some stock market investors were tallying orders announced by Vestas during the year and noting a significant shortfall between orders announced and Vestas' full year revenue guidance for 2009. It was widely expected that Vestas would downgrade guidance; the downgrade never came and in the end Vestas delivered on its guidance. We have a similar situation developing with Vestas this year.

Analysis by Wind OEMs

We extend our analysis to look at individual wind OEMs announced orders versus our volume sales forecasts.

The table below shows that Gamesa, Suzlon and Clipper have all already announced a higher percentage of orders for 2010 (relative to our volume sales forecast) than in 2009. This indicates they are well on track to meeting our 2010 volume sales forecast.

Vestas had announced the least orders for 2010 delivery relative to our 2010 volume sales forecast, which is c5.5GW. In 2009, Vestas announced projects relating to 73% of its full year sales; in first half of 2010 it has only announced projects relating to 47% of our HSBC volume sales forecast. However this percentage increases to 53% if we consider year to date orders received for 2010.

Wind OEMs – announced orders allocated by year as a % of HSBC volume sales forecast for that year (MW)

Summary	2009a	2010e	2011e	2012e	2013e	2014e
Vestas	73%	47%	23%	10%	0%	0%
Gamesa	69%	86%	74%	51%	0%	0%
Suzlon	48%	55%	7%	0%	0%	0%
Clipper	30%	50%	23%	0%	0%	0%
REpower	81%	71%	57%	27%	20%	20%
Nordex	73%	N/A	N/A	N/A	N/A	N/A
Goldwind	N/A	N/A	N/A	N/A	N/A	N/A
Average	62%	62%	37%	18%	4%	4%
Average ex-Clipper	69%	65%	40%	22%	5%	5%

Source: HSBC estimates, company information

Wind OEMs – order books

We have analysed the top 10 wind OEMs order books over the last three and half years from Q1 2007 to Q2 2010. The top 10 wind OEMs accounted for c85% of global demand over this period. We have used two different sources in this process:

- ▶ Order backlog: published order book positions for the quoted wind OEMs
- ▶ New order flow: announced new orders for the top 10 manufacturers. Broadly, 70% of new orders are announced by a wind OEM.

Order backlog

We have analysed published order books for all wind turbine manufacturers that we cover. Their order book at the end of Q2 2010 was generally stronger than it was a year earlier except for Gamesa and Nordex (down 8% y-o-y). The order backlog has shown an improvement recently with the backlog as the end of Q2 2010 better than at the end of Q 2010 for all the wind turbine manufacturers under our coverage. Vestas's order showed the greatest increase q-o-q, increasing by 93%. This increase was also due the one very large order of 1.5GW which it signed with EDPR in Q2. Gamesa and Suzlon's order book also increased by c29% in the period (for Suzlon in the period

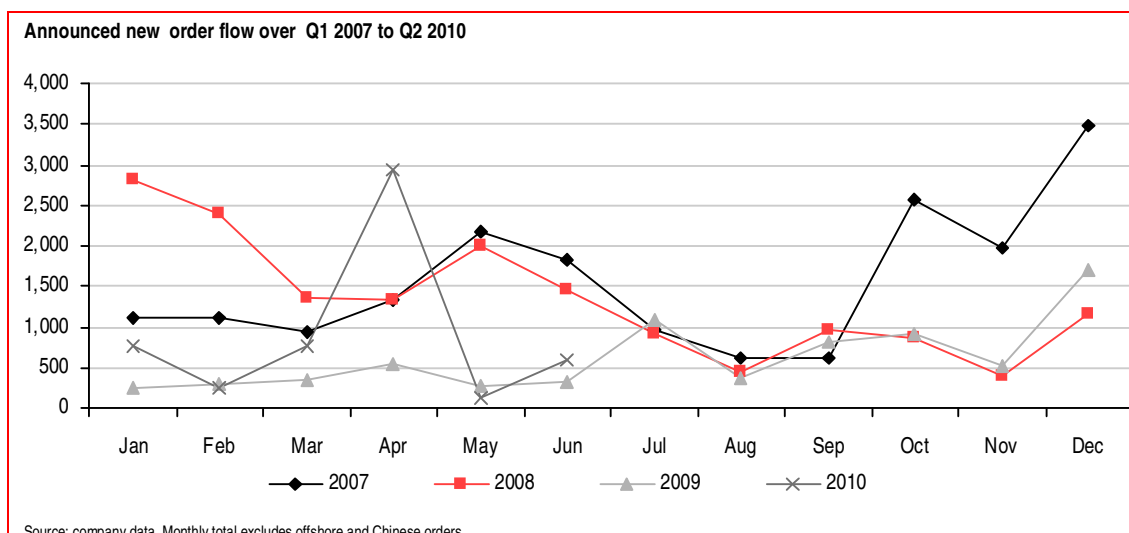
between 26 May 2010 and 11 August 2010 (as per disclosure during Q1FY2010-11 results). Nordex's and REpower's order book increased by c23% and 14% in Q2 (in value terms).

New order flow is starting to improve

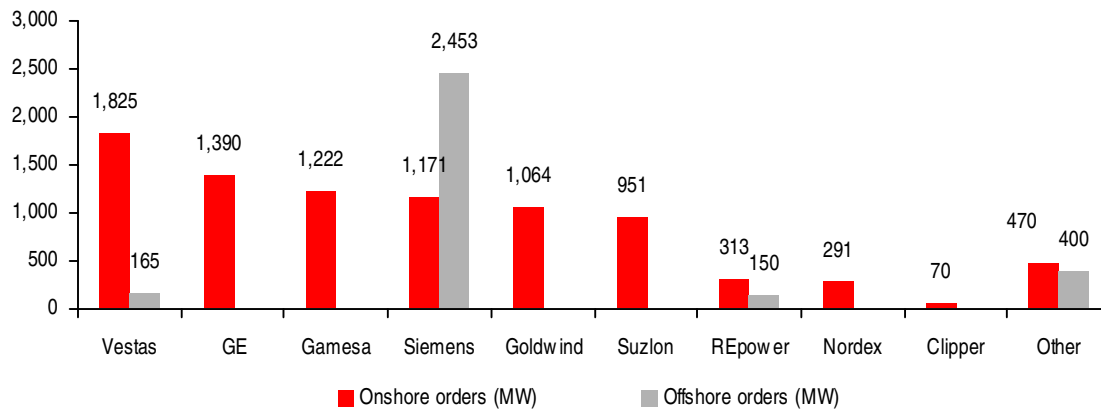
New order flow is starting to improve: new orders in H1 2010 were c5.5GW, which is more than double a year earlier (H1 2009: c2GW). However, new orders are still significantly below H1 2007 and H1 2008 levels. We estimate that in H1 2010, the average order book has increased by 17% y-o-y.

New order flow – large versus small manufacturers still divided

We have analysed announced new orders in 2009. New order flows over the last year have been notably better for the larger wind turbine manufacturers versus the smaller ones. 2009 orders for Gamesa and Vestas (combined) are down c50% compared to a year earlier (in MW-terms), whereas orders for Suzlon, REpower and Nordex (combined) are sharply down by 70% on a year earlier.



New wind turbine order flow in 2009 by Manufacturer



Note: Only publicly disclosed orders. Source: HSBC, Company data.

Vestas most highly geared to a demand recovery

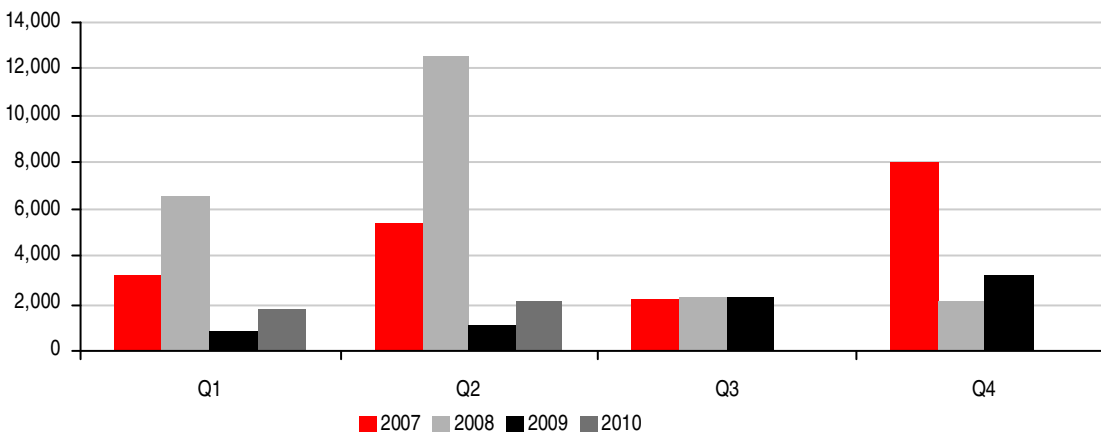
Following the freeze in the credit markets in September 2008, investors focused on the exposure of the wind turbine manufacturers to different customer types. Future sales for Gamesa were seen as safer than Vestas as Gamesa has a higher portion of utility customers compared to Vestas which has a higher exposure to medium sized Independent Power Producers (IPPs). In our view, the reverse should now happen. As the project finance markets become easier month by month it is the medium sized IPPs which have found credit more difficult to obtain over the last

year or so, which should now start to receive finance once again (assuming they have not gone bankrupt) and therefore start to place orders again. Vestas is more highly geared towards this customer type.

Vestas has received the largest numbers of orders for onshore and Siemens for offshore turbines

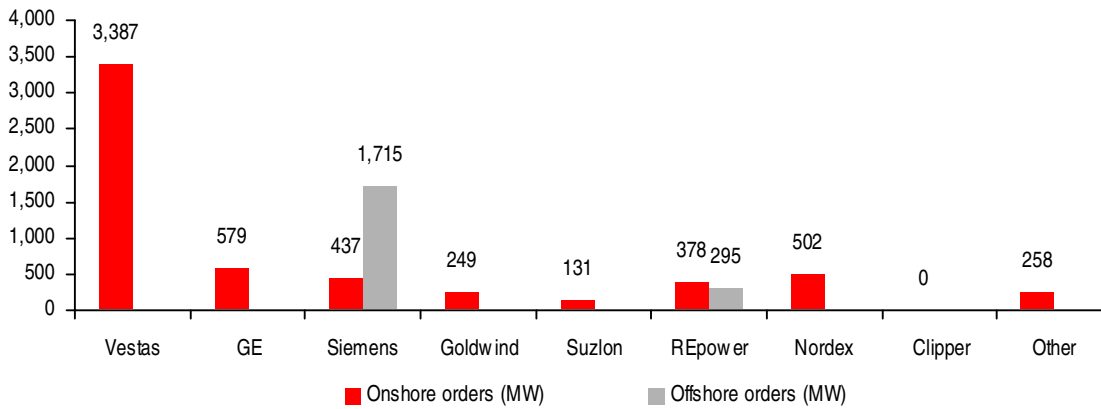
As per our analysis of 2009 order flow, Vestas remains the leader in the onshore segment of the wind turbine market. It received the orders for c1.8GW of onshore turbines in 2009. Gamesa also had a fairly strong order flow and stood at third

Announced wind turbine new order flow from Q1 2007 to Q2 2010 (MW)



Source: Company data, HSBC. Note: Monthly total excluding offshore and Chinese wind turbine manufacturers orders

New wind turbine order flow in H1 2010 by Manufacturer



Note Only publicly disclosed orders. Gamesa has not disclosed any orders in H1 2010 hence not shown above. Vestas orders include 1.5GW of framework agreement with EDPR but does not include an additional 600MW of options
Source: HSBC, Company data.

place garnering 1.2GW of new orders behind GE which managed to get c1.4GW of orders. Siemens dominated the offshore turbine market with c2.5GW of orders.

New order flow in H1 2010

As per the orders announced by the major wind turbine manufacturers for H1 2010, Vestas (3,387MW) and GE (579MW) appear to be the biggest beneficiaries. We however note that Gamesa has not disclosed any orders for H1 2010. REpower has also received orders for 673MW which includes a 295MW order for offshore turbines for “Nordsee Ost” offshore wind farm in Germany. Siemens has continued to dominate the offshore wind turbine market in H1 2010 with c1.7GW of orders. From the order flow analysis of the top 10 turbine manufacturers it is clear to us that Vestas has maintained its lead with c70% of the new orders announced after H1 2010 going to Vestas. Siemens came a distant second, bagging c19% of the orders announced after H1 2010.

Demand analysis based on wind farm developers’ guidance

We have estimated new order flow for wind turbines in 2010 by looking at the top developers in the US, Europe and Asia and their installation target for 2010. We then deduct the turbine orders which have already been placed by these developers for 2010 to arrive at the likely new order flow. A limitation of this analysis is that we only have publicly announced information, which typically excludes data relating to smaller orders.

US

US wind farm developers and their turbine requirement in 2010

Developer	Guidance - Midpoint (MW)	Turbine supply secured (MW)
NextEra (FPL)	725	Not disclosed
IBR	900	900
EDPR	550	550
EDF EN	700	700
MidAmerican Energy	Not disclosed	Not disclosed
Total (Midpoint)	2,875	
HSBC forecast	7,000	
% of total forecast	41%	
% demand covered		31%

Some developers have given range for their guidance; we have taken midpoint of their guidance.
Source: HSBC estimates.

In the US, NextEra (FPL), Iberdrola Renovables, EDPR and Mid American Energy are the largest wind farm developers. Of these, Iberdrola

Renovables has stated that their requirements for 2010 are covered. EDPR had in an earlier presentation also stated that its turbine needs for 2010 are covered. FPL has said in April 2010 that it has a development target of 600-850MW in 2010. FPL and Mid American energy have not provided any details as to their turbine requirement coverage. EDF-EN, though a relatively smaller developer in US, had also stated that its turbine requirement is totally covered for 2010.

Europe

European wind farm developers and their turbine requirement in 2010

Major developers	Guidance - Midpoint (MW)	Turbine supply secured (MW)
IBR	900	900
EDPR	550	550
Acciona	600	600
EDF EN	400	400
Total	2,450	2,450
HSBC forecast	9,000	
% of total forecast	27%	
% demand covered		27%

Some developers have given range for their guidance; we have taken midpoint of their guidance.
Source: HSBC estimates.

In Europe, Iberdrola Renovables, EDF-EN, EDPR and Acciona are the major developers. Of these, Iberdrola Renovables, EDF-EN's turbine need for 2010 is totally covered. EDPR in a presentation had also stated that its turbine needs for 2010 are covered. Acciona sources turbines largely internally.

Spanish Demand in 2010

Gamesa in its Annual Results presentation said that new turbine demand in 2010 in Spain will be c1,000MW as the installations are capped at 1,855MW for 2010.

Asia

Chinese wind farm developers and their turbine requirement in 2010

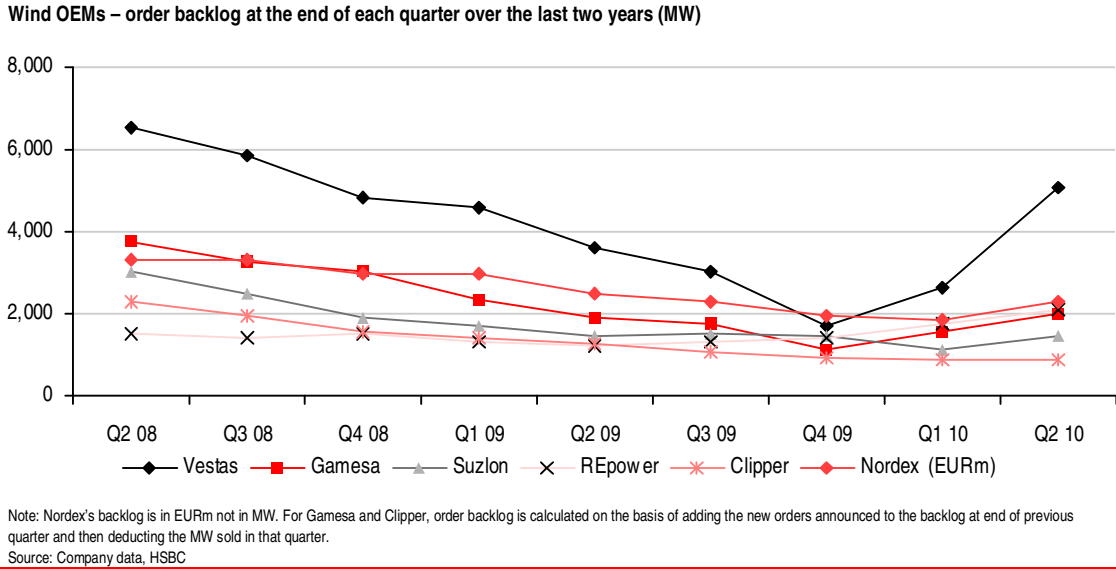
Major developers	Guidance - Midpoint (MW)	Turbine supply secured (MW)
China Longyuan	1,600	1,600
China Datang	Not disclosed	Not disclosed
China Huaneng	Not disclosed	Not disclosed
Guohua	Not disclosed	Not disclosed
Beijing Energy	Not disclosed	Not disclosed
HSBC forecast	15,000	
% of total forecast	11%	
% demand covered		11%

Some developers have given range for their guidance; we have taken midpoint of their guidance.
Source: HSBC estimates.

There is very low visibility for China, Asia's largest market with respect to new turbine orders.

We estimate that Chinese installations in 2010 will be c86% of the Asia-Pacific demand

However, most of the supply is by domestic manufacturers. Vestas and Gamesa had 4.4% (2008:11%) and 2.0% (2008:8%) market share in 2009 (source: MAKE consulting). Though estimates for wind turbine installations in China are high (2010 HSBCe of 15GW), we expect domestic manufacturers like Sinovel, Goldwind and Dongfang, Mingyang etc, which supplied >85% of wind turbine requirements in 2009 (as per MAKE Consulting), to continue to meet a large part of this demand leaving little for the foreign turbine manufacturers.



Valuation

- ▶ Vestas is trading on a 2011e PE basis of 11.6x, at a discount to the sector average of 13.5x
- ▶ EDP Renovaveis is currently trading at the lowest multiples relative to peers on EV/EBITDA for 2010e-12e
- ▶ PEG ratio analysis has its limitations since it does not capture the medium- to long-term growth prospects of the wind sector

How we value the Wind OEMs

Valuation methodology - DCF is our primary tool

Given the difficulties involved in multiple analysis for a relatively young sector with poor profitability, we don't focus primarily on relative multiple analysis or valuation. We have used DCF as our primary valuation tool because it is an absolute valuation methodology.

We have used two slightly different DCF methodologies – the HSBC four-stage ROIC-based DCF and a 'classic' FCF-based DCF. The key elements in the HSBC ROIC-based valuation approach are:

- ▶ Four-stage cash-flow model: explicit forecast period; semi-explicit forecast period; fade period; and terminal period
- ▶ Full reconciliation of discounted cash-flow variables with return on invested capital/weighted average cost of capital approach
- ▶ WACCs calculated using local-currency long-bond yields, local-equity-market risk premia, HSBC-assigned beta values (based on observed raw betas from Bloomberg)

- ▶ Common assumption of 28-year DCF period for all stocks' returns
- ▶ Four other key valuation model inputs: terminal period growth rate in invested capital; terminal period asset turnover rate; terminal period pre-tax margin; terminal period tax rate
- ▶ Default assumption that terminal ROIC will not materially deviate from WACC, although we are prepared to change that assumption when we think it is right to do so

The classic FCF-based DCF approach incorporates the following features:

- ▶ WACC calculations as above
- ▶ 10 years of discounted forecast FCFs
- ▶ A terminal value calculated using an assumed terminal growth rate

We convert the fair-value estimates we arrive at through these methodologies into a fair-value target price by taking a simple average of the two prices along and applying either a premium or discount if necessary.

Wind OEMs: valuation summary

Company	Rating	Curr.	Target Price	Current Price	Pot'l Return	EV/Sales			EV/EBITDA			HSBC PE			PEG		
						2010e	2011e	2012e	2010e	2011e	2012e	2010e	2011e	2012e	2010e	2011e	2012e
Wind Turbine Manufacturers																	
Vestas	OW(V)	DKK	300.00	228.00	32%	1.1	0.9	0.8	10.8	6.5	5.4	31.5	11.6	9.2	0.6	0.8	0.9
Clipper	OW(V)	GBP	1.00	0.44	130%	0.1	0.0	0.0	6.2	1.1	0.7	n.m.	12.6	9.2	0.8	0.3	0.2
Nordex	OW(V)	EUR	10.00	6.82	47%	0.2	0.2	0.1	4.1	2.9	1.9	18.5	11.4	7.1	na	n.m.	n.m.
Gamesa	N(V)	EUR	5.50	5.10	8%	0.7	0.6	0.6	7.8	6.7	6.1	21.4	16.4	12.4	0.7	0.7	0.7
REpower	N(V)	EUR	115.00	98.48	17%	0.5	0.4	0.3	6.0	5.3	4.2	15.8	14.8	12.4	na	na	n.m.
Suzlon	UW(V)	INR	42.00	49.60	-15%	1.0	0.9	0.8	17.8	12.5	9.3	n.m.	n.m.	41.2	0.2	n.m.	0.7
Goldwind	N/R	CNY	n/a	18.48	n/a	2.5	1.9	1.5	13.3	9.7	8.2	17.9	14.3	11.2	na	na	na
	Mean					0.9	0.7	0.6	9.4	6.4	5.1	21.0	13.5	10.3	0.6	0.6	0.6
	Median					0.7	0.6	0.6	7.8	6.5	5.4	18.5	13.5	10.2	0.7	0.7	0.7
Component Suppliers																	
Hansen	OW(V)	GBP	0.95	0.54	76%	1.0	0.8	0.7	10.4	7.2	5.1	n.m.	30.6	10.6	na	0.7	0.2
Transmissions																	
China High Speed	N/R	CNY	n/a	16.64	n/a	3.1	2.5	2.1	11.8	9.7	8.0	15.7	12.9	11.9	na	na	na
	Mean					2.1	1.7	1.4	11.1	8.5	6.6	15.7	21.8	11.3	na	0.7	0.2
	Median					2.1	1.7	1.4	11.1	8.5	6.6	15.7	21.8	11.3	na	0.7	0.2

Source: Thomson Financial DataStream, HSBC. Prices as on 25 August 2010 Thomson Financial DataStream for estimates for companies not covered Suzlon 2012e PE excluded in calculating Mean and Median

Assignment of ratings

The HSBC Equity Research methodology calls for allocating hurdle rates to establish ratings. They are based on the local cost of equity for any given stock plus a volatility band. That band is +/- 5 percentage points for stocks defined as not volatile and +/- 10 percentage points for stocks defined by HSBC as volatile.

The stocks covered have a volatility indicator, as defined by our Quants team. That is not surprising, given the sector's volatile performance and the lack of history for most of the stocks.

For example, for an Indian stock such as Suzlon, we calculate the hurdle rate as follows: we calculate the Indian cost of equity is 11.0%. The stock is considered volatile, so this translates into a Neutral band of +1.0% to +21.0% above the current share price. Any potential return above or below that range would give an Overweight (V) or an Underweight (V) rating. The cost of equity for UK stocks is 8%, and the cost of equity for European stocks is 8.5%.

Details on valuation and individual company assumptions are in the companies section of this report.

Peer comparison for the OEMs

We include a full sector analysis of multiples below. We note that a full sector comparison is subject to certain limitations in that it is difficult to undertake a meaningful peer comparison since the smaller manufacturers (Suzlon, Nordex and REpower) have lower profitability than the larger ones.

In terms of 2010e EV/Sales, Clipper is the cheapest, trading at 0.1x versus the sector average of 0.6x..

In terms of 2010e EV/Sales Nordex at 0.2x is also trading at a significant discount to the sector average of 0.6x. REpower at 0.5x 2010e EV/Sales is also trading slightly below the sector average of 0.6x

In terms of 2011e PE, Vestas is trading at 11.6x, at a discount to both Gamesa and REpower at 16.4x and 14.8x respectively. We believe that this is unjustified and Vestas should trade at a premium as Vestas is the established market leader and is more geared to demand recovery.

Relative to the market

The concerns about the fiscal position of some of the countries in Europe and the regulatory

uncertainty in the US over the clean energy legislation have led to the wider sell off equities globally. The share prices of all wind turbine manufacturers under our coverage have declined YTD and have under-performed their respective local markets as in the chart below.

Although all the wind turbine manufacturers share prices have fallen, smaller players have borne the brunt of the fall. Vestas and Gamesa, the larger players, have fallen by considerably less than the smaller players like Clipper and Nordex. Clipper has fallen by more than 50% YTD.

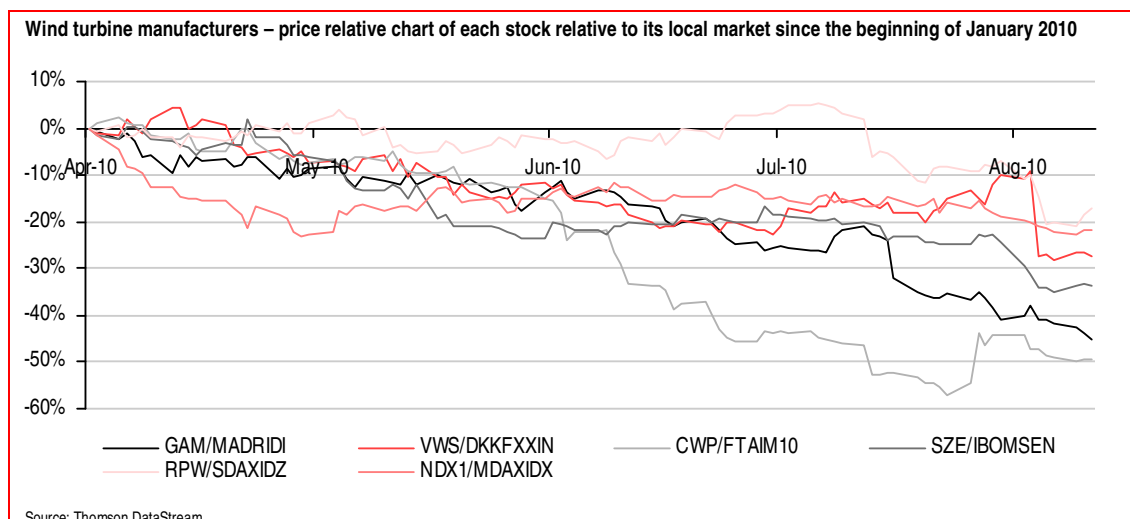
Wind OEMs versus Capital Goods

The wind OEMs are trading relatively cheaper than the Capital Goods sector in terms of EV/Sales multiples for the forecast period 2010e-12e. On 2010e, wind OEMs are trading at EV/Sales of 0.6x versus Capital Goods at 1.1x, a discount of c43%.

The wind OEMs are currently trading at a higher sector average of 21.8x on 2010e PE compared to sector average of 16.7x for the capital goods sector. However, the wind OEMs are trading at lower PEG 2010e multiple (0.6x) compared to the capital goods sector (1.1x). This is due to the much high growth potential offered by the wind OEMs compared to the capital goods sector.

In terms of 2010e P/BV, the wind OEMs are trading at a lower multiple of 1.3x versus 2.9x for the capital goods sector, a discount of c56%, again highlighting the fact that the sector has witnessed a dramatic sell-off primarily caused by the regulatory uncertainty in Europe and the US, the two biggest wind markets, and the deteriorating order book position of wind OEMs.

Thus, though wind OEMs may appear to be a bit expensive in terms of PE multiples, considering their higher growth profile and the intrinsic value as determined by P/BV, they are attractive relative to the capital goods sector, in our view.



Wind OEMs versus Solar

Wind OEMs are also looking attractive relative to the solar sector, in our r view. We believe that wind companies are at lower regulatory risk as compared to solar companies as the subsidy burden in European countries due to solar sector is much higher vis-à-vis wind. In terms of 2010e EV/Sales, wind OEMs are trading at c45% discount to the solar sector. Wind OEMs are also trading at a 54% and 18% discount to the solar sector in terms of 2010e PEG and P/BV.

Relative valuation – Wind OEMs versus Capital Goods and Solar Sectors

	Rating	C'cy	Price Target	Price Current	P'tial return	EV/sales			EV/EBITDA			PE			PEG 2010e	P/BV 2010e
						2010e	2011e	2012e	2010e	2011e	2012e	2010e	2011e	2012e		
Wind OEMs																
Vestas	OW(V)	DKK	300.00	228.00	32%	1.1	0.9	0.8	10.8	6.5	5.4	31.5	11.6	9.2	0.6	1.8
Clipper	OW(V)	GBP	1.000.44		130%	0.1	0.0	0.0	6.2	1.1	0.7	n.m.	12.6	9.2	0.8	na
Nordex	OW(V)	EUR	10.006.82		47%	0.2	0.2	0.1	4.1	2.9	1.9	18.5	11.4	7.1	na	1.2
Gamesa	N(V)	EUR	5.505.10		8%	0.7	0.6	0.6	7.8	6.7	6.1	21.4	16.4	12.4	0.7	0.8
REpower	N(V)	EUR	115.0098.48		17%	0.5	0.4	0.3	6.0	5.3	4.2	15.8	14.8	12.4	na	1.9
Suzlon	UW(V)	INR	42.0049.60		-15%	1.0	0.9	0.8	17.8	12.5	9.3	n.m.	n.m.	41.2	0.2	1.2
Hansen	OW(V)	GBP	0.95	0.54	76%	1.0	0.8	0.7	10.4	7.2	5.1	n.m.	30.6	10.6	na	0.7
Transmissions																
Mean						0.6	0.6	0.5	9.0	6.0	4.7	21.8	16.2	10.2	0.6	1.3
Median						0.7	0.6	0.6	7.8	6.5	5.1	19.9	13.7	9.9	0.7	1.2
Capital Goods																
Aerospace & Defence						0.8	0.7	0.7	7.0	6.2	5.4	13.5	10.8	9.3	1.5	3.0
Appliances						0.4	0.3	0.3	4.5	3.3	2.7	9.2	7.0	6.3	0.4	1.9
Building Technology						1.7	1.6	1.4	9.7	8.5	7.4	16.2	14.1	12.6	1.4	3.4
Commercial Vehicles						1.1	1.0	0.9	10.2	7.6	6.0	26.1	15.4	12.5	0.6	2.4
Diversifieds						1.5	1.3	1.1	12.4	10.3	8.2	20.5	16.2	13.1	0.8	3.2
Power Technology						1.1	0.9	0.7	8.9	6.7	5.2	16.4	12.1	10.5	2.6	3.2
Production Technology						1.6	1.4	1.2	10.0	8.0	6.9	18.5	14.2	12.1	0.9	3.5
Shipbuilding						0.9	1.0	0.9	6.7	7.8	7.0	13.1	14.4	12.3	0.8	2.4
Mean						1.1	1.0	0.9	8.7	7.3	6.1	16.7	13.0	11.1	1.1	2.9
Median						1.1	1.0	0.9	9.3	7.7	6.4	16.3	14.1	12.2	0.9	3.1
Solar																
Downstream - solar cells/panels manufacture						0.9	0.8	0.7	10.0	7.4	6.0	32.7	22.5	14.6	1.4	1.2
Upstream - silicon/wafer production						1.4	1.4	1.4	7.6	7.0	6.6	17.6	17.7	16.2	1.2	1.9
Integrated						1.2	1.1	0.9	5.9	5.2	4.3	11.2	12.7	9.7	1.2	1.4
Mean						1.2	1.1	1.0	8.2	6.8	5.8	21.1	18.7	14.1	1.2	1.5
Median						1.1	1.0	0.9	6.7	6.2	5.4	14.9	15.3	12.6	1.0	1.3

Source: HSBC estimates. Price as of 25 August. Suzlon 2012e PE excluded in calculating Mean and Median

How we value Wind farm developers

Detailed valuation summaries for each company can be found in the companies section of this note, but we summarise our approach here. Acciona, IBR and EDPR all operate 'build to keep' wind farm development models and therefore maximise the value derived from their projects, by owning and operating the wind farms they develop, as opposed to a 'build to sell' model, where the developer chooses to sell the project to a third party, either as an operational wind farm or as a fully consented pre-construction project. EDF EN operates a mixture of both models – it keeps some (most actually) and sells some, which helps cash flow and thus financing of future development projects.

Valuation summary

Wind farm developers – valuation summary

	IBR	EDPR	Acciona	EDF EN
Operating assets				
Installed capacity (MW)	11,010	5,665	5,363	2,145
Value (EURm)	13,935	7,612	7,241	3,523
Value per MW (EURm)	1.27	1.34	1.35	1.64
Construction assets				
Total capacity (MW)	1,464	1,319	453	318
Value (EURm)	1,440	1,230	434	381
Value per MW (EURm)	0.98	0.93	0.96	1.20
Pipeline				
Total capacity (MW)	49,901	30,951	23,747	14,919
Pipeline (EURm)	2,475	1,200	1,200	500
Value per MW (EUR'000)	50	39	51	34

Source: company data, HSBC estimates

EDF EN and Acciona have higher valued operating portfolios, on a per MW basis, than IBR and EDPR, at EUR1.65 and EUR1.35 per MW respectively, since these companies both use project finance, with higher leverage (typically, 80% debt, 20% equity (although Acciona's value per MW is lower than EDF EN's due to Acciona's Spanish market exposure). IBR and EDPR both mainly finance their projects using credit from

their parent companies (with an optimal capital structure of 50% debt, 50% equity).

EDF EN has the highest value of operating portfolio on a per MW basis (EUR1.64 per MW), on our estimates. This is due to its higher exposure (in relative terms) to regions such as Italy, Greece and the UK, which have favourable tariff pricing regimes and thus achieve higher project NPVs.

We estimate that Acciona and IBR have the highest quality development portfolio at EUR51,000 per MW and EUR50,000 per MW respectively. This is due to their projects being at a more advanced stage than say EDPR's, which includes nearly 10GW of 'prospecting' rights in its c31GW development portfolio (also, Acciona should realise a higher value per MW from its pipeline due to higher leverage – see above). The reason for the lower value per MW for EDF EN's pipeline is that EDF EN operates a 'keep some, sell some' business model, whereby it builds and sells some wind farms, rather than a pure 'build to keep' model like IBR, EDPR and Acciona.

SOTP methodology – valuing wind farm assets

In order to calculate the value of the company's 'build to keep' wind assets under this method we have set up project valuation models to estimate the DCF-derived NPV per kW for projects in the wind farm developers main markets, paying particular attention to unifying assumptions in those markets where more than one of the wind farm developers are present (ie US, Spain, Portugal, UK and France).

We calculate the value per MW of the wind business in each market by adding together two components: the investment cost and the NPV element. We outline these components and related assumptions below.

- ▶ **Investment cost element:** we estimate the investment costs of existing installations and projects under construction
- ▶ **NPV element:** we forecast the DCF-derived NPV expected from operating assets. We perform separate calculations for assets acquired in 2009 (ie following the impact of the credit market freeze of September 08) and those calculated pre-freeze.

For existing assets, we reduce the total of these two components by 5% pa to reflect the 20 year life of the wind farms

Assumptions under the 'build to keep' approach

Our NPV calculation assumes that the developer keeps the wind farm, which it has developed from greenfield, and therefore represents the maximum NPV available to a developer.

We have made the following additional assumptions:

1) Wind regime

Our capacity (or load) factor assumptions are based on historic performance and guidance provided by the company, where available, coupled with average capacity factor data for each market. EDPR, IBR and Acciona provide good information on the average capacity factors by market. EDF EN does not provide detailed historic information on the capacity factors by market. Thus, when there is overlap between one of its main markets and one of the remaining three wind farm developers, we have taken the lower of the three capacity factors and the average capacity factor in that market.

2) Tariffs

Our tariff assumptions are based on current tariff prices/PPA prices in each market coupled with implied tariff prices deduced from information provided by the wind farm developers. Again,

EDPR, in particular, and also IBR, provide good information in this area.

3) Other incentives

We have included other incentives in our model, ie, Treasury grant, PTC and MACRs (accelerated tax depreciation) in the US.

4) Financing structure

For EDF EN and Acciona, which adopt a project financing model for their wind farms, we have adopted a debt:equity structure of 80:20 for all markets except the US. In the US, we have prepared our model based on a tax equity partnership flip structure except for forecasting new installations during 2009, where we have used an 80:20 debt:equity structure and we have assumed the Treasury grant is received.

For IBR and EDPR, which receive credit from their parent companies to finance their wind farms (as well as use of retained profits), we have adopted an optimal debt:equity structure of 50:50. This decreased leverage gives rise to a higher WACC (despite a lower cost of debt) and therefore reduces project NPVs.

5) Cost of debt

For EDF EN and Acciona, we have assumed a margin of 300bps over the 10 year EURO mid swap rate for wind farms added in 2009 and 100bps for wind farms added prior to that. The large difference in margin is due to the impact of the credit freeze of September 2008.

We have assumed lower debt margins for EDPR and IBR, which receive cheaper credit from their parent companies. For both companies we have adopted a margin of 250bps in 2009 and 100bps in 2008.

The impact on cost of debt is lessened as a result of EURIBOR (and the 10 year EURO mid swap rate) falling over the period. We have assumed 10 year

EURO mid swap rate of 3.5% for 2009 wind farms and 4.5% for wind farms installed prior to that.

6) Cost of equity

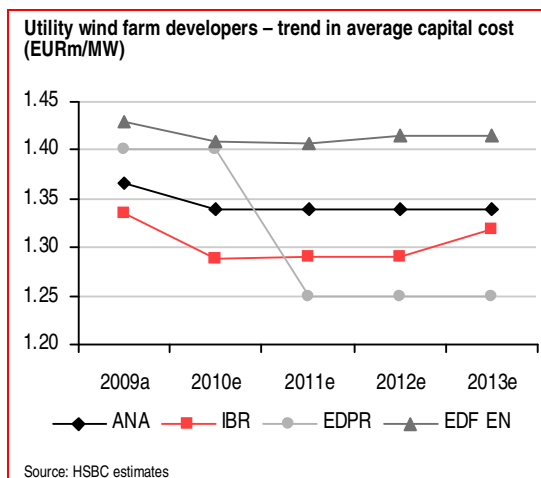
We have used a beta of 1 in our cost of equity calculations and have adopted a different cost of equity depending on the market but have been consistent for companies that are present in the same markets.

Using the example of EDF EN and EDPR in Portugal, we have adopted an equity market risk premium of 4.5% in both cases for 2008 and 2009, and risk free rates of 4.5% and 4.0% in 2009 and 2008 respectively. This gives rise to a cost of equity in both cases of 9.0% in 2009 and 8.5% in 2008.

Similar trends apply for other market ie the cost of equity reduces slightly over 2009 due to a decrease in the risk free rate (and an EMRP that remains unchanged).

7) Capital costs

We have observed an upward trend in capital costs over the period 2006-08 and then we assume a downward trend thereafter. We have also assumed different prices in different regions.



The drop in capital cost for EDPR is partly due to a lower price per MW under its framework agreement with Vestas.

8) Operating costs

These can vary a lot within each region. Broadly, operating margin for European projects are of the order 80-85% and US projects are of the order 75-80%. We have assumed EUR30-40k per kWpa for the European markets, excluding the UK where we have assumed EUR55 per kW pa.

DCF limitations

In our view, the DCF methodology has its limitations for valuing a wind-farm developer/operator on a high and long-term growth track, such as the wind farm developers. The main reasons are:

- ▶ The high upfront investment costs required for the company's wind farms are included over the DCF period, but the revenue stream from all wind farms is not fully reflected (unless a steady state is reached and a suitable terminal value is used)
- ▶ DCF does not allow for the different financing structures of the SPVs that hold wind farms in different regions
- ▶ The terminal value in the DCF does not sufficiently capture the decommissioning of the wind farm at the end of its UEL (Useful Economic Life) (about 20 years) and subsequent re-powering if applicable
- ▶ DCF does not capture the value of the pipeline (needs to be added on separately)

We thus only use DCF in valuing the wind turbine manufacturing business and not the wind farm development and other renewable business.

Peer comparison for the Developers

We expect the utility wind farm developers to receive a steady flow of income on their renewable assets over the next 20 years or so. The return on these assets is fairly predictable: the revenue stream is determined largely by fixed government incentives on tariffs or Power Purchase Agreements (PPAs) over the life of the renewable asset. In the case of wind assets, this is coupled with wind measurements, which can be predicted within reasonable error bounds from year to year. Thus, their renewable assets are reasonably easy to value.

Relative to fair value of renewable assets

Amongst the wind farm developers we cover, Acciona, EDPR and IBR all operate a build-to-keep business model (ie develop, build, own and operate their wind farms). Acciona and EDPR are trading below the fair value of their operating plus construction renewable assets, which we calculate are worth EUR69.4 and EUR5.8 per share, compared to their current share prices of EUR60.7 and EUR4.3 respectively. IBR, on the other hand, is trading at par to the fair value of its operating plus construction renewable assets, which we calculate are worth EUR2.5 per share (current share price is EUR2.52). However, we believe this is more because investors are attributing some value to IBR's non-renewable businesses (gas storage, thermal and energy management).

In all cases, no value seems to be attributed to future growth in the renewable business of any of the three wind farm developers.

The discount of the current share price to the fair value of assets becomes even more pronounced in the case of Acciona, if we include the value of its other business units (construction, real estate, concessions, water and environmental services,

Comparison of valuation of renewable assets (EUR/share)

Valuation (EUR/share)	Acciona	EDPR	IBR*
Operating assets	116.7	8.7	3.3
Construction assets	7.0	1.4	0.3
Other renewables	36.8	0	0.2
Less: Net Debt	91.1	4.3	1.4
Equity value per (renewables)	69.4	5.8	2.5
Current share price (as close of 25 August 2010)	60.7	4.3	2.5
% (discount)/premium to equity value of operating/construction assets	(13%)	(25%)	0%
Pipeline valuation	19.3	1.4	0.6
Total equity value (renewables)	88.7	7.2	3.1
% (discount)/premium to current share price	46%	66%	23%

*Note: We have possibly underestimated the equity value of IBR's operating/construction assets since we have not excluded the component of net debt relating to non-renewable assets (as the company does not provide a split).
Source: HSBC estimates

wine and fund management), which we do not currently include in our valuation.

Relative to EV per MW of operational wind assets

Wind farm developers – relative valuation EV per MW (operational wind assets) (as close of 25 August 2010)

Company	Currency	EV (m)	MW	EV/MW
IBR	EUR	16,329	11,010	1.48
ANA	EUR	9,513	5,363	1.77
EDPR	EUR	7,556	5,665	1.33
EDF EN	EUR	5,617	2,145	2.62
Terna	EUR	345	142	2.43
Infigen	EUR	1,176	1,726	0.68
Plambeck	EUR	124	788	0.16
Enertad	EUR	446	208.4	2.14
Greentech	EUR	132	68	1.94

Source: company data, Bloomberg, HSBC

We compare the wind farm developers on their indicative EV/MW valuation multiple. Amongst the top wind farm developers (ANA, IBR, EDPR and EDF EN), EDPR is the cheapest on a per MW basis with an EV/MW of 1.33x while EDF EN is trading at the highest multiple of 2.62x. The reason for this is two fold: firstly, EDF EN operates a project finance based financing model, thus its projects are more highly levered than IBR and EDPR and the equity return is therefore higher; secondly, it sells some its wind farms, which creates value that is included in the EV (but not the MW kept).

Utility wind farm developers – relative valuation (Prices as close of 25 August 2010)

	Rating	Currency	Target price	Current price	P'tial return	EV/Sales			EV/EBITDA			PE			PEG			P/BV
						2010e	2011e	2012e	2010e	2011e	2012e	2010e	2011e	2012e	2010e	2011e	2012e	2010e
IBR	OW(V)	EUR	3.5	2.5	39%	6.2	5.8	5.3	10.0	9.1	8.1	23.8	20.6	17.2	1.4	1.4	1.2	0.8
Terna Energy	OW(V)	EUR	5.0	3.4	46%	6.8	6.1	4.4	17.4	12.0	7.3	31.9	18.0	9.9	N/A	N/A	n.m.	1.0
EDP R	OW(V)	EUR	7.3	4.3	67%	6.8	6.3	5.8	8.4	7.7	7.0	30.8	26.1	19.7	1.3	1.0	0.8	0.7
Acciona	OW(V)	EUR	94.0	60.7	55%	1.6	1.6	1.6	9.0	8.1	7.4	18.4	14.5	12.1	1.0	1.0	1.1	0.7
EDF EN	N(V)	EUR	34.0	30.9	10%	4.7	4.6	4.4	14.5	12.8	11.8	21.9	16.8	13.5	0.9	1.0	1.1	1.7
Infigen Energy	NR	AUD	N/A	0.7	N/A	8.6	7.0	1.3	14.0	10.5	1.9	n.m.	65.0	N/A	N/A	N/A	N/A	0.6
PNE Wind	NR	EUR	N/A	1.8	N/A	1.2	0.9	0.7	8.2	7.2	5.6	12.0	7.8	N/A	N/A	N/A	N/A	1.2
ERG Renewable	NR	EUR	N/A	0.8	N/A	10.1	5.8	5.1	18.9	8.5	7.4	n.m.	78.5	N/A	N/A	N/A	N/A	1.1
Greentech Energy	NR	DKK	N/A	11.3	N/A	6.7	6.5	5.1	12.2	10.4	7.8	94.2	14.7	N/A	N/A	N/A	N/A	0.3
					Mean	5.9	4.9	3.7	12.5	9.6	7.1	33.3	29.1	14.5	1.2	1.1	1.0	0.9
					Median	6.7	5.8	4.4	12.2	9.1	7.4	23.8	18.0	13.5	1.1	1.0	1.1	0.8

*Note: PNE Wind was earlier known as Plambeck Neue Energia and ERG Renewable was earlier known as Enertad
Source: HSBC estimates, Thomson Financial DataStream (for stocks not covered by HSBC)

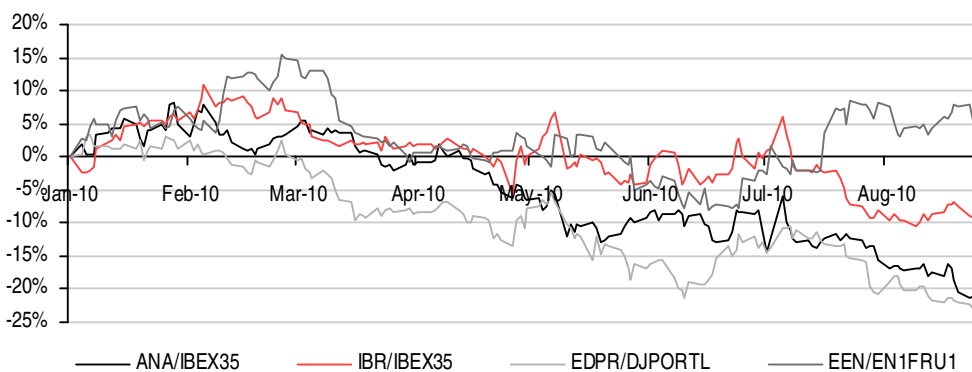
However, this is only a limited exercise for the following reasons:

- ▶ The business model of the wind farm developers is not identical for all, some operate 'build-to-keep' while some operate 'keep some – sell some' business model
- ▶ We take only the operational wind farm assets and not the under construction wind assets and other renewable assets (operational and under construction)
 - ▶ Companies do not provide a split of net debt by business division meaning while we only take the wind operational assets, the net debt is for the group level (clearly some portion of net debt should be associated to other business segments as well, for the instance solar division of EDF EN). For Acciona, which provides a split of net debt by business segments, we have taken net debt associated with only the Energy division
 - ▶ We take the last reported Net Debt and operational MW to calculate the EV

Relative to the market

The sovereign debt risk in Europe and in particular Southern Europe has led to wider sell off in equities globally. The share prices of all wind farm developers under our coverage are down some 15%-35% each since the beginning of January 2010 and have under-performed their respective local markets as shown in the chart below (except EDF EN which has outperformed its local market by 6% since beginning of Jan. 2010).

Utility wind farm developers – price relative chart of each stock relative to its local market since the beginning of January 2010



Source: Thomson DataStream

Wind farm developers versus European electric utilities

The wind farm developers are currently trading at the sector average of 23.7x on 2010e PE compared to sector average of 11x for the European utilities. However, the utilities sector is trading at higher PEG 2010e multiple (2.1x) compared to the wind farm developers sector (1x). This is due to the much high growth potential offered by the wind farm developers sector compared to the utilities sector.

On 2010e P/BV, the wind developers are trading at sector average of 1x which is attractive compared to the sector average of 1.7x for European utilities. This again highlights the fact that the wind developer sector has witnessed dramatic sell-off primarily caused by the regulatory uncertainty in Spain and US, the two biggest wind markets.

Amongst the wind developers, Acciona is cheapest on all multiples compared to its peers (except EV/EBITDA where EDPR is cheapest). This is mainly due to its large exposure to Spanish construction and real estate market which has caused weakness in its share price, which we consider unjustified. We believe that as Acciona increases its exposure to renewable energy, the stock will experience a re-rating.

EDF EN is trading at 3x 2010e EV/MW multiple which is highest in its peer group. This is due to the fact that EDF EN has been least sold-out on the back of its well-diversified portfolio which has considerably reduced the regulatory uncertainty that is being faced by IBR, EDPR and Acciona, all of which are have large exposure to Spain, in terms of operating assets.

Relative valuation – Wind farm developers versus European Utilities (Price as of close of 25th Aug. 2010)

	Rating	Currency	Target price	Current price	EV/sales 2010e	2011e	2012e	EV/EBITDA 2010e	2011e	2012e	PE 2010e	2011e	2012e	PEG 2010e	P/BV 2010e	EV/MW 2010e
Wind farm developer																
IBR	OW(V)	EUR	3.50	2.52	6.2	5.8	5.3	10.0	9.1	8.1	23.8	20.6	17.2	1.3	0.8	1.4
EDP R	OW(V)	EUR	7.25	4.33	6.8	6.3	5.8	8.4	7.7	7.0	30.8	26.1	19.7	1.2	0.7	1.1
EDF EN	OW(V)	EUR	34.00	30.89	4.7	4.6	4.4	14.5	12.8	11.8	21.9	16.8	13.5	0.8	1.7	3.0
Acciona	OW(V)	EUR	94.00	60.70	1.6	1.6	1.6	9.0	8.1	7.4	18.4	14.5	12.1	0.8	0.7	1.7
Mean					4.8	4.6	4.3	10.5	9.4	8.6	23.7	19.5	15.6	1.0	1.0	1.8
Median					5.5	5.2	4.9	9.5	8.6	7.8	22.9	18.7	15.3	1.0	0.8	1.6
Utilities																
CEZ a.s.	UW	CZK	900.00	820.00	2.9	3.0	3.0	6.5	6.7	6.8	9.4	9.4	9.1	4.8	2.0	1.6
Drax Group	OW	GBP	4.50	3.86	1.0	0.9	0.9	3.7	4.1	4.2	6.5	7.1	7.3	n.m.	1.2	0.4
Fortum OYJ	OW	EUR	21.00	17.96	3.5	3.4	3.2	8.1	8.0	7.5	11.4	11.3	10.6	2.9	1.9	1.4
Verbund	UW	EUR	22.00	27.79	3.1	3.0	2.7	9.2	8.5	7.8	17.4	16.7	15.2	2.4	2.4	1.2
International Power	N(V)	GBP	4.00	3.67	2.1	1.9	1.8	8.4	7.5	6.7	16.6	13.7	11.7	0.9	1.1	1.6
EDF	UW	EUR	39.00	31.48	1.8	1.8	1.7	7.2	6.8	6.6	16.9	14.7	13.7	1.5	2.0	1.3
ENEL	OW	EUR	4.50	3.68	1.5	1.4	1.4	6.1	5.9	5.6	7.9	7.8	7.3	1.9	1.0	1.1
EDP	OW	EUR	3.20	2.41	1.8	1.8	1.7	6.8	6.7	6.3	8.3	7.8	7.1	1.1	1.2	1.2
Iberdrola	N	EUR	6.26	5.28	2.2	2.1	2.0	8.1	7.7	7.2	10.9	10.0	9.1	1.2	1.0	1.4
Enagas	OW	EUR	16.00	13.68	6.5	6.2	5.9	8.3	7.9	7.5	10.1	9.8	9.2	2.1	1.9	n/a
Gas Natural	OW	EUR	14.10	11.63	2.0	1.9	1.7	6.7	6.3	5.9	8.3	7.3	7.0	0.9	0.9	2.0
GDF Suez	N	EUR	28.00	24.30	1.2	1.2	1.1	7.4	6.2	5.8	12.7	11.5	10.1	1.1	0.9	1.8
Centrica	OW	GBP	3.50	3.25	0.8	0.8	0.8	6.0	5.7	5.5	13.0	12.3	11.4	2.0	3.5	3.0
E.ON	N	EUR	25.00	22.10	0.8	0.8	0.8	5.5	5.4	5.1	8.2	9.2	8.6	n.m.	0.9	1.0
RWE	UW	EUR	52.00	52.26	1.0	1.0	1.0	5.5	5.6	5.5	7.4	8.8	8.6	n.m.	1.8	1.1
SSE	N	GBP	12.20	11.26	0.9	0.9	0.9	8.5	8.7	8.3	10.4	10.0	9.9	4.2	3.1	1.7
Mean					2.1	2.0	1.9	7.0	6.7	6.4	11.0	10.5	9.7	2.1	1.7	1.5
Median					1.8	1.8	1.7	7.0	6.7	6.5	10.2	9.9	9.2	1.9	1.5	1.4

Source: HSBC estimates

Comparing the wind farm developers

- ▶ EDPR is our highest conviction idea – provides most potential return
- ▶ Acciona is second
- ▶ IBR is third – consistently scores highest on qualitative criteria but currently offers less potential return

Qualitative scorecard

We have developed a performance scorecard for the wind farm developers. EDPR is our highest conviction idea and Acciona is second as per this scorecard (see table on next page).

Methodology

Our two-stage scorecard takes into account a) a performance metric (comprising of various qualitative and quantitative criteria) and b) potential return on the stock.

At the first stage, the quantitative criteria include the portfolio size, grants/allocations received, electricity pricing risk/ regulatory risk, financial strength, and the future growth profile. For the qualitative criteria, we include strategic targets/ quality of management and the level of disclosure provided by a particular company.

To the ranks of each company on each criterion, we then apply different weights (which we assign based on their relative importance to the company's performance, in our view) and arrive at first-stage score.

The second-stage ranks the stocks on the potential return offered by a stock and multiplies the rank with a multiple (10x) to arrive at the second-stage score.

We apply equal weights to the two scores arrived at the end of each stage and the sum total of the two weighted score gives us our overall ranking.

The scores are given in descending order (from 6 to 1), meaning the better a company is on a particular criterion, the higher score it gets. For example, we believe the level of disclosure is best for EDPR so it gets a score of 6 on that criterion while Terna Energy is weakest in disclosures and hence it gets the lowest score of 1.

Analysis

EDPR and Acciona are our highest conviction ideas

EDPR provides the best disclosure and is second best (after IBR) in terms of portfolio size, financial strength and quality of management. It also currently provides the most potential return of the wind farm developers.

Acciona is amongst the top-three ranked stocks on 4 out of the 6 criteria and also provides second-best potential return of the wind farm developers.

IBR consistently ranks among the top-three companies on almost all criteria which underscores the high quality of the company. The only criterion where IBR scores lower is the 'electricity pricing/ regulatory risk', due to its exposure to such risk in Spain and US, its two biggest markets.

But IBR still does not figure in our top-three preferred stocks due to the lower score achieved on valuation (potential return). However, this once again highlights the faith market has in IBR's stock as it shows that IBR's stock price has been punished less relative to the other wind farm developers.

Performance metric

In this section, we compare the major wind farm developers on various qualitative and quantitative factors, which we believe are important when making an investment decision on their stocks:

- ▶ **Portfolio size:** IBR is the largest wind player in the world with 11GW of operating assets. Acciona has the largest non-wind renewable business in the world with 1.1GW of STEG (Solar Thermal Electric Generation), Solar PV, small hydro/hydro and biomass operating assets.
- ▶ **Recent market developments:** we focus on (i) US Treasury grant disbursement (USD4.8bn in cash), (ii) Spanish project pre-registration (9GW of renewable projects allocated out to 2012) and (iii) recent large

Wind farm developers – Relative valuation scorecard

INPUT (Raw values)

Stage I – Performance metric	IBR	EDPR	Acciona	EDF EN	Terna Energy
Portfolio size	5	4	3	2	1
Grants/allocations	5	3	4	2	1
Electricity pricing risk/regulatory risk	3	2	1	5	4
Financial strength	5	4	3	2	1
Growth profile	5	3	2	4	1
Strategic targets/management	3	4	2	5	1
Disclosure	4	5	3	2	1
Score	30	25	18	22	10
	1	2	4	3	5

Stage II – Valuation

Potential return (%)	39%	67%	55%	10%	46%
	2	5	4	1	3

OUTPUT (Values weighted by relative importance)

Stage I – Performance metric	Weighting	IBR	EDPR	Acciona	EDF EN	Terna Energy
Portfolio size	10%	5	4	3	2	1
Grants/allocations	10%	5	3	4	2	1
Electricity pricing risk	30%	9	6	3	15	12
Financial strength	20%	10	8	6	4	2
Growth profile	10%	5	3	2	4	1
Strategic targets/management	10%	3	4	2	5	1
Disclosure	10%	4	5	3	2	1
Score – Performance metric	100%	41	33	23	34	19
Ranking		1	3	4	2	5
Stage II – Valuation						
Score - Potential return (%)	100%	20	50	40	10	30
Valuation ranking		4	1	2	5	3
Total score (Stage I + Stage II)		61	83	63	44	49
Overall ranking		3	1	2	5	4

Source: HSBC

offshore development right allocations in the UK totalling 32GW (enough to power a quarter of the UK's electricity). IBR was a winner in all three markets.

- ▶ **Electricity pricing risk:** how secure are the wind farm developers' cash flows? Acciona is most exposed to electricity prices, with 73% exposure to Spain (unhedged). IBR and EDPR are both hedged. EDF EN has no exposure to Spain.
- ▶ **Financial strength:** IBR and EDPR have strong financial support from their parent groups, which provide credit for the financing of nearly all of their wind farms. EDF EN and Acciona raise project finance, which has made financing difficult over the last year or so; however, the project finance market is now starting to improve.
- ▶ **Growth profile:** EDPR offers the most attractive earnings growth with a three year EPS CAGR of 24% over 2010e-13e. EDF EN has the best estimated three year EBITDA CAGR of 21%.
- ▶ **Strategic targets and detailed disclosure:** Information disclosure is good at EDPR and IBR at all levels. Acciona and EDF EN give their long-term new installations (wind and other renewables) as well as financial targets but limited or no information on capacity factors and wind tariffs across geographies.

Utility wind farm developers – a comparison of renewable energy assets, including geographical split of wind assets and pipeline (MW)

	Iberdrola Renovables	Acciona	EDPR	EDF EN
Operating assets				
Wind	11,010	5,363	5,665	2,145
STEG	50	114	-	-
Solar PV	-	33	-	120
Hydro	-	679	-	-
Small hydro	342	232	-	101
Biomass	4	33	-	68
Thermal/co-gen	0	100	-	18
Under construction				
Wind	1,464	453	1,317	318
STEG	-	150	-	-
Solar PV	-	-	-	138
Hydro	-	-	-	-
Small hydro	-	-	-	-
Biomass	-	32	-	7
Thermal/co-gen	-	-	-	-
Wind - operating assets	11,010	5,363	5,665	2,145
Geographic split:				
Spain	47%	73%	34%	0%
Europe (ex-Spain)	8%	7%	18%	58%
Europe	55%	80%	52%	58%
US	35%	8%	48%	41%
RoW	10%	12%	0%	1%
Non-fixed tariff regimes	47%	73%	34%	0%
Wind – pipeline	49,901	23,897*	28,588	12,984
Geographic split:				
Spain	18%	29%	16%	0%
Europe (ex-Spain)	15%	n/a	18%	32%
Europe	34%	n/a	34%	32%
US	49%	n/a	61%	59%
RoW	17%	n/a	4%	9%
Non-fixed tariff regimes	18%	29%	16%	0%

*At its Strategy Day in March 2010, Acciona has only provided that 29% of its development pipeline is in Spain and the remaining 71% is International.
Source: company data, HSBC estimates

1) Renewable asset portfolio size

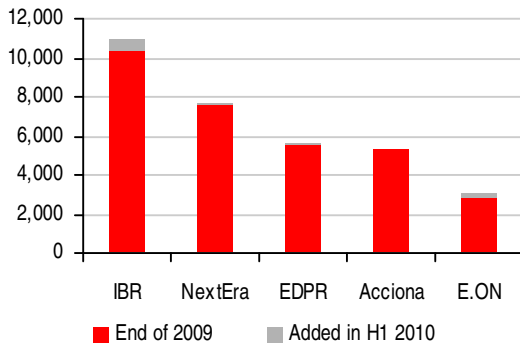
Iberdrola Renovables is the largest wind farm developer/operator globally with 11GW of wind installed capacity followed by NextEra (FPL group) with over 7.6GW (net). EDPR is the third-largest wind farm developer globally with c5.7GW (net) wind operational assets.

Acciona has not installed any new wind farms in the last six months and it now has c5.4GW (net) wind operational assets (including 2GW of wind assets from Endesa at the end of June 2009).

E.ON with more than 3GW wind operational assets completes the top-five global wind farm developers/operators.

EDF EN is relatively small but is still a top-10 wind farm developer globally and had 2.1GW net wind capacity under operation at end H1 2010.

Wind farm developers - top five companies globally (operational wind assets MW)



Source: company data, HSBC

2) Recent market developments

In 2010, the US, Spanish and UK (offshore) have been important markets for the utility wind farm developers we follow, not always with positive effect.

- ▶ **US:** USD4.8bn in Treasury grant cash disbursements for renewable projects in the US, mostly (USD4.2bn) allocated to wind projects but in H1 only 1.3GW
- ▶ **UK (offshore):** 32GW worth of offshore development right allocations – enough capacity to power a quarter of the UK
- ▶ **Spain:** 9GW worth of renewable project announced on a pre-registry list (to receive favourable tariffs), including 6.4GW of wind projects to be installed by the end of 2012.

We have reviewed these developments for the wind farm developers we cover, and evaluate the winners and losers.

US market – Treasury grant is short-term driver

The US is the world's largest wind market with 25% of new installations globally over 2005-08. In the near term, we expect the US Treasury grant to be a support for the sector in the US market, however, in the absence of a federal RES

(Renewable Electricity Standard) and given that PPAs (Power Purchase Agreements) are low due to the advent of shale gas, the US market has been weak so far during H1 2010 installing just 1.3GW in new wind capacity.

The US Treasury Grants scheme, which provides a cash grant of 30% of a renewable energy project's capital cost, has until now made nearly cUSD4.8bn of disbursements to renewable projects since it got underway in July 2009. Wind projects have received c88% of the total allocations (source: US DoE website).

US Treasury grant allotments to projects in various renewable technologies since the beginning of allotments in July 2009

Technology	USDm
Wind	4,215
Geothermal	158
Biomass	103
Solar PV	285
Landfill	17
Hydro (Incremental)	4
Fuel cell	3
Solar thermal	2
CHP	5
Others	2
Total	4,794

Source: US DOE, HSBC

According to the US DoE list, a total of 150 wind projects have received grants so far totalling cUSD4.2bn (as in the table above).

EDPR has the highest US market penetration with 48% of its operating assets located in the US. Iberdrola Renovables has 35% and EDF EN 41% of their operating assets in the US. Acciona currently has the least exposure (8% of operating assets) in the US, among the four major wind farm developers. However, it is looking to significantly increase this percentage over time – we forecast a third of all new installations will be in the US.

The major winners and losers from the US Treasury Grants scheme, in our view, are:

Winners: IBR has been the major beneficiary of the programme receiving USD976m in treasury grants until now (2009: USD580m, 2010-to-date: USD394m). EDPR has received more than USD300m while Acciona has received cUSD100m in grants.

Losers: EDF EN has received just cUSD70m in grants under the programme, which puts it at a disadvantage in the promising US wind market (out of its 605MW (gross) wind capacity under construction at end H1 2010, one-third was in the US). NextEra Energy (FPL) has won a relatively small number (cUSD430m) of grants considering it is the number one wind farm developer in the US (based on cumulative capacity).

Spain – adds visibility in coming years

In December 2009, the Spanish Industry Ministry announced that it has included 338 projects with a total generating capacity of 9GW in a pre-registry list for renewable energy. The projects will be entitled to receive renewable energy subsidies at current levels before a new regulatory framework, likely to grant lower subsidies, comes into force in 2013 for future renewable energy projects. The projects are to be operational by 2012 in the case of wind energy and by 2013 in case of solar thermal.

Renewable projects included in the Spanish pre-registry list, split by technology

Technology	MW
Wind	6,389
Solar thermal	2,340
Cogeneration	155
Biomass	88
Biogas	37
Small hydro	25
Hydro	18
Total	9,051

Source: HSBC, Ministry of Industry, Tourism and Trade

Winners: Iberdrola Renovables (Wind: 1.2GW, STEG: 50MW) and Acciona (Wind: 824MW, STEG: 250MW and Biomass: 30MW) both won more projects than we were forecasting in Spain. In particular, Acciona has won 324MW of wind projects more than we were forecasting. At this stage, we have not upgraded our forecasts as Acciona may decide to sell the development rights rather than develop them itself.

Spain pre-registry allotments – major winners of government approvals (MW)

Company	Wind	STEG
Iberdrola Renovables	1,175	50
Acciona	1,104	250
EDP Renovaveis	840	
Eolia Renovables	631	
Fersa	253	
Abengoa		650
ACS		300
FCC		100
OHL		100
Others*	2,386	890
Total	6,389	2,340

* unidentifiable with information that is publicly available
Source: HSBC, Ministry of Industry, Tourism and Trade

Losers: EDPR (Wind: 840MW) won fewer projects than we were forecasting. Our previous forecasts for Spain were 1,260MW over the period; we are now forecasting just 750MW. However, positive developments on projects in Poland and Bulgaria should more than offset this, in our view. Moreover, we estimate that project NPVs are higher in Poland and Bulgaria than they are in Spain.

Offshore wind development rights awarded by the UK Crown Estate (MW)

	Round III	Round II	Scotland	Total
Utilities				
Iberdrola Renovables	3,600	250	1,500	5,350
Scottish & Southern Energy	4,000	252	2,321	6,573
EDP Renovaveis	975	-	-	975
E.ON	600	600	300	1,500
RWE Renewables	3,750	2,202	-	5,952
Vattenfall	3,600	300	-	3,900
Centrica	4,200	1,390	-	5,590
DONG Energy	-	1,422	280	1,702
Sub-total	20,725	6,416	4,401	31,542
Others				
Statoil Hydro	2,250	158	-	2,408
Stakraft	2,250	158	-	2,408
SeaEnergy Renewables	325	-	913	1,238
Mainstream Renewable Power	2,000	-	360	2,360
Eneco	900	-	-	900
Flour	1,750	-	350	2,100
Siemens	2,000	-	-	2,000
Masdar	-	200	-	200
Warwick Energy	-	560	-	560
Fred Olsen Renewables	-	-	415	415
Sub-total	11,475	1,076	2,038	14,589
Total	32,200	7,492	6,439	46,131

Source: UK Crown Estate, HSBC

Offshore – UK is the main market

UK is currently the biggest offshore wind market globally with more than 1GW of cumulative capacity installed out of the global installed capacity of 2.2GW by end 2009.

The UK offshore market witnessed a great deal of activity in 2009 and early 2010 with the announcement of 6.4GW offshore wind contracts in Scottish Territorial Waters (February 2009) and 32GW contracts in UK waters (Round 3 announced in January 2010) by the UK Crown Estate. This was on the back of 7.5GW offshore contracts awarded by the Crown Estate in 2003 under Round 2.

According to the data from BWEA, there are currently 1.45GW offshore wind projects under construction in UK and another 2.6GW projects have been approved. Turbine orders for all of the projects under construction have been placed. Siemens will supply turbines for 1GW, Vestas will supply for 300MW and REpower will supply for 150MW offshore project.

Regulatory support

In April 2009, the UK government increased the ROCs (renewable obligation certificate) available for electricity produced from offshore wind to 2 ROC per MWh from 1.5 ROC per MWh for projects reaching financial closure in the period from April 09 till March 10. In December 2009 this time limit was extended to March 2014 in a bid to help the UK reach its aggressive renewable energy targets.

This was a positive signal to the offshore wind market at a time where the economic viability of the projects was decreasing due to increasing turbine costs in the UK (mostly due to the weak pound impacting imported turbine prices) and also was not helped by weak project finance markets and banks' lack of risk appetite (offshore projects being more risky than onshore projects).

What about China?

China and the US are the two largest wind markets in the world – we forecast c61% of new installations globally in 2010. However, while the US is highly

important for the utility wind farm developers we cover, China is not. None of our covered wind farm developers have material exposure to China; it is much more of a domestic market.

3) Electricity pricing risk

Wind farm developers typically have good visibility on earnings/operating cash flow since most wind markets operate fixed government incentivised tariffs or Power Purchase Agreements (PPAs) over the life of the wind farm, coupled with wind measurements, which can be predicted within reasonable error bounds. However, some markets have electricity pricing risk. The main market where our wind farm developers have electricity pricing risk exposure is Spain. There is some potential electricity pricing risk in the US and the UK too (to the extent a PPA is not signed), but it is much more common to sign long-term PPAs in these markets.

Utility wind farm developers – a comparison of geographical split of wind operational assets at end H1 2010

	IBR	Acciona	EDPR	EDF EN
Total capacity (MW)	11,010	5,363	5,665	2,145
Spain	47%	73%	34%	-
US	35%	8%	48%	41%
UK	7%	-	-	7%
Portugal	-	2%	11%	14%
France	-	-	4%	16%
Greece	-	1%	-	9%
RoW	10%	16%	3%	14%

Source: Company data, HSBC

Acciona has the highest exposure to markets where there is electricity pricing risk with 73% of operating assets in Spain. Iberdrola Renovables and EDPR have c47% and c34% exposure to Spain respectively but both hedge their electricity price exposure in this market. Acciona does not hedge in Spain – and believes that it is now too late to start to hedge as it believes that the pool price in Spain is bottoming out. All three companies have a lesser degree of pricing risk exposure in the UK and the US.

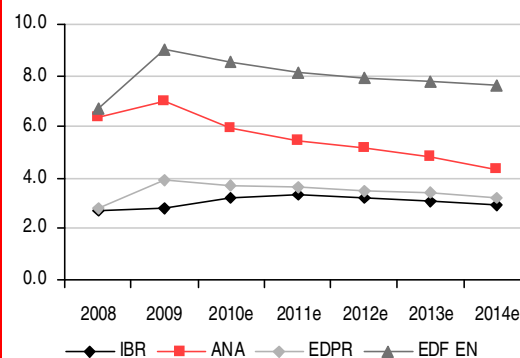
EDF EN is the most geographically diversified wind farm developer and has a relatively lower exposure to markets with electricity pricing risk (just 7% exposure to the UK, no Spanish market exposure).

4) Financial strength

Financial strength is important for the wind farm developers as wind farms are very capital intensive (at cEUR1.4m per MW for onshore wind farms and cEUR3.4m per MW for offshore installations) and all the companies we follow are pursuing aggressive build-out plans. There are two different financing models:

- ▶ **Project finance:** due to the predictable nature of the return on a wind farm, project finance can be raised, typically 80% debt and 20% equity.
- ▶ **Corporate debt:** in the case of utility spin offs which have a utility parent company with a strong credit rating, corporate debt can be raised cheaply at the parent company level and lent down (typically at a slight premium). Optimum capital structure in this case is 50% debt, 50% equity (if debt is too high, there is a risk to the parent company's credit rating).

Utility wind farm developers – net debt/EBITDA analysis



Source: Company data, HSBC estimates

Acciona and EDF EN mainly use project finance to fund their wind farms. The project finance markets have been difficult over the last year or so but are now starting to show signs of improvement.

IBR and EDPR pursue the corporate debt model: they have strong financial support and commitment from their respective parent groups, which provide credit for the financing of nearly all of their wind farms. This was an advantage for both companies when the project finance markets froze a year or so ago.

Currently, IBR is the most financially sound company based on net debt/EBITDA with a 2010e multiple of 3.2x. EDPR is close with a multiple of 3.7x for 2010e.

Acciona has significantly reduced its net debt after the completion of the Endesa transaction. It plans to keep net debt around this new lower level by reducing capex in its non-renewables division. We forecast that its net debt will tend towards 4x times EBITDA over the next five years as will IBR's and EDPR's to around 3x.

However, we forecast EDF EN to have a net debt/EBITDA multiple of around 9x over the same time period. This is not unusual for a company consolidating a SPV each of which has raised project finance (of 80% debt).

5) Growth profile

We believe EDPR provides the most attractive earning growth rate during 2010e-13e with 3 year EPS CAGR of 24%. EDF EN provides the most attractive EBITDA 3-year CAGR of 21%, on our estimates.

Utility wind farm developers – HSBC forecast 3 years EPS and EBITDA CAGR

	EPS CAGR (2010e-13e)	EBITDA CAGR (2010e-13e)
EDP Renovaveis	24%	17%
EDF EN	21%	20%
Acciona	19%	13%
Iberdrola Renovables	16%	16%

Source: HSBC estimates

6) Detailed disclosure

Strategic targets are important for wind farm developers as they give visibility over installations and hence capex spend. Investors can also get a sense as to where the company is planning to invest in the coming years (ie IBR and EDPR are both planning to expand out of Spain and into the US).

At its Strategy Day in March 2010, Acciona disclosed its long-term strategic and financial targets at the group level and at divisional level as well. It targets to install 2.4GW in wind capacity over 2010-13 implying an average run rate of 600MW per annum. In STEG, Acciona has a target to install 300MW over 2010-13.

EDPR has a strategic target of achieving 10.5GW installed capacity by 2012 and its parent group has expressed a firm commitment to ensuring the necessary financing is in place. In the near-term, EDPR targets to install 1.0-1.1GW (net) wind capacity over the next two years.

EDF EN has a strategic target of achieving 4.2GW (net) installed renewable capacity including 500MW in solar, by 2012, but does not have such strong support from its parent group.

On the other hand, although Iberdrola Renovables has financing arrangements commensurate with EDPR, it does not currently have a long-term strategic target. It does however give near-term guidance on achieving renewable installed capacity of 12.5GW by 2010 and has, fairly quickly, come back to its guidance of annual installations of 2GW, guidance initially given at the time of its IPO back in November 2007.

Currently, EDPR provides the best level of disclosure on its operating wind farms, which are of a better than average quality in nearly all of its markets. IBR provides good information on its operating wind farm assets and pipeline. Acciona and EDF EN do not provide much detail on their operating assets or development pipeline.

This page has been intentionally left blank.

Companies section

Acciona (ANA SM)

- ▶ The concerns about sovereign data and construction news have been more than discounted in the share price, in our view
- ▶ Acciona gives investors exposure to high-growth wind, solar thermal and water desalination industries
- ▶ We reiterate our OW(V) rating, but adjustments to tariff assumptions lead us to reduce our target price to EUR94 (from EUR120)

Recent downward share price move overdone

Amongst the wind farm developers under our coverage, Acciona has witnessed the most share-price weakness in the current market turmoil. Acciona's share price is down more than 33% since the beginning of 2010 and down 37% from its peak of EUR96 in mid-January. It has underperformed its local market IBER35 by over 15% since January this year.

We believe the company's exposure to the Spanish construction and real estate market, which is one of the worst hit in Europe, has disproportionately dragged the share price down. In our view, this is somewhat overdone as the company is increasing its international presence, and so reducing its Spanish exposure.

No longer a Spanish construction conglomerate

Acciona is no longer a pure Spanish construction conglomerate, but, in our view, is being treated as

James Magness*
Analyst
HSBC Bank plc
+44 20 7991 3464
jjames.magness@hsbcib.com

Robert Clover *
Analyst
HSBC Bank plc
+44 20 7991 6741
robert.clover@hsbcib.com

*Employed by a non-US affiliate of HSBC Securities (USA) Inc., and is not registered/qualified pursuant to FINRA regulations

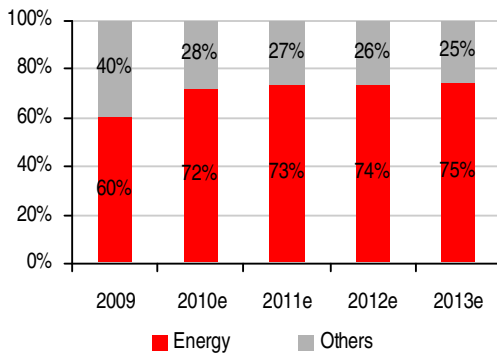
Acciona –price movement relative to IBEX35 index since the beginning of January 2010



Source: Thomson Financial DataStream, HSBC

if it were. We think the story is one of refocusing and restructuring. There is an increasing focus on the renewable energy division and an increased focus on expansion overseas. According to the group's strategic targets, the renewable energy division will account for 70% of group EBITDA in 2013e (c76% according to our forecasts, but we are more conservative on growth in the non-renewable businesses) up from 60% in 2009.

Acciona – Contribution of Energy division to group EBITDA (HSBC forecast)



Source: Company data, HSBC estimates

Furthermore, Acciona is reducing its Spanish exposure through international expansion. For example, in the renewable energy division, we forecast that two-thirds of new wind installations over the next four years will be outside Spain, reducing total Spanish exposure to 60% for the operational wind farms (from 73% in 2009).

High growth wind industry

Acciona is the fourth largest wind-farm developer/owner globally. At the end of H1 2010, Acciona had c5.4GW of net wind operating capacity, 453MW of wind assets under construction. Acciona also has a large wind development pipeline of around 24GW.

A rare STEG opportunity

At end H1 2010, Acciona has 114MW of operational STEG assets (50MW plant in Spain and a 64MW STEG plant in Nevada, US). This, coupled with the 150MW of STEG plants under

construction, make Acciona one of only a few major global STEG players. Acciona is thus a rare opportunity to gain some STEG exposure.

A world leader in water desalination

Acciona is a global leader in water treatment and desalination. Acciona Water contributes only a small part of the group's earnings right now, but Water is one of Acciona's three core strategic pillars, and is one of Acciona's fastest growing business areas and already the most internationally spread.

Acciona Agua has good exposure to the fast-growing Australian and higher-growth European markets.

H1 2010 results

Acciona reported weak set of H1 2010 results which were below market expectations at all levels (except net income). Revenue was EUR3bn, 3% up y-o-y but 3% below consensus. Although Energy division revenue was up 42% from H1 2009, the group revenue was dragged down by the infrastructure division, for which revenue was down 10% y-o-y, impacted by the lack of activity in Spanish construction market (the division accounts 50% of the group revenue). EBITDA was EUR528m, 2% below consensus but 38% higher than H1 09. This was primarily due to increased contribution by the high margin Energy division (75% contribution to group EBITDA in H1 2010 versus 63% in H1 2009).

Acciona installed no renewable projects during the first half but construction assets increased to 635MW (including wind assets of 453MW) from 590MW at end Q1 2010.

Acciona's strategic targets versus our forecast

Acciona has a strategic target to add 2,400MW wind capacity over 2010-13 implying 600MW addition every year on average. We aim to be

conservative in our new installation forecast due to weaker project finance market in short term, and we forecast Acciona to install 1,950MW new wind capacity over next four years (versus our earlier forecast of 2,100MW).

Acciona – Net wind installations forecast – new v old

	2010e	2011e	2012e	2013e
New forecast	125	525	700	600
Old forecast	375	525	600	600

Source: HSBC estimates

During 2010e-12e, we forecast wind installations to be weighted more towards 2012e (and peak in 2012e) in order to enable Acciona to meet its installation targets but also to reduce the impact of lower wind premiums (35% cut from existing premiums) under the agreement between the Spanish Industry Ministry and the Spanish wind sector that expires in end 2012.

In March 2010, Acciona won a contract to build three wind farms in Mexico with a total combined capacity of 306MW. The wind farms are expected to be commissioned by the end of 2011 and will comprise 204 units of 1.5MW wind turbines which Acciona will source internally from its turbine manufacturing division.

In other renewables, Acciona has a target to install 300MW of STEG capacity over 2010-13 implying 75MW installations pa on average. Again, we aim to be conservative on our installation forecast and forecast Acciona to install 150MW over 2010e-13e (same as our earlier forecast).

Acciona – Net STEG installations forecast – new v old

	2010e	2011e	2012e	2013e
New forecast	100	50	0	0
Old forecast	100	50	0	0

Source: HSBC estimates

Impact of changes on our forecast

We have cut our assumption for wind tariff in Spain over 2010e-14e due to the continued weakness in Spanish pool prices. Due to the continued lack of activity in the Spanish construction market, we believe that Acciona's Infrastructure and real estate division will continue to be lacklustre and have cut their y-o-y growth rates for 2010e-12e.

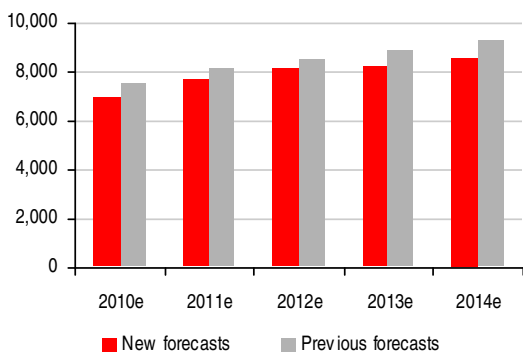
ANA – HSBC assumption for wind tariff in Spain (EUR/MWh)

	2010e	2011e	2012e	2013e	2014e
New assumption	70	75	77	78	79
Old assumption	80	83	85	87	89

Source: HSBC estimates

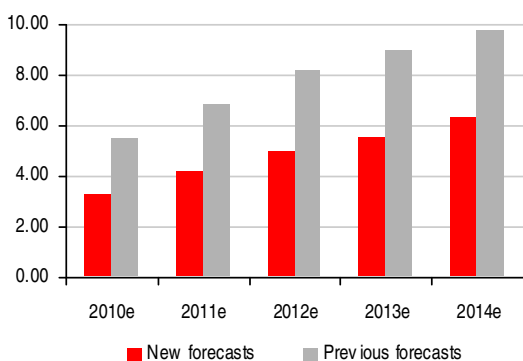
This results in a 5%-8% reduction in our revenue forecast for 2010e-12e. We forecast the wind turbine division to increase its revenue share in the Energy division going forward but as it is a low margin business (compared to electricity sales); we believe it will result in a drop in EBITDA margin for the Energy division on the whole. And since the Energy division contributes over 70% to the group EBITDA, the impact on EPS is more pronounced. EPS are now down c40% over 2010e-12e.

ANA – Sales forecast (EURm) – new vs. old



Source: HSBC estimates

ANA – EPS forecast (EUR) – new vs. old



Source: HSBC estimates

HSBC versus consensus

Acciona – Sales forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	6,355	6,946	7,666	6,983	1%
2011e	7,286	7,388	8,162	7,675	4%
2012e	7,389	7,949	8,695	8,124	2%

Source: Bloomberg, HSBC estimates

Acciona – EBITDA forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	1,147	1,262	1,335	1,269	1%
2011e	1,352	1,443	1,526	1,495	4%
2012e	1,614	1,656	1,676	1,708	3%

Source: Bloomberg, HSBC estimates

Valuation

We cut our target price to EUR94 from EUR120 earlier but maintain our Overweight (V) rating on Acciona.

We believe that wider market concerns over sovereign risk in Southern Europe have caused weakness in Acciona's share price since early 2010. Acciona is no longer a pure Spanish construction conglomerate, but, in our view, is being treated as if it were.

In order to emphasise the embedded value in Acciona, we now value all non-renewable/environmental divisions at zero. These divisions include the construction and real estate businesses, areas which have been particularly badly hit by Spain's deep recession. Clearly some value should be attached to these divisions, in our view. In fact, we believe the divisions still have the equity value of cEUR27 per share that we gave them in our initiation report, published 28 October 2009. However, we do not today believe that the market will currently place an appropriate value on these in light of current concerns in Spain. It is clear to us that if these were appropriately valued it would add further upside to our price target.

Valuation

Our valuation includes SOTP components for the operating and construction renewable assets and the wind farm development pipeline. In order to calculate the value of Acciona's wind assets, we have set up project valuation models, taking into account country-specific wind tariff regimes, capital costs, capacity factors of a typical wind farm and also market multiples like equity market risk premium (EMRP) and risk free rate (RFR), to estimate the NPV per kW for projects in its main markets, including the US, Spain, Australia and Germany. We calculate the value per MW of the operational assets, under construction assets and probability

weighted development pipeline, separately, in each market by adding together two components: the investment cost and the NPV element.

We value Acciona's operational wind farm assets of 5,363MW at cEUR7,241m with an average implied value of EUR1.35m per MW. In addition, we value the 453MW of construction assets at EUR434m – assuming 50% of capex has been incurred and the probability-weighted wind development pipeline of c24GW at EUR1,200m, implying a value of EUR51,000/MW.

We value Acciona's other renewable operational assets (911MW hydro and mini-hydro, 114MW solar thermal, 33MW solar PV, 33MW biomass assets and 100MW cogeneration assets) using the same valuation methodology.

Wind turbine business

Acciona is a top 10 wind turbine manufacturer globally but on a group level it is a small business segment. We value the wind turbine business using DCF methodology and add 2% to the group's WACC of 7.5% to reflect the risk of a small but growing business.

We have not included any central overheads in our valuation as we believe they are fully reflected in our project-valuation models.

This results in a fair valuation for Acciona of EUR94.27, which we round down to EUR94 to arrive at our new target price, down from EUR120 previously due to the cut in our wind tariff assumptions (primarily in Spain) and cut in our wind installation forecast, explained earlier. Our new target price implies 55% potential return over one year, which is above the 18.5% threshold limit for Neutral band for volatile European stocks under HSBC's research model, so we maintain our Overweight (V) rating on the stock.

Risks

Downside risks to our view include:

- ▶ Acciona operates in a regulated industry environment and is dependent, in many cases, on government subsidies (like PTC/ITC or treasury grants in the US market) to provide adequate returns on investment. Furthermore, government subsidy regimes can change dramatically, impacting the company's margins
- ▶ Acciona is mainly dependent on the Spanish market. This may prove inadequate to mitigate its business risk.
- ▶ Acciona may not be able to secure appropriate power purchasing agreements (PPAs) for its operating assets in the US.
- ▶ Acciona may not install all of its planned wind installations from greenfield developments. This could lead to lower project NPV
- ▶ The recent turmoil in the credit and equity markets may impact Acciona's ability to raise the capital we expect will be necessary to develop its pipeline fully and at sufficiently attractive rates to generate an adequate return on its investment
- ▶ Climate change could dramatically change the current observed meteorological wind conditions under which the company's existing and future assets are expected to operate
- ▶ A longer-than-expected downturn in the European (in particular Spanish) real estate and construction industry.

Acciona – changes to our SOTP valuation

	New forecast (EURm)	Old forecast (EURm)	Absolute difference (EURm)	% difference
Operational wind	7,241	8,227	(986)	(12%)
Construction	434	108	327	304%
Pipeline	1,200	1,800	(600)	(33%)
Total wind assets	8,876	10,134	(1,259)	(12%)
wind turbine business	305	413	(108)	(26%)
Total wind	9,180	10,548	(1,367)	(13%)
Other renewable	2,286	2,325	(39)	(2%)
Total Energy	11,467	12,873	(1,406)	(11%)
Environment (ex-water)	114	121	(7)	(4%)
Water	232	264	(32)	(10%)
Construction		-		
Concessions		-		
Real Estate		-		
Logistics & airports		-		
Others		-		
Total	11,813	13,258	(1,445)	(11%)
Adjust:				
Net debt/(cash)	5,656	5,499	157	3%
Minority interest	306	306	0	0%
Equity value	5,858	7,453	(1,602)	(21%)
Value per share (EUR)	94.27	120.09	(25.82)	(22%)
Target price (rounded) (EUR)	94.00	120.00	(26.00)	(22%)

Source: HSBC estimates

Financials & valuation: Acciona

Overweight (V)

Financial statements

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Profit & loss summary (EURm)				
Revenue	6,512	6,983	7,675	8,124
EBITDA	1,043	1,269	1,495	1,707
Depreciation & amortisation	-595	-620	-714	-810
Operating profit/EBIT	448	649	781	897
Net interest	-214	-315	-369	-405
PBT	214	334	412	492
HSBC PBT	214	334	412	493
Taxation	-44	-100	-124	-148
Net profit	1,262	205	260	310
HSBC net profit	107	205	260	310

Cash flow summary (EURm)

Cash flow from operations	10,712	819	952	1,158
Capex	-4,372	-1,007	-1,491	-1,702
Cash flow from investment	-4,229	-1,036	-1,519	-1,736
Dividends	62	-51	-65	-78
Change in net debt	-12,220	268	633	656
FCF equity	-3,734	-187	-539	-544

Balance sheet summary (EURm)

Intangible fixed assets	1,596	1,596	1,596	1,596
Tangible fixed assets	10,838	11,225	12,002	12,893
Current assets	6,325	6,878	7,286	7,515
Cash & others	1,451	1,451	1,451	1,451
Total assets	20,532	21,473	22,657	23,777
Operating liabilities	4,856	5,375	5,732	5,964
Gross debt	8,716	8,984	9,617	10,272
Net debt	7,265	7,533	8,166	8,821
Shareholders funds	5,758	5,911	6,106	6,339
Invested capital	12,452	12,873	13,701	14,589

Ratio, growth and per share analysis

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Y-o-y % change				
Revenue	-9.7	7.2	9.9	5.9
EBITDA	-2.5	21.7	17.8	14.2
Operating profit	-16.4	44.9	20.3	14.8
PBT	-35.3	56.1	23.4	19.4
HSBC EPS	-62.1	91.3	27.0	19.4

Ratios (%)

Revenue/IC (x)	0.4	0.6	0.6	0.6
ROIC	2.1	3.6	4.1	4.4
ROE	2.1	3.5	4.3	5.0
ROA	-0.3	-0.5	-0.4	-0.2
EBITDA margin	16.0	18.2	19.5	21.0
Operating profit margin	6.9	9.3	10.2	11.0
EBITDA/net interest (x)	4.9	4.0	4.1	4.2
Net debt/equity	119.8	121.2	127.3	132.8
Net debt/EBITDA (x)	7.0	5.9	5.5	5.2
CF from operations/net debt	147.4	10.9	11.7	13.1

Per share data (EUR)

EPS Rep (fully diluted)	20.33	3.30	4.19	5.00
HSBC EPS (fully diluted)	1.72	3.30	4.19	5.00
DPS	0.43	0.82	1.05	1.25
Book value	90.60	93.02	96.08	99.75

Valuation data

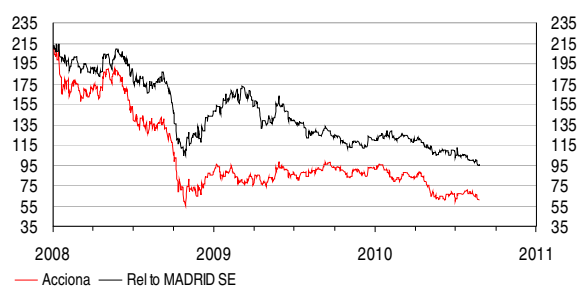
Year to	12/2009a	12/2010e	12/2011e	12/2012e
EV/sales	1.6	1.5	1.5	1.5
EV/EBITDA	10.1	8.5	7.7	7.1
EV/IC	0.8	0.8	0.8	0.8
PE*	35.2	18.4	14.5	12.1
P/Book value	0.7	0.7	0.6	0.6
FCF yield (%)	-114.1	-5.7	-16.5	-16.6
Dividend yield (%)	0.7	1.4	1.7	2.1

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (EUR)	60.70	Target price (EUR)	94.00	Potential return (%)	54.9
Reuters (Equity)	ANA.MC	Bloomberg (Equity)	ANA SM		
Market cap (USDm)	4,872	Market cap (EURm)	3,857		
Free float (%)	40	Enterprise value (EURm)	10807		
Country	Spain	Sector	Construction & Engineering		
Analyst	James Magness	Contact	44 20 7991 3464		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

Iberdrola Renovables (IBR SM)

- ▶ Largest Renewable utility player in the world
- ▶ Firmly on track to meet 2010-end guidance of 12.5GW installed renewable capacity
- ▶ We reiterate our OW(V) rating. Removal of 10% liquidity premium and reductions in our tariff assumptions, however, lead us to cut our target price from EUR4.00 to EUR3.50.

Steady as she goes...

Iberdrola Renovables (IBR) is the largest wind-farm developer/operator globally with more than 11GW operational wind assets.

IBR has been the biggest beneficiary of the US Treasury Grant program receiving cUSD400m in grants in 2010-to-date and cUSD580m in 2009.

Development pipeline

At c50GW, (excluding 10GW as contribution of Gamesa under the Strategic development agreement), it has a larger wind-development pipeline than any other wind farm developer.

IBR – wind capacity at end H1 2010 (MW)

	Operational	Under construction	Pipeline
Spain	5,194	155	9,100
US	3,877	850	24,565
UK	816	206	7,653
RoW	1,123	253	8,583
Total	11,010	1,464	49,901

Source: company data

Biggest beneficiary of US Treasury grant allocations

IBR has received close to USD1bn in US Treasury grants allocations since the program got underway in July 2009. This is more than any of its European peers have received (EDPR has received around USD300m, Acciona has received around USD100m while EDF EN has received cUSD70m until now) and more even than NextEra Energy, which is the largest wind farm operator in US in terms of operating capacity, has received (cUSD430m).

Back to its 'pre-crisis' installation guidance

In 2009, IBR returned to its old guidance of installing 2GW per annum (a target given at the time of its IPO back in November 2007) fairly quickly. This is much better compared to the other wind farm developers who have either cut their long term installation targets or have shifted their installation targets to the near future.

James Magness*
Analyst
HSBC Bank plc
+44 20 7991 3464
jjames.magness@hsbcib.com

Robert Clover *
Analyst
HSBC Bank plc
+44 20 7991 6741
robert.clover @hsbcib.com

*Employed by a non-US affiliate of HSBC Securities (USA) Inc., and is not registered/qualified pursuant to FINRA regulations

IBR has also reiterated its target to install 1GW wind capacity per annum in US in 2011 and 2012.

Good H1 2010 performance

Iberdrola Renovables achieved a good first half of 2010 in spite of the regulatory uncertainty in its main markets, Spain and the US.

New wind installations in H1 were 654MW, c38% of its installation guidance of 1,750MW for 2010 (and our forecast of 1,700MW). In 2009, IBR had installed 46% of its full year installations in H1, but the total installations were only 1,400MW last year. Wind capacity under construction was 1,464MW implying it is well on track to meet its full year installation target of 1,750MW for 2010.

For H1 10, IBR achieved revenue of EUR1.12bn, up 19% y-o-y and EBITDA of EUR707m, up 22% y-o-y. Net Income was EUR158m, up 7% y-o-y primarily on the back of a weak Q2 due to one-time 'mark-to-market' loss of EUR33m. This will however not impact company cashflow.

2010 guidance reiterated

IBR reiterated its guidance to achieve renewable capacity of 12.5GW and 20% earnings growth by end 2010. However, IBR noted that the earnings growth guidance was conservative and could go up. We are currently forecasting c20% growth in earnings for 2010.

IBR's strategic targets versus our forecast

Iberdrola Renovables does not currently have a long-term strategic target. It has only a target to achieve 12.5GW installed capacity by end 2010.

At the moment, we have kept our wind installation forecast unchanged for 2010e-13e. We forecast IBR to install 1.7GW in 2010e in wind capacity (nil in other renewables), thus reaching

12GW in wind installed capacity and 400MW in other renewables by end 2010e.

HSBC wind installation forecast (MW)

	2009a	2010e	2011e	2012e	2013e
New forecast	1,396	1,700	2,000	2,000	2,050
Old forecast	1,396	1,700	2,000	2,000	2,050

Source: HSBC estimates

Impact of changes on our forecast

We have reduced our wind capacity factor assumption for the UK market to 27% (from 28%) to bring it in line with the historical data points over 2007-09a. We have cut our assumption for wind tariff in Spain over 2010e-14e due to the continued weakness in Spanish pool prices.

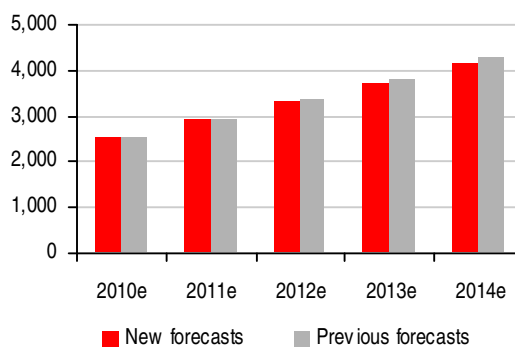
IBR – HSBC assumption for wind tariff in Spain (EUR/MWh)

	2010e	2011e	2012e	2013e	2014e
New assumption	85	85	85	85	85
Old assumption	85	86	87	89	90

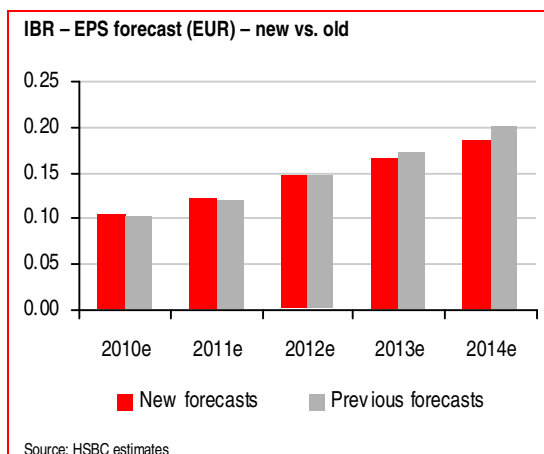
Source: HSBC estimates

This has resulted in slight reduction (0-2%) in our revenue forecasts for 2010e-12e. However, our new EPS forecasts for 2010e-12e actually go up slightly, in spite of the tariff reductions - by 2%-3% - on account of lower interest charge assumptions on the back of low actual net debt for end-2009.

IBR – Sales forecast (EURm) – new vs. old



Source: HSBC estimates



HSBC vs. consensus

IBR – Sales forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	2,113	2,430	2,790	2,541	5%
2011e	2,466	2,812	3,268	2,922	4%
2012e	2,995	3,242	3,527	3,350	3%

Source: Thomson Financial DataStream, HSBC

IBR – EBITDA forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	1,494	1,584	1,653	1,593	1%
2011e	1,679	1,824	1,959	1,876	3%
2012e	1,951	2,095	2,242	2,186	4%

Source: Thomson Financial DataStream, HSBC

Valuation

We value IBR's operational wind farm of 11,010MW at EUR13,395m with an average implied value of EUR1.27m per MW. In addition, we value the 1,464MW of construction assets at EUR1,440m – assuming 50% of capex has been incurred. We also value IBR's gross wind development pipeline (probability weighted and excluding its share in JV with Gamesa) of c49.9GW at EUR2,475m implying a value of EUR50,000/MW.

We apply the same methodology to value its other operational renewable assets (342MW mini-hydro, 50MW STEG and 4MW biomass assets).

We have not included any central overheads in our valuation as we believe they are fully reflected in our project-valuation models.

Liquidity premium removed

The wind farm developers are typically a renewable offshoot of a parent utility/group which still controls the majority stake in the company. Earlier, we were assigning a 10% liquidity premium to IBR to account for it being notably more liquid than the other wind farm developers. But of late, we have noticed that recently the 15 day moving average of daily turnover of IBR is more or less the same as that of Acciona (both are listed on the same exchange IBEX35I). So we now remove the 10% liquidity premium we had previously assigned to IBR. This has shaved off cEUR0.35 from our target price.

Using our basic SOTP methodology and year- and country-specific WACCs, EMRPs and RFRs, we derive a fair value of EUR3.46 per share for the company. We round this off to EUR3.50 to arrive at our new target price, down from EUR4.0 previously due to the removal of 10% liquidity premium and reductions in our tariff assumptions, as explained earlier. Our new target price implies 39% potential return over one year, which is above the 18.5% Neutral threshold for volatile European stocks under HSBC's research model, so we maintain our Overweight (V) rating on the stock.

Risks

Downside risks to our view include:

- ▶ IBR is most dependent on four key markets and on government subsidies to provide adequate returns on investment. Subsidy policies can change dramatically
- ▶ The company's assessment of the quality of its pipeline and, therefore, its ability to grow, may be overly optimistic
- ▶ IBR may not install all of its planned wind installations from greenfield developments.

This could potentially lead to lower project NPVs than we have assumed in our valuation of the company's wind business

- ▶ We may have overestimated the quality of IBR's development pipeline
- ▶ The wind resource at the company's site may not be as good as previously thought. Moreover, it can vary significantly between sites, and we have mainly adopted county average capacity factors.

Iberdrola Renovables – changes to our SOTP valuation

	New forecast (EURm)	Old forecast (EURm)	Absolute difference (EURm)	% difference
Operational wind	13,935	13,639	295	2%
Construction assets	1,440	809	630	78%
Pipeline - wind	2,475	2,975	(500)	(17%)
Total wind assets	17,849	17,424	426	2%
Other renewable	969	984	(16)	(2%)
US FPL contract	184	184	0	0%
Gas storage	640	640	0	0%
Energy management	152	152	0	0%
Thermal	400	400	0	0%
Total	20,194	19,784	410	2%
Adjust:				
Net debt/(cash)	5,684	4,761	923	19%
Minority interest	108	74	35	47%
Non-core	230	321	(91)	(28%)
Equity value	14,632	15,270	(638)	(4%)
Value per share (EUR)	3.46	3.62	(0.15)	(4%)
Liquidity premium (10%)*	0.00	0.36	(0.36)	(100%)
Target price (rounded) (EUR)	3.50	4.00	(0.50)	(13%)

*Note: We have now removed the 10% liquidity premium we were assigning to IBR earlier. Please see the valuation section for details.
Source: HSBC estimates

Financials & valuation: Iberdrola Renovables S.A

Overweight (V)

Financial statements

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Profit & loss summary (EURm)				
Revenue	2,009	2,541	2,922	3,350
EBITDA	1,325	1,593	1,876	2,186
Depreciation & amortisation	-640	-731	-864	-994
Operating profit/EBIT	686	862	1,012	1,192
Net interest	-171	-217	-266	-297
PBT	512	645	746	894
HSBC PBT	515	645	746	894
Taxation	-141	-194	-224	-268
Net profit	365	447	517	620
HSBC net profit	368	447	517	620

Cash flow summary (EURm)

Cash flow from operations	1,110	1,164	1,479	1,724
Capex	-2,475	-2,685	-2,646	-2,451
Cash flow from investment	-2,475	-2,685	-2,646	-2,451
Dividends	0	0	0	0
Change in net debt	330	1,522	1,167	727
FCF equity	-1,272	-1,517	-1,162	-720

Balance sheet summary (EURm)

Intangible fixed assets	4,383	4,304	4,195	4,056
Tangible fixed assets	14,653	16,685	18,576	20,172
Current assets	1,834	1,822	2,056	2,320
Cash & others	258	258	258	258
Total assets	21,537	23,478	25,494	27,215
Operating liabilities	5,433	5,407	5,739	6,113
Gross debt	3,839	5,361	6,528	7,254
Net debt	3,581	5,102	6,269	6,996
Shareholders funds	12,156	12,603	13,120	13,739
Invested capital	15,178	17,146	18,829	20,176

Ratio, growth and per share analysis

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Y-o-y % change				
Revenue	-1.0	26.5	15.0	14.6
EBITDA	11.8	20.2	17.8	16.5
Operating profit	-3.3	25.7	17.4	17.8
PBT	-13.7	26.0	15.6	20.0
HSBC EPS	-7.0	21.5	15.6	20.0

Ratios (%)

Revenue/IC (x)	0.1	0.2	0.2	0.2
ROIC	3.7	4.1	4.4	4.8
ROE	3.1	3.6	4.0	4.6
ROA	2.4	2.7	2.9	3.2
EBITDA margin	66.0	62.7	64.2	65.3
Operating profit margin	34.1	33.9	34.6	35.6
EBITDA/net interest (x)	7.8	7.3	7.0	7.4
Net debt/equity	29.2	40.1	47.4	50.5
Net debt/EBITDA (x)	2.7	3.2	3.3	3.2
CF from operations/net debt	31.0	22.8	23.6	24.7

Per share data (EUR)

EPS Rep (fully diluted)	0.09	0.11	0.12	0.15
HSBC EPS (fully diluted)	0.09	0.11	0.12	0.15
DPS	0.00	0.00	0.00	0.00
Book value	2.88	2.98	3.11	3.25

Valuation data

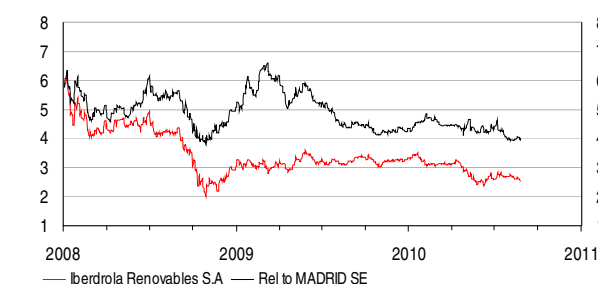
Year to	12/2009a	12/2010e	12/2011e	12/2012e
EV/sales	7.0	6.1	5.7	5.2
EV/EBITDA	10.6	9.7	8.9	8.0
EV/IC	0.9	0.9	0.9	0.9
PE*	28.9	23.8	20.6	17.2
P/Book value	0.9	0.8	0.8	0.8
FCF yield (%)	-12.2	-14.6	-11.2	-6.9
Dividend yield (%)	0.0	0.0	0.0	0.0

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (EUR)	2.52	Target price (EUR)	3.50	Potent'l return (%)	38.9
Reuters (Equity)	IBR.MC	Bloomberg (Equity)	IBR SM		
Market cap (USDm)	13,443	Market cap (EURm)	10,645		
Free float (%)	100	Enterprise value (EURm)	15517		
Country	Spain	Sector	Electric Utilities		
Analyst	James Magness	Contact	44 20 7991 3464		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

EDP Renovaveis (EDPR PL)

- ▶ Trading at highest discount to the fair value of operating and construction assets amongst the wind farm developers
- ▶ EDP R is one of two favoured players in the developer space
- ▶ We reiterate our Overweight (V) rating, but changes to tariff and installation assumptions lead us to cut to our target price to EUR7.25 (from EUR8.0)

Recently more 'sold-off' than other wind developers

EDPR has underperformed its local market

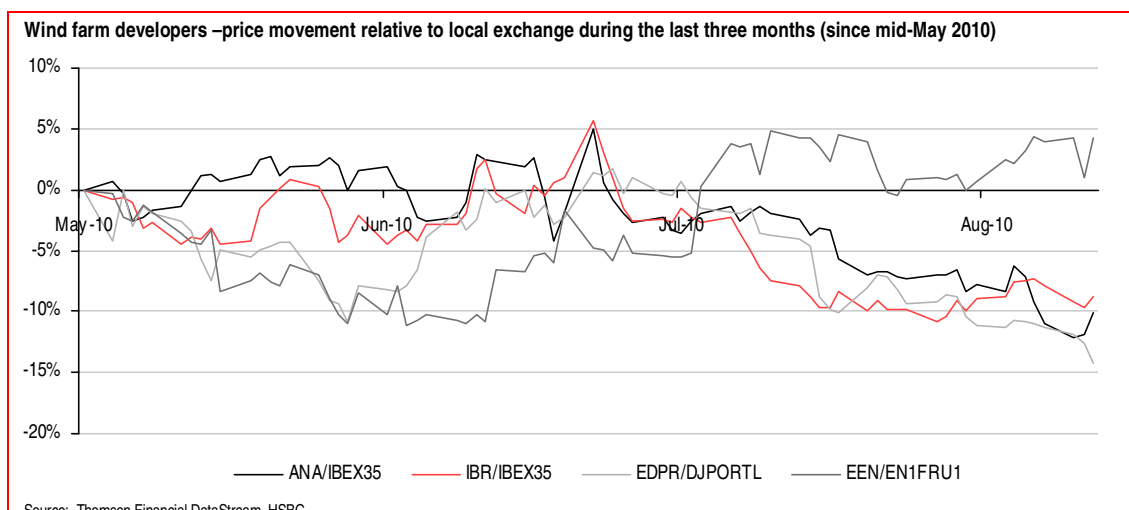
Wider market concerns due to sovereign issues in Southern Europe have caused weakness in the share prices of all wind farm developers. EDPR has suffered more share price weakness than peers in the last three months.

EDPR has underperformed its local market by some 15% during the last three months, which is more than other wind farm developers. IBR and ANA have underperformed IBEX35 by some 10% while EDF EN has outperformed its local market by 4% over the same time period.

James Magness*
Analyst
HSBC Bank plc
+44 20 7991 3464
jjames.magness@hsbcib.com

Robert Clover *
Analyst
HSBC Bank plc
+44 20 7991 6741
robert.clover@hsbcib.com

*Employed by a non-US affiliate of HSBC Securities (USA) Inc., and is not registered/qualified pursuant to FINRA regulations



Trading much below the fair value of operating assets

EDPR is currently trading at a 25% discount to the fair value of its operating and under construction assets (on our estimates, which we consider to be conservative). For Acciona, the discount is 13% while IBR is trading at par (see table below).

Currently, no value seems to be attributed to future growth in the renewable business of any of the three wind farm developers. However, if we include the valuation of the pipeline, we calculate a total equity fair value per share for EDPR which is 66% above the current share price. This difference from the current share price is highest among its peer group (46% for Acciona and 23% for IBR).

Comparison of valuation of renewable assets (EUR/share)			
Valuation (EUR/share)	Acciona	EDPR	IBR
Operating assets	116.7	8.7	3.3
Construction assets	7.0	1.4	0.3
Other renewables	36.8	0.0	0.2
Less: Net Debt	91.1	4.3	1.4
Equity value per share (renewables)	69.4	5.8	2.5
Current share price	60.7	4.3	2.5
% (discount)/premium to equity value of operating/construction assets	(13%)	(25%)	0%
Pipeline valuation	19.3	1.4	0.6
Total equity value (renewables)	88.7	7.2	3.1
% (discount)/premium to current share price	46%	66%	23%

*Note: We have possibly underestimated the equity value of IBR's operating/construction assets since we have not excluded the component of net debt relating to non-renewable assets (as the company does not provide a split). (Price as close of 25th Aug. 2010)
Source: HSBC estimates

Increasing exposure to high growth wind markets

EDPR has one of the largest wind development pipelines worldwide of c31GW (net/gross) and 1.3GW of under construction assets at H1 2010. EDPR targets to install 1.0-1.1GW (net) wind capacity per annum over the next three years.

The US is the biggest market for EDPR, accounting for almost 60% of its development pipeline and 40% of under construction assets.

But EDPR has cut its wind installation guidance in the US by 600MW over 2010-12 due to the high level of regulatory uncertainty (federal RES).

However, EDPR has around 25% of its development pipeline in high growth wind markets like Poland, Romania, Bulgaria etc. which have more favourable wind tariff regime than Spain and the US.

We believe that a reduction in installations in the US will result in higher number of new installations in more favourable regions in the Rest of Europe in future.

EDPR's geographical split of wind development pipeline and under construction assets at end H1 2010

	Pipeline	Under construction
Total	30,949	1,319
US	61%	39%
Spain	16%	25%
Poland	5%	0%
Brazil	4%	5%
UK	4%	0%
France	4%	3%
Romania	2%	17%
RoW	3%	11%

Source: company data, HSBC estimates

Better turbine prices due to framework agreement with Vestas

We believe the long term framework agreement signed with Vestas for 1,500MW (plus an option of further 600MW) should enable EDPR to source turbines at lower prices which will help it to reduce its capital expenditure going forward. This is also indicated by EDPR's forecast of a 10% reduction in capex/MW for 2011e-12e from 2009-10e levels.

H1 2010 results

For H1 2010, revenue was EUR413mm, up 32% y-o-y and EBITDA was EUR343mm, up 20% on the back of increased generating capacity which was up 27% on H1 2009. However, net income was down 47% but that was due to higher depreciation and financing charge on the back of increased installed and under construction

capacity. The wind capacity factors were 31% at group level, same as H1 09. They were lower in the US (32% vs. 36% in H1 09) but this was more than offset by particularly strong capacity factors in Europe, primarily in Spain (28% vs. 26%) and Portugal (31% vs. 25%). Wind farms under construction increased to 1.3GW from 1.1GW at the end Q1 2010.

EDPR's strategic targets versus our forecast

We have cut our new wind installation forecast for 2010e-12e on account of the regulatory uncertainty in the US and Spanish market, both of which are EDPR's biggest markets. We forecast EDPR to install 1,050MW wind capacity per year through 2010e-12e.

EDPR – Net wind installation forecast – EDPR, HSBC new v old

MW	2010e	2011e	2012e	2013e
EDPR target	1,100-1,200	1,100-1,200	1,100-1,200	n/a
HSBC New forecast	1,050	1,050	1,050	1,250
HSBC Old forecast	1,400	1,450	1,350	1,350

Source: HSBC estimates, company information

EDPR has a target to achieve a greater than 30% CAGR growth in EBITDA and net income over the period 2009-12e. We believe we are conservative on the build out of wind assets over the short term. We currently forecast that EDPR will achieve a 22% EBITDA and 19% net income 3-year CAGR over 2009-12e.

EDPR – EBITDA and Net Income 2009-12e CAGR

	EDPR guidance	HSBC forecast
EBITDA	+30%	22%
Net Income	+30%	19%

Source: company data, HSBC estimates

Impact of changes on our forecast

We have updated the financials to reflect the Q2 10 performance. We have cut our assumption for wind tariff in Spain over 2010e-14e due to the continued weakness in Spanish pool prices.

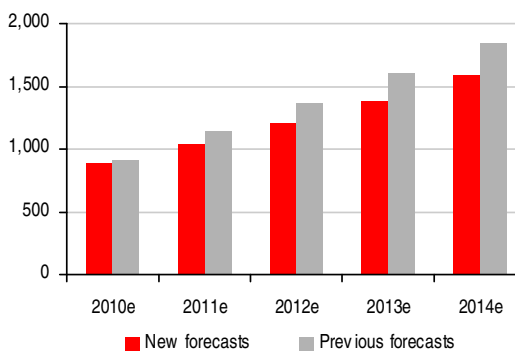
EDPR – HSBC assumption for wind tariff in Spain (EUR/MWh)

	2010e	2011e	2012e	2013e	2014e
New assumption	80	83	85	85	85
Old assumption	85	86	87	89	90

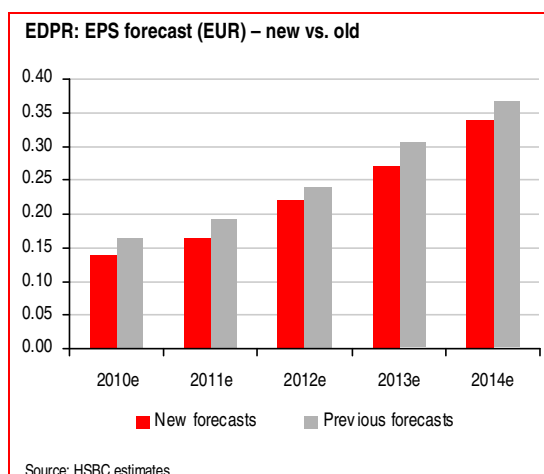
Source: HSBC estimates

This coupled with the cut in new wind installation forecast has resulted in a 2-12% cut in our revenue forecast for 2010e-12e. The cut is more pronounced at the EPS level, which is down 9%-15% for 2010e-12e. This is due to higher depreciation charges on an increased number of under construction assets.

EDPR – Sales forecast (EURm) – new vs. old



Source: HSBC estimates



HSBC versus consensus

EDPR – Sales forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	833	942	1,009	891	(5%)
2011e	991	1,164	1,302	1,040	(11%)
2012e	1,170	1,381	1,571	1,205	(13%)

Source: Bloomberg, HSBC estimates

EDPR – EBITDA forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	659	715	745	716	0%
2011e	748	883	972	849	(4%)
2012e	877	1,051	1,191	995	(5%)

Source: Bloomberg, HSBC estimates

Valuation

We value EDPR using our SOTP based valuation methodology, valuing its operational assets, under construction assets and the probability weighted development pipeline separately.

We value EDPR's operational wind farm of 5,665MW at EUR7,612m with an average implied value of EUR1.34m per MW. In addition, we value the 1,319MW of construction assets at EUR1,230m – assuming 50% of capex has been incurred. We also value EDPR's probability-weighted wind development pipeline at end H1 2010 of c30.9GW at EUR1,200m, implying a value of cEUR39,000/MW.

We have not included any central overheads in our valuation as we believe they are fully reflected in our project-valuation models.

Using our basic SOTP methodology and year- and country-specific WACC, EMRP and RFR for each of EDPR's main wind markets, we derive a fair value of EUR7.26 per share for the company which we round down to EUR7.25 to arrive at our new target price. This is down from EUR8.0 previously due to reductions in our tariff assumptions and new wind installation forecast, as explained earlier.

This implies 67% potential return over one year, which is above the 18.5% Neutral threshold for volatile European stocks under HSBC's research model, so we maintain our Overweight (V) rating on the stock.

Risks

Downside risks to our view include:

- ▶ EDPR operates in a regulated industry environment and is dependent, in many cases, on government subsidies (like PTC/ ITC or treasury grants in the US market) to provide adequate returns on investment – and government subsidy regimes can change dramatically
- ▶ EDPR is mainly dependent on three key markets – the US, Spain and Portugal. This may prove to be inadequate mitigation of its business risk
- ▶ The company's assessment of the quality of its pipeline and, therefore, its ability to grow may be overly optimistic
- ▶ EDPR may not be able to secure appropriate power purchasing agreements (PPAs) for its operating assets in the US
- ▶ EDPR may not be able to find enough windy sites for development and, therefore, maintain

a net increase in its pipeline; this would affect our growth assumptions

- ▶ EDPR may not install all of its planned wind installations from greenfield developments. This could potentially lead to lower project NPVs
- ▶ The recent turmoil in the credit and equity markets may impact EDPR's ability to raise the capital we expect will be necessary to develop its pipeline fully and at sufficiently attractive rates to generate an adequate return on its investment
- ▶ Climate change could dramatically change the current observed meteorological wind conditions under which the company's existing and future assets operate

EDP Renovaveis – changes to our SOTP valuation

	New forecast (EURm)	Old forecast (EURm)	Absolute difference (EURm)	% difference
Operational wind	7,612	6,964	648	9%
Construction	1,230	1,309	(79)	(6%)
Pipeline	1,200	1,475	(275)	(19%)
Total wind assets	10,042	9,749	293	3%
Total enterprise value (EURm)	10,042	9,749	293	3%
Adjust:				
Net debt/(cash)	3,779	2,891	888	31%
Minority interest	107	83	24	30%
Non-core	173	164	9	5%
Equity value (EURm)	6,329	6,939	(610)	(9%)
Value per share (EUR)	7.26	7.95	(0.70)	(9%)
Target price (rounded) (EUR)	7.25	8.00	(0.75)	(9%)

Source: HSBC

Financials & valuation: EDP Renovaveis

Overweight (V)

Financial statements

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Profit & loss summary (EURm)				
Revenue	648	891	1,040	1,205
EBITDA	543	716	849	995
Depreciation & amortisation	-312	-444	-521	-578
Operating profit/EBIT	231	272	329	417
Net interest	-72	-99	-125	-147
PBT	163	174	204	271
HSBC PBT	163	174	204	271
Taxation	-45	-49	-57	-76
Net profit	115	122	145	192
HSBC net profit	115	122	145	192

Cash flow summary (EURm)

Cash flow from operations	542	950	901	1,031
Capex	-1,963	-1,450	-1,354	-1,326
Cash flow from investment	-1,963	-1,450	-1,354	-1,326
Dividends	0	0	-29	-38
Change in net debt	998	440	482	333
FCF equity	-1,421	-499	-453	-294

Balance sheet summary (EURm)

Intangible fixed assets	1,336	1,336	1,336	1,336
Tangible fixed assets	8,635	9,641	10,475	11,222
Current assets	1,105	1,090	1,117	1,147
Cash & others	444	444	444	444
Total assets	11,294	12,285	13,145	13,923
Operating liabilities	2,950	3,376	3,637	3,925
Gross debt	2,673	3,114	3,595	3,928
Net debt	2,230	2,670	3,152	3,484
Shareholders funds	5,220	5,345	5,463	5,620
Invested capital	7,683	8,248	8,847	9,337

Ratio, growth and per share analysis

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Y-o-y % change				
Revenue	21.8	37.5	16.7	15.8
EBITDA	23.9	31.9	18.6	17.2
Operating profit	-0.3	17.9	20.6	27.1
PBT	-1.8	6.7	17.5	32.9
HSBC EPS	9.8	7.0	18.1	32.9

Ratios (%)

Revenue/IC (x)	0.1	0.1	0.1	0.1
ROIC	2.3	2.5	2.8	3.3
ROE	2.2	2.3	2.7	3.5
ROA	1.6	1.1	1.2	1.4
EBITDA margin	83.7	80.3	81.6	82.6
Operating profit margin	35.6	30.6	31.6	34.7
EBITDA/net interest (x)	7.5	7.3	6.8	6.8
Net debt/equity	41.9	49.0	56.6	60.8
Net debt/EBITDA (x)	4.1	3.7	3.7	3.5
CF from operations/net debt	24.3	35.6	28.6	29.6

Per share data (EUR)

EPS Rep (fully diluted)	0.13	0.14	0.17	0.22
HSBC EPS (fully diluted)	0.13	0.14	0.17	0.22
DPS	0.00	0.00	0.03	0.04
Book value	5.98	6.13	6.26	6.44

Valuation data

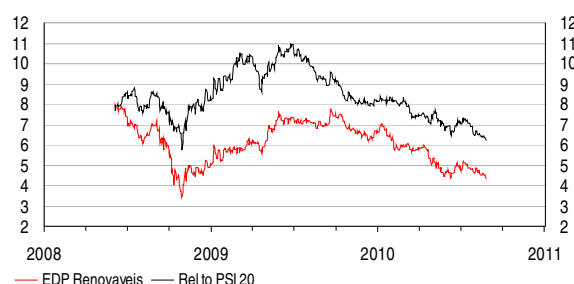
Year to	12/2009a	12/2010e	12/2011e	12/2012e
EV/sales	9.3	7.3	6.7	6.1
EV/EBITDA	11.2	9.1	8.2	7.3
EV/IC	0.8	0.8	0.8	0.8
PE*	33.0	30.8	26.1	19.7
P/Book value	0.7	0.7	0.7	0.7
FCF yield (%)	-37.2	-13.1	-11.8	-7.7
Dividend yield (%)	0.0	0.0	0.8	1.0

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (EUR)	4.33	Target price (EUR)	7.25	Potential return (%)	67.4
Reuters (Equity)	EDPR.LS	Bloomberg (Equity)	EDPR PL		
Market cap (USDm)	4,770	Market cap (EURm)	3,777		
Free float (%)	100	Enterprise value (EURm)	6494		
Country	Portugal	Sector	Independent Power Producers		
Analyst	James Magness	Contact	44 20 7991 3464		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

EDF Energies Nouvelles (EEN FP)

- ▶ Well diversified portfolio with good visibility on tariffs
- ▶ Higher growth than other utility developers due to smaller operating base
- ▶ We have cut our target price to EUR34 (from EUR40) but maintain our Neutral (V) rating

Well diversified portfolio comes to rescue

Whilst we have EDF EN on a Neutral (V) rating really for valuation reasons, it has performed relatively better than the rest of the developers due to its lack of Spanish exposure and its well diversified wind and solar installed capacity and development pipeline. Compared to the other large wind-farm developers/operators (see table on next page), EDF EN has a much higher percentage of its wind farm capacity (and sales) in the markets where there are fixed tariffs or fixed-price PPAs.

This has helped EDF EN to considerably mitigate regulatory risks due to change in wind regime in one or more of its markets.

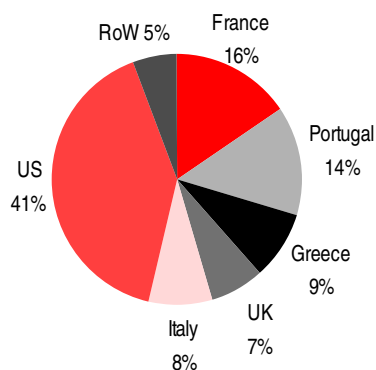
For example, EDF EN has zero exposure to the Spanish wind market which has seen significant regulatory uncertainty and considerable pressure on spot electricity prices in the recent past.

James Magness*
Analyst
HSBC Bank plc
+44 20 7991 3464
james.magness@hsbcib.com

Robert Clover *
Analyst
HSBC Bank plc
+44 20 7991 6741
robert.clover@hsbcib.com

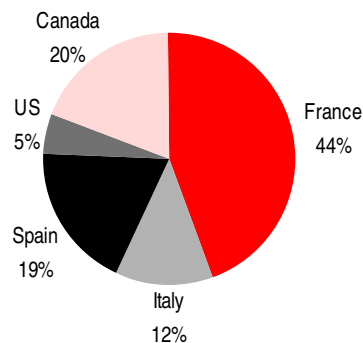
*Employed by a non-US affiliate of HSBC Securities (USA) Inc., and is not registered/qualified pursuant to FINRA regulations

EDF EN – geographical split of installed wind capacity at end H1 2010



Source: company data, HSBC estimates

EDF EN – geographical split of installed solar capacity at end H1 2010



Source: company data, HSBC estimates

Utility wind farm developers – a comparison of geographical split of wind operational assets (MW) at end H1 2010

	IBR	EDPR	Acciona	EDF EN
Total installed capacity	11,010	5,665	5,363	2,194
Spain	47%	34%	73%	-
US	35%	48%	8%	41%
UK	7%	-	-	7%
Portugal	-	11%	2%	14%
France	-	4%	-	16%
Greece	-	-	1%	9%
RoW	10%	3%	16%	14%

Source: company data, HSBC estimates

Turbine needs secured

EDF EN had c2.5GW of turbines contracted with various wind turbine manufacturers at end 2009. This covers its turbine requirements for whole of 2010 and partly for 2011 and gives a good visibility on EDF EN's progress towards achieving its strategic targets for new installations (discussed below).

EDF EN – Turbines contracted as at end 2009

Geography	Turbine supplier	Timeframe	MW
Americas	GE	2010-11	701
	REpower	2010	300
		2011-15	954
Europe	Clipper	2010	30
	Vestas	2010	282
	REpower	2010	60
	Enercon	2010-11	167
Total			2,494

Source: company data

Solar

Regulatory changes in France and Italy

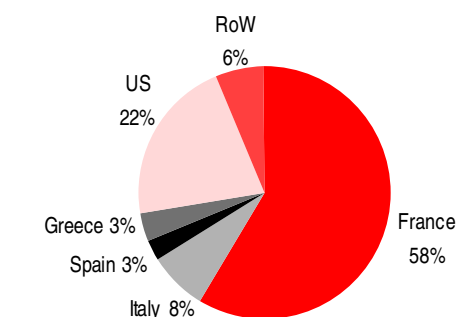
France: The government has unveiled a draft law which proposes a 12% cut in solar tariffs for solar farms (>250kW) starting 1st Sept. 2010. The existing Feed-in-Tariff law already cuts solar tariffs by 10% for roof-top systems and solar farms (<250kW) after 2012.

Italy: The solar tariffs in Italy are currently amongst the highest in Europe. The government is working on a draft law which proposes a deep cut of 30% in solar tariffs in 2011 and by further 6% pa in 2012 and 2013. The law also proposes to

impose a cap of 3GW in new installations during the next 3 years.

France and Italy are among the top markets for EDF EN and combined account for 70% of net under construction assets and 66% of gross solar development pipeline.

EDF EN – geographical split of solar under construction assets plus development pipeline



Source: company data

The proposed cuts in solar tariffs and cap on new installations in these two markets lead us to take a conservative stance on new solar installations during 2010e-12e. We therefore cut our solar installation forecast during 2010e-12e by 15% to 340MW from 400MW earlier.

EIB solar financing

In April 2010, EDF EN executed a framework financing agreement with European Investment Bank (EIB) for EUR500m to finance its solar capacity additions in France. This was part of the MOU signed in December 2009 with EIB and four other banks for a total of EUR1bn in financing to fund its solar projects in France and Italy.

Good H1 2010 results

EDF EN achieved good H1 2010 results at the group and at the divisional level. Revenue was EUR545m, 28% higher than H1 09 and EBITDA was EUR169m, up 15%, primarily on account of the wind farm sales (DSSA) division. Energy sales were up 30% y-o-y on the back of increased generating

capacity in the US and France and good wind conditions in Portugal and in spite of unfavourable wind conditions in the US and UK. Net wind capacity under construction was 318MW.

Strong solar installations in H1 2010

During H1 2010, EDF EN installed 52MW (net) which is much better than 6MW (net) installed in H1 09. This was due to higher installations in France and Spain during H1 10. Net solar capacity under construction was 138MW.

On the back of strong installations in the first half and higher capacity under construction, we raise our solar installation forecast for 2010e to 120MW (net) from 100MW (net) earlier.

EDF EN's strategic targets versus our forecast

EDF EN has a strategic target of achieving 4.2GW of net installed capacity, including 500MW in solar capacity by 2012. This implies a target to achieve 3,700MW net wind installed capacity (a net addition of 1,667MW during 2010-12 over its FY09 end capacity of 2,033MW).

We have cut our wind installation forecast for the year 2010e mainly on account of short-term regulatory uncertainty in the US but over the period 2010e-12e we now forecast EDF EN to add 1,525MW (previously 1,500MW) net wind capacity reaching a net wind installed capacity of 3,558MW by 2012e.

EDF EN – Net wind installations forecast – new v old

MW	2010e	2011e	2012e
New forecast	375	625	525
Old forecast	475	525	500

Source: HSBC estimates

In solar, we have raised our installation forecast for 2010e to 120MW from 100MW earlier due to the strong solar installations and higher construction assets at H1 2010 end. However, we cut our installation forecast during 2010e-12e to

340MW from 400MW on the back of regulatory changes in France and Italy, as mentioned earlier. We now forecast EDF EN to achieve a net installed capacity of 408MW by 2012e.

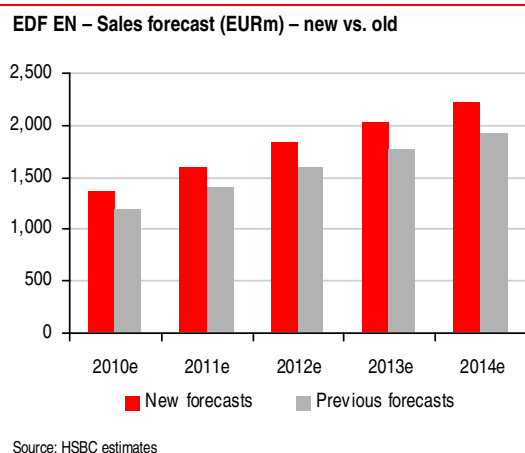
EDF EN – Net solar installations forecast – new v old

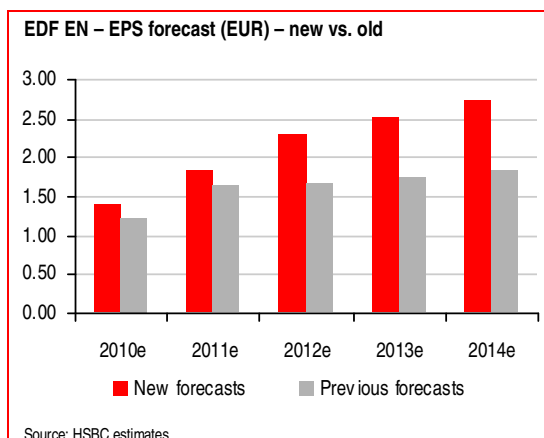
MW	2010e	2011e	2012e
New forecast	120	110	110
Old forecast	100	150	150

Source: HSBC estimates

Impact of changes on our forecast

We update our model for FY2009 and H1 2010 actual figures. We raise our revenue forecast for 2010e-12e by around 9-12% and our 2010e-12e EPS forecast by 8%-27% primarily on account of the base effect due to better than expected H1 results.





HSBC versus consensus

EDF EN – Sales forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	1,194	1,370	1,483	1,376	0%
2011e	1,409	1,565	1,681	1,599	2%
2012e	1,651	1,788	1,963	1,836	3%

Source: HSBC estimates

EDF EN – EBITDA forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	409	444	473	446	0%
2011e	521	575	613	569	-1%
2012e	713	728	741	690	-5%

Source: HSBC estimates

Valuation

We value EDF EN using our DCF-derived SOTP based valuation methodology, valuing its operational assets, under construction assets and the probability weighted development pipeline separately.

EDF EN operates on “keep some – sell some” business model meaning that it sells some of the wind farms it develops and keep the rest for its own account. (IBR, EDPR and ANA all operate a 100% build-to-keep business model).

We value EDF EN’s operational wind farm of 2,145MW at EUR3,523m with an average implied value of EUR1.64m per MW. In addition, we

value the 318MW of construction assets at EUR381m – assuming 50% of capex has been incurred. We also value its gross wind development pipeline (probability weighted) at end H1 2010 of c14.9GW at EUR500m, implying a value of EUR34,000/MW.

We value EDF EN’s other renewable assets (mainly solar) using the same valuation methodology.

We have not included any central overheads in our valuation as we believe they are fully reflected in our project-valuation models.

Using our basic SOTP methodology and year- and country-specific WACC, EMRP and RFR for each of EDF EN’s major markets, we derive a fair value of EUR34.01 per share for the company which we round off to EUR34 to arrive at our target price, down from EUR40 previously. Our new target price implies 11% potential return over one year, which is within the Neutral band of -1.5% to 18.5% for volatile European stocks, under HSBC’s research model, so we maintain our Neutral (V) rating on the stock.

In spite of our earnings estimate upgrades, our price target has come down 15% relative to our previously published target of EUR40, due to reclassification of assets under construction on account of project delays.

Risks

Downside risks to our view include:

- ▶ EDF EN operates in a regulated industry and depends, in many cases, on government subsidies to provide adequate returns on investment – and government subsidy regimes can change dramatically
- ▶ EDF EN may not install all of its planned wind installations from greenfield developments. This could potentially lead to

lower project NPVs than we have assumed in our valuation of the company's wind business

- ▶ The recent turmoil in the credit and equity markets may affect EDF EN's ability to raise the capital we expect will be necessary to develop its pipeline fully and at rates attractive enough to generate an adequate return on its investment
- ▶ We may have overestimated the quality of EDF EN's development pipeline
- ▶ The wind resource at the company's site may not be as good as previously thought. Moreover, it can vary significantly between sites, and we have mainly adopted county average capacity factor

Upside risks to our view include:

- ▶ We may have underestimated the load factors on EDF EN's generation installations. These may turn out to be better than forecast
- ▶ We may get an unexpectedly positive result to the regulatory uncertainty in the US.

EDF EN – changes to our SOTP valuation

	New forecast (EURm)	Old forecast (EURm)	Absolute difference (EURm)	% difference
Operational	3,523	2,753	771	28%
Construction assets	381	755	(374)	(49%)
Pipeline	500	450	50	11%
Build to keep wind assets	4,405	3,958	447	11%
Build to sell wind assets	291	364	(73)	(20%)
O&M - 3rd party sales	156	135	21	16%
Total wind	4,851	4,456	395	9%
Other renewable	842	405	437	108%
Distributed energies	289	244	44	18%
Total enterprise value	5,982	5,105	877	17%
Adjust:				
Net debt/(cash)	3,221	1,911	1,310	69%
Minority interest	263	249	14	5%
Non-core assets	140	122	18	15%
Equity value (EURm)	2,638	3,067	(429.1)	(14%)
Value per share (EUR)	34.01	39.54	(5.5)	(14%)
Target price (rounded) (EUR)	34.00	40.00	(6.0)	(15%)

Source: HSBC estimates

Financials & valuation: Edf Energies Nouvelles

Neutral (V)

Financial statements

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Profit & loss summary (EURm)				
Revenue	1,173	1,376	1,599	1,836
EBITDA	334	446	569	690
Depreciation & amortisation	-104	-142	-187	-228
Operating profit/EBIT	230	305	381	461
Net interest	-104	-143	-173	-204
PBT	126	161	208	257
HSBC PBT	126	161	208	257
Taxation	-21	-45	-58	-72
Net profit	98	109	143	178
HSBC net profit	98	109	143	178

Cash flow summary (EURm)

Cash flow from operations	-57	447	336	333
Capex	-1,278	-1,220	-1,096	-1,115
Cash flow from investment	-1,262	-1,220	-1,096	-1,115
Dividends	-23	-29	-33	-43
Change in net debt	1,486	802	792	825
FCF equity	-1,262	-772	-759	-782

Balance sheet summary (EURm)

Intangible fixed assets	135	135	135	135
Tangible fixed assets	3,594	4,672	5,580	6,466
Current assets	2,006	1,684	1,810	2,015
Cash & others	466	100	100	100
Total assets	6,125	6,881	7,916	9,006
Operating liabilities	945	1,178	1,304	1,427
Gross debt	3,476	3,912	4,705	5,530
Net debt	3,010	3,812	4,605	5,430
Shareholders funds	1,310	1,390	1,499	1,634
Invested capital	4,324	5,213	6,122	7,090

Ratio, growth and per share analysis

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Y-o-y % change				
Revenue	15.5	17.3	16.2	14.8
EBITDA	47.3	33.6	27.4	21.3
Operating profit	39.1	32.4	25.1	21.0
PBT	8.6	28.2	28.9	23.6
HSBC EPS	20.2	11.7	30.5	24.6

Ratios (%)

Revenue/IC (x)	0.3	0.3	0.3	0.3
ROIC	5.4	4.6	4.8	5.0
ROE	7.6	8.1	9.9	11.3
ROA	2.0	1.8	2.0	2.2
EBITDA margin	28.5	32.4	35.6	37.6
Operating profit margin	19.6	22.1	23.8	25.1
EBITDA/net interest (x)	3.2	3.1	3.3	3.4
Net debt/equity	191.4	229.8	259.3	283.1
Net debt/EBITDA (x)	9.0	8.5	8.1	7.9
CF from operations/net debt		11.7	7.3	6.1

Per share data (EUR)

EPS Rep (fully diluted)	1.26	1.41	1.84	2.29
HSBC EPS (fully diluted)	1.26	1.41	1.84	2.29
DPS	0.38	0.42	0.55	0.69
Book value	16.89	17.92	19.33	21.07

Valuation data

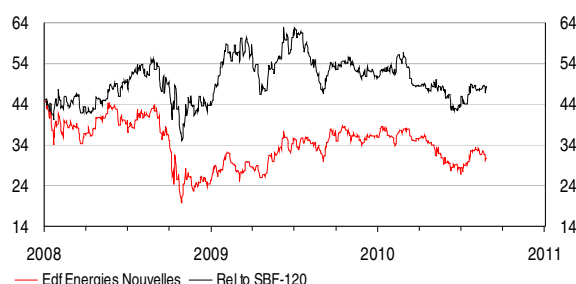
Year to	12/2009a	12/2010e	12/2011e	12/2012e
EV/sales	4.3	4.3	4.2	4.1
EV/EBITDA	15.2	13.2	11.7	10.9
EV/IC	1.2	1.1	1.1	1.1
PE*	24.5	21.9	16.8	13.5
P/Book value	1.8	1.7	1.6	1.5
FCF yield (%)	-61.2	-37.5	-36.8	-37.9
Dividend yield (%)	1.2	1.4	1.8	2.2

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (EUR)	30.89	Target price (EUR)	34.00	Potentl return (%)	10.1
Reuters (Equity)	EEN.PA	Bloomberg (Equity)	EEN FP		
Market cap (USDm)	3,026	Market cap (EURm)	2,396		
Free float (%)	100	Enterprise value (EURm)	5875		
Country	France	Sector	Independent Power Producers		
Analyst	James Magness	Contact	44 20 7991 3464		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

Terna Energy (TENERGY GA)

- ▶ New RES law in Greece improves long-term outlook, but short-term commissioning delays hurt sentiment and lower conviction
- ▶ Following the recent share price weakness (-45% YTD), downside risks from current levels are limited, in our view
- ▶ We have an Overweight (V) rating, with target price of EUR5.0

Investment case

Terna Energy (TE), 47.6% owned by GEK Group, is a leading Greek wind farm developer with 148.5MW of installed and 189.5MW under construction RES capacity. TE currently operates in Greece, Bulgaria and Poland.

Trading below the fair value of operational and under construction assets

Overall, commissioning delays on top of wider Greek macro concerns have dented investor sentiment, lowered conviction on the stock and caused weakness in the share price (down 45% ytd, underperforming the local market by some 15%). That said, we see limited downside risk from present levels, as based on our estimates, TE currently trades 14% below the fair value of its 338MW active assets (ie operational and under construction), which we calculate at EUR4.0/share, hence implying zero value for TE's RES pipeline/growth potential.

Terna Energy – Share price at (discount)/ premium to the fair value of operational and construction assets

	EURm	EUR/ share
Wind parks (Greece)	392.80	3.59
Wind parks (outside Greece)	42.60	0.39
Hydro plants	34.90	0.32
RES (total)	470.30	4.30
Construction	15.00	0.14
Solar	4.00	0.04
Total EV of operational and construction assets	489.30	4.48
Net debt	-29.50	-0.27
SG&A expenses	37.50	0.34
Crisis levy + Higher tax	44.50	0.41
Total equity value	436.80	4.00
Current share price (as of 25 th Aug. 2010)		3.43
(Discount)/premium to fair value of assets		-14%

Source: HSBC estimates

Vangelis Karanikas*

Analyst
HSBC Pantelakis Securities
(Greece)
+30 210 696 5211
vangelis.karanikas@hsbc.com

*Employed by a non-US affiliate of HSBC Securities (USA) Inc, and is not registered/ qualified pursuant to FINRA regulations

New RES law is positive, but regulatory uncertainties remain

We expect the recent new RES law to accelerate the RES licensing procedure in Greece, hence improving TE's long-term outlook. That said, some regulatory uncertainties remain in the short-term and TE will disclose in the next couple of months which of its c550MW future projects will continue to receive the 30% state capex subsidy (at risk in our

view, given the weak public finances) or enjoy a 20% higher feed-in tariff instead. On our estimates, any change is valuation neutral for TE.

Changes to our forecasts

At this juncture, we are keeping our installation and financial forecasts for Terna Energy unchanged as from our last note on Terna (“*Commissioning delays lower conviction*” by Vangelis Karanikas, published on 16 June 2010).

Outlook for 2010

We overall expect 2010 to be poor, with 2010e recurring EPS seen falling 32% y-o-y to EUR0.11 (largely driven by construction activities, 19% below consensus), before a strong recovery in 2011e (+78% to EUR0.19, 2% below consensus) purely on the back of capacity additions and abroad, as we expect the 2010e-11e feed-in tariffs to remain at current levels of EUR87.8/MWh. All in all, we forecast TE to have installed capacity of 177MW and 380MW by end-2010e and 2011e, respectively (below TE’s guidance).

HSBC v consensus

Terna Energy – Sales forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	65	75	98	65	-13%
2011e	91	106	145	91	-14%
2012e	119	152	232	136	-11%

Source: HSBC estimates, Bloomberg

Terna Energy – EBITDA forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	26	33	51	26	-23%
2011e	46	58	89	46	-21%
2012e	68	94	157	81	-14%

Source: HSBC estimates, Bloomberg

Terna Energy – EPS forecast: HSBC vs. consensus (EUR)

	Low	Mean	High	HSBC	HSBC % above/ (below) mean
2010e	0.10	0.15	0.29	0.11	-25%
2011e	0.15	0.23	0.45	0.19	-17%
2012e	0.20	0.39	0.84	0.35	-10%

Source: HSBC estimates, Bloomberg

Catalysts

A new RES law was recently voted by the Greek parliament, which we expect to significantly reduce red tape and accelerate the RES licensing procedure in the country, hence improving the sector’s long-term outlook. Furthermore, the new law introduces a new tariff regime, effectively applying a 20% feed-in tariff increase for those RES projects that will not receive the 30% state capex subsidy. TE said that the evaluation process for 550MW of wind farm capacity is currently underway by the relevant authorities and TE will be informed by September which of the above projects will receive state subsidies or enjoy the 20% tariff hike. Based on our initial estimates, *ceteris paribus*, the new tariff regime should have little or no impact on TE’s valuation but it should positively affect TE’s operating profitability. In our view, the potential abolition of the current state subsidy regime should overall favour larger industry players with strong balance sheets and easier access to project financing. That said, we do not expect TE to face any financing constraints in light of the higher borrowing needs.

In our view, the key *catalysts* to TE’s short-term performance are good progress in a) commissioning new capacity in Greece, b) the 200-300MW of installation licences that TE expects to receive by year-end in Greece, and c) international expansion. We expect TE to provide a more detailed target on new installations in H2 2010. Assuming 250MW start construction by year-end in Greece, our SOTP based fair value would rise to EUR6.1 (or 22%) on our estimates.

Valuation and rating

In our basic SOTP method, which includes a value for TE's pipeline discounted for the timing of future new installations, we a) use a WACC of 11.1% (assuming 7.5% RFR, 4.5% ERP and 0.9 beta), b) assume a base-case scenario of 850MW in Greece and 54MW abroad in 20114 (below TE's targets), and c) apply a 20% discount to account for a weak execution track record. Hence we derive our TP at EUR5.0 (45% potential return, which is above the -1.5% to 18.5% Neutral band for volatile European stocks under HSBC's research model). We have an OW(V) rating on Terna Energy.

Terna Energy – SOTP valuation summary

	EURm	EUR/share
Wind parks (Greece)	610.50	5.58
Wind parks (outside Greece)	51.90	0.47
Hydro plants	55.20	0.50
RES (total)	717.60	6.56
Construction	15.00	0.14
Solar	4.00	0.04
Target EV for Terna Energy business segments	736.60	6.74
Net debt	-29.50	-0.27
Other SG&A expenses (international expansion)	37.50	0.34
Crisis levy+ higher tax on distributed earnings	44.50	0.41
Target Group Market Capitalisation	684.10	6.26
20% discount on installation delays	547.30	5.01
Target price (Rounded) EUR		5.00

Source: HSBC estimates

Risks

Downside risks in our view are:

- ▶ Further commissioning delays – despite the greater longer term visibility brought about by the recent new RES law, TE may still encounter delays in the execution of its business plan
- ▶ Negative changes in the regulatory framework; note that TE operates in a regulated industry environment and is dependent on government subsidies to provide adequate IRRs; furthermore, government subsidy regimes can change dramatically, impacting the company's margins
- ▶ Execution risks, i.e. construction bottlenecks amid heavy workload in late 2010, early 2011
- ▶ The recent turmoil in credit and equity markets may impact TE's ability to raise the capital which we expect will be necessary to develop its pipeline fully at rates attractive enough to generate an adequate IRR.

Financials & valuation: Terna Energy SA

Overweight (V)

Financial statements

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Profit & loss summary (EURm)				
Revenue	73	65	91	136
EBITDA	26	26	46	81
Depreciation & amortisation	-6	-7	-8	-14
Operating profit/EBIT	20	19	39	67
Net interest	4	-2	-8	-12
PBT	24	17	30	54
HSBC PBT	24	17	30	54
Taxation	-8	-7	-10	-18
Net profit	16	9	19	35
HSBC net profit	17	12	21	38

Cash flow summary (EURm)

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Cash flow from operations	13	9	22	45
Capex	-111	-143	-147	-116
Cash flow from investment	-91	-143	-147	-116
Dividends	7	6	11	19
Change in net debt	81	126	109	37
FCF equity	-88	-127	-120	-66

Balance sheet summary (EURm)

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Intangible fixed assets	0	0	0	0
Tangible fixed assets	343	479	619	721
Current assets	295	236	219	259
Cash & others	245	196	169	191
Total assets	640	717	841	982
Operating liabilities	75	70	103	169
Gross debt	190	268	350	409
Net debt	-55	71	181	218
Shareholders funds	372	375	384	400
Invested capital	318	448	566	620

Ratio, growth and per share analysis

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Y-o-y % change				
Revenue	-0.5	-11.0	39.7	48.6
EBITDA	-2.3	-2.3	79.8	75.2
Operating profit	-9.4	-5.0	105.5	72.6
PBT	-25.5	-27.9	75.1	80.4
HSBC EPS	-27.9	-32.1	77.6	82.5

Ratios (%)

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Revenue/IC (x)	0.3	0.2	0.2	0.2
ROIC	5.1	2.8	5.0	7.4
ROE	4.7	3.1	5.5	9.7
ROA	3.2	2.3	3.7	5.2
EBITDA margin	35.8	39.3	50.6	59.6
Operating profit margin	27.0	28.8	42.3	49.2
EBITDA/net interest (x)		16.6	5.5	6.6
Net debt/equity	-14.7	19.0	47.1	54.6
Net debt/EBITDA (x)	-2.1	2.8	3.9	2.7
CF from operations/net debt		12.2	12.0	20.6

Per share data (EUR)

Year to	12/2009a	12/2010e	12/2011e	12/2012e
EPS Rep (fully diluted)	0.15	0.09	0.17	0.32
HSBC EPS (fully diluted)	0.16	0.11	0.19	0.35
DPS	0.07	0.06	0.10	0.17
Book value	3.40	3.43	3.51	3.66

Key forecast drivers

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Construction sales	39.6	30.0	30.0	30.0
RES sales	33.7	35.3	61.2	105.6
Group sales	73.4	65.3	91.2	135.6
Construction EBITDA	5.3	3.1	3.1	3.1
RES EBITDA (clean)	21.0	22.6	43.1	77.7
Group EBITDA	26.3	25.7	46.1	80.8
Group EBITDA margin	35.8%	39.3%	50.6%	59.6%
Construction EBITDA margin	13.3%	10.3%	10.3%	10.3%
RES EBITDA margin (clean)	62.3%	63.9%	70.3%	73.6%

Valuation data

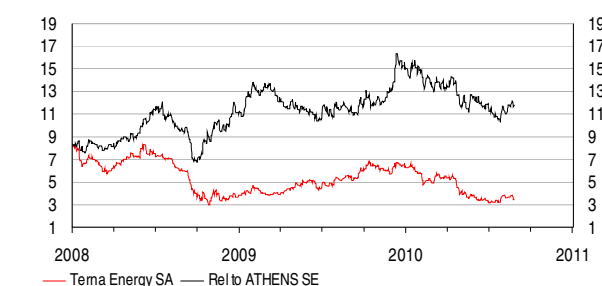
Year to	12/2009a	12/2010e	12/2011e	12/2012e
EV/sales	4.4	6.8	6.1	4.4
EV/EBITDA	12.2	17.4	12.0	7.3
EV/IC	1.0	1.0	1.0	1.0
PE*	21.7	31.9	18.0	9.9
P/Book value	1.0	1.0	1.0	0.9
FCF yield (%)	-23.6	-33.8	-32.1	-17.5
Dividend yield (%)	2.0	1.6	2.8	5.1

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (EUR)	3.43	Target price (EUR)	5.00	Potent'l return (%)	45.8
Reuters (Equity)	TENr.AT	Bloomberg (Equity)	TENERGY GA		
Market cap (USDm)	474	Market cap (EURm)	375		
Free float (%)	27	Enterprise value (EURm)	446		
Country	Greece	Sector	INDEPENDENT POWER PRODUCERS		
Analyst	Vangelis Karanikas	Contact	30 210 6965 211		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

Stated accounts as of 31 Dec 2007 are IFRS compliant

Clipper (CWP LN)

- ▶ Clipper is looking to reduce its reliance on the US domestic market by expanding its sales abroad
- ▶ Agreements with UTC regarding warranty and with Pratt & Whitney to sell & service its turbines are positive developments
- ▶ We increase our target price to 100p (from 90p) and we upgrade the stock to Overweight (V) from Neutral (V)

Clipper: above average growth

We are upgrading Clipper from N(V) to OW(V) on the basis of both valuation and expected catalysts. We note that on valuation terms, at just 44p, Clipper is trading below the value of the cash on balance sheet of 46p. We believe that this is unjustified as it completely discounts the value of its wind turbine business and its project development pipeline. The recent agreement with UTC to provide warranty support should be a major step in helping Clipper realise potential orders.

Thus while it may appear to be a US play, where we note that the market is currently difficult, we feel that Clipper looks better placed than some of its larger competitors to show above average growth from a lower base.

Agreement with UTC & Pratt & Whitney

Clipper announced in a trading update on 27 July that it is finalizing an agreement with UTC, its majority shareholder, to provide Liberty wind

turbines warranty support. We believe that this will help Clipper in marketing its turbines.

Clipper also announced that it is targeting international expansion outside of the US into the major global economies and the emerging markets. We believe that this is a positive development as it will diversify its customer base geographically and reduce its reliance on the US market where we expect growth to be flat over the next five years (2009-14e).

Valuation looks appealing

Clipper has been one of the worst performing wind stock over the last couple of years. It is currently trading at an all-time low and is c90% below its level immediately pre-credit crisis (and 95% below its all-time high of 918p). It has underperformed its local market by 50% since mid-April.

We believe that Clipper's stock is currently trading at attractive levels and offers significant potential return.

Apart from its core wind turbine business, Clipper also has c9GW of wind development assets of which more than 1,000MW are advanced stage

Robert Clover *
Analyst
HSBC Bank plc
+44 20 7991 6741
robert.clover@hsbcib.com

James Magness*
Analyst
HSBC Bank plc
+44 20 7991 3464
james.magness@hsbcib.com

*Employed by a non-US affiliate of HSBC Securities (USA) Inc., and is not registered/qualified pursuant to FINRA regulations

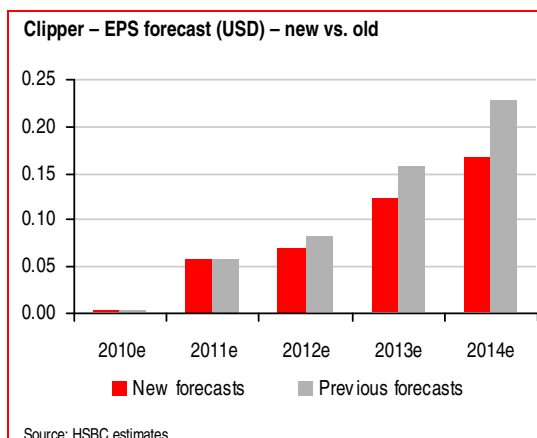
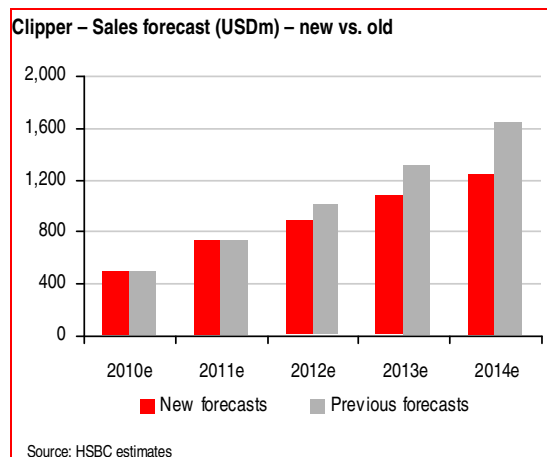
project development assets. It also had a cash balance of USD153m as at 30 June 2010 with virtually no debt.

FY2011 guidance

Clipper has guided for sales of 140 to 180 turbines in 2010 and said that it expects to achieve “approximately break even results for the full year” if the higher end of the delivery range is achieved. Clipper expects to record an operating loss in H1 FY10.

Impact of changes on our forecasts

We have not made any changes to our forecasts for 2010e & 2011e. We have however cut our forecasts beyond 2011e. We cut our sales revenues forecasts by 12%, 19% and 24% for FY12e, FY13e & FY14e. Our 2010e and 2011e EPS remains unchanged but decreased by 14%, 21% and 27% for FY12e, FY13e & FY14e respectively. See charts below.



HSBC versus consensus

Clipper – Sales forecast: HSBC vs. consensus (USDm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010e	436	522	717	503	-4%
2011e	446	720	1,199	737	2%
2012e	523	735	1,013	888	21%

Source: Bloomberg, HSBC estimates

Clipper – EBITDA forecast: HSBC vs. consensus (USDm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010e	-23	-2	8	8	nm
2011e	3	33	68	32	-2%
2012e	29	42	50	43	3%

Source: Bloomberg, HSBC estimates

Valuation

We value Clipper using our two DCF approaches. Using a WACC of 8.9% (beta 1.4, EMRP of 3.5%, and gross cost of debt 5.8%), we derive an average fair value of 65p based on our two different DCF methodologies. - the HSBC four-stage ROIC-based DCF and a ‘classic’ FCF-based DCF (for details of our DCF methodologies refer to the “Valuation” section above) To this we have added the value of Clipper’s wind gross development pipeline (c9,000MW including Titan joint venture with BP) of 64p.

For valuing Clipper's wind development portfolio, we have assumed that all of its wind development assets are in an early stage (implying initial land control and active negotiations and holdings), to which we ascribe a value of USD45.5 per KW (versus USD 34 previously) using a probability-weighted model. This gives us a fair value including pipeline of 128p. To this we apply a discount of 20% due to the prevailing uncertainty over the climate bill in the US. This gives us our target price of 100p (rounded) (from 90p before). Our target price has gone up, not down, in spite of our medium term estimate reductions as this impact has been more than offset by the increase in our estimate of the development pipeline.

Under our research model, for stocks with a volatility indicator, the Neutral band is +/-10ppt around the hurdle rate of 8% for UK stocks. Our 12-month target price of 100p implies a potential return of c130%, which is above the Neutral band; thus, we rate the stock Overweight (V).

Risks

Downside risks to our view include:

- ▶ Lack of financing could seriously impact the company's performance and could also dent the ability of its clients to develop their pipelines
- ▶ Our MW sales assumptions may be too optimistic if the market recovery is slower or less pronounced than our expectations
- ▶ Favourable tariffs and incentives could be withdrawn by governments, which may turn less supportive of renewables in light of increasing government borrowings
- ▶ Orders expected by us may not materialise

Financials & valuation: Clipper Windpower

Overweight (V)

Financial statements

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Profit & loss summary (USDm)				
Revenue	743	503	737	888
EBITDA	-229	8	32	43
Depreciation & amortisation	-13	-10	-18	-25
Operating profit/EBIT	-242	-2	15	19
Net interest	1	3	5	5
PBT	-242	1	19	23
HSBC PBT	-104	-2	15	19
Taxation	0	0	-7	-8
Net profit	-241	1	13	15
HSBC net profit	-103	1	13	15

Cash flow summary (USDm)

Cash flow from operations	-171	-152	32	13
Capex	-13	-10	-17	-23
Cash flow from investment	-3	-10	-17	-23
Dividends	0	0	0	0
Change in net debt	159	-44	-15	9
FCF equity	161	-112	7	-15

Balance sheet summary (USDm)

Intangible fixed assets	2	2	2	2
Tangible fixed assets	53	53	53	51
Current assets	299	267	392	487
Cash & others	50	94	109	109
Total assets	354	322	447	540
Operating liabilities	655	415	528	596
Gross debt	1	1	1	10
Net debt	-49	-93	-109	-99
Shareholders funds	-337	-130	-118	-102
Invested capital	-350	-187	-190	-165

Ratio, growth and per share analysis

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Y-o-y % change				
Revenue	0.8	-32.3	46.4	20.5
EBITDA			287.7	33.9
Operating profit				26.4
PBT			1336.4	20.8
HSBC EPS			1320.7	20.8

Ratios (%)

Revenue/IC (x)	-2.3	-1.9	-3.9	-5.0
ROIC	76.4	0.4	-5.1	-6.8
ROE	47.1	-0.4	-10.1	-13.8
ROA	-35.9	0.3	3.3	3.1
EBITDA margin	-30.9	1.7	4.4	4.9
Operating profit margin	-32.6	-0.4	2.0	2.1
EBITDA/net interest (x)	305.9			
Net debt/equity	0.0	0.0	0.0	0.0
Net debt/EBITDA (x)	0.2	-11.2	-3.4	-2.3
CF from operations/net debt				

Per share data (USD)

EPS Rep (fully diluted)	-1.86	0.00	0.05	0.06
HSBC EPS (fully diluted)	-0.79	0.00	0.05	0.06
DPS	0.00	0.00	0.00	0.00
Book value	-2.59	-1.00	-0.90	-0.79

Valuation data

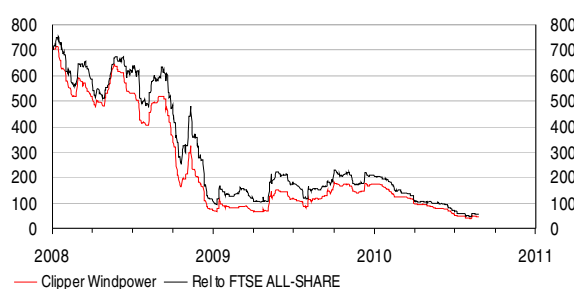
Year to	12/2009a	12/2010e	12/2011e	12/2012e
EV/sales	0.1	0.1	0.0	0.1
EV/EBITDA		6.1	1.1	1.0
EV/IC				
PE*		178.3	12.5	10.4
P/Book value				
FCF yield (%)	112.0	-77.9	4.9	-10.4
Dividend yield (%)	0.0	0.0	0.0	0.0

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (GBPp)	44	Target price (GBPp)	100	Potent'l return (%)	129.9
Reuters (Equity)	CWPR.L	Bloomberg (Equity)	CWP LN		
Market cap (USDm)	144	Market cap (GBPm)	93		
Free float (%)	81	Enterprise value (USDm)	51		
Country	United Kingdom	Sector	Electric Utilities		
Analyst	Robert Clover	Contact	44 20 7991 6741		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

Gamesa (GAM SM)

- ▶ Gamesa's exposure to ex-growth markets of Spain and the US is problematic; Chinese market remains fiercely competitive
- ▶ Gamesa is trying to diversify its customer base but we believe that its efforts are yet to yield results
- ▶ We cut our target price to EUR5.50 (from EUR14.0) and rating to N(V) from OW(V) due to lower industry growth expectations

Constrained for growth

In 2006, Gamesa decided to focus on the high growth markets of Spain, the US and China in order to drive its growth. Ironically, this strategy of Gamesa has started to unravel, partly due to macro events, as both Spain and the US are amongst the markets most impacted by regulatory uncertainty. Further as our analysis shows, we also expect these markets to have slow growth rates in the near to mid term in future.

We forecast a five-year CAGR (2009-14e) of 0% for the US and negative 8% for Spain. We expect Gamesa's other key markets in Europe, Italy and Portugal, to also have a five year CAGR of 0% and of minus 6% respectively.

China, the remaining major focus market for Gamesa, remains highly competitive and is dominated by domestic turbine manufacturers like Sinovel, Goldwind and Dongfang.

In order to revive growth Gamesa is diversifying its geographic footprint and has entered five new markets since the beginning of 2010. It is also looking to diversify its customer base to include small and medium sized developers and independent

power producers. However, in the near to mid term, we believe that Gamesa's growth is inextricably linked to the growth of the renewable markets in its domestic market of Spain.

Q2 results in-line but outlook less rosy

Gamesa's Q2FY10 results were a bit above consensus at the EBIT and net income line. Q2 revenue was EUR559m, 10% below Bloomberg consensus of EUR618m. EBIT was EUR26m versus consensus of EUR25m. Net income was EUR14m versus consensus of EUR12m.

However, the outlook looks less rosy with Gamesa cutting its volume sales guidance to 2.4-2.5GW for FY10 (from 2.7-3.0GW previously). EBIT margin guidance was cut to 4.5-5.5% (from 6-7% previously) for the wind turbine business. Gamesa also reduced its volume sales guidance for FY11 to 2.7-3.3GW from more than 3.6GW previously. We are forecasting c2.4GW of sales for FY2010e and c2.8GW of sales for FY11e. Our EBIT margin for FY10e is 4.7%.

Robert Clover *
Analyst
HSBC Bank plc
+44 20 7991 6741
robert.clover@hsbcib.com

James Magness*
Analyst
HSBC Bank plc
+44 20 7991 3464
jjames.magness@hsbcib.com

*Employed by a non-US affiliate of HSBC Securities (USA) Inc., and is not registered/qualified pursuant to FINRA regulations

Order flow

Gamesa said that its order book covered 77% of its reduced sales guidance for 2010 as at the end of the Q2 (c1.9GW). Further it reported 109MW of orders for 2011. Thus its order book was c2GW as at the end of Q2 2010. Gamesa has not publicly announced any order flow in 2010 but said that it received order confirmation for 871MW in H1 2010, including 109MW for 2011 (2009: 438MW). Of the 871MW in H1, 530MW were received in Q1 of which Gamesa said that 70% pertain to the framework agreements and 30% to the new orders from the market.

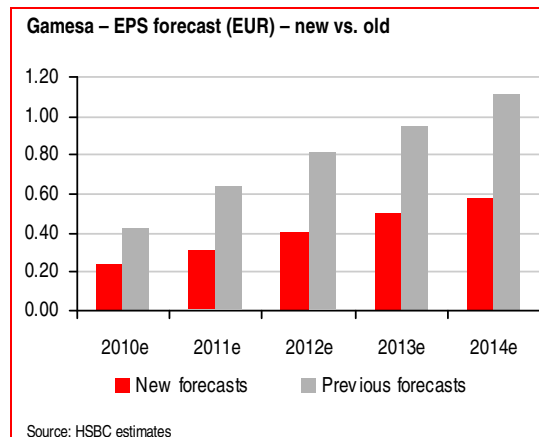
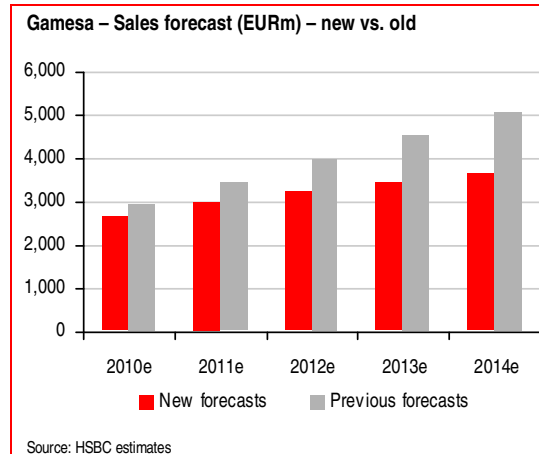
As per our analysis of the order flow, Gamesa looks on track to meet our sales forecast for 2010. In the first half of 2010 it has announced projects relating to 86% of our HSBC volume sales forecast for 2010e.

We have more conviction on Vestas than on Gamesa

We have greater conviction on Vestas than on Gamesa as it is more geographically diversified and in our view, more geared to recovery in the wind turbine market due to its exposure to smaller IPPs. We expect that Vestas's volumes will recover in 2011 with the strong order flow that Vestas has shown in H1 (5.7GW).and along with it Vestas's margins to around 10-11% from the expected depressed levels of 2010.

Impact of changes on our forecasts

We have cut our sales revenues forecasts by 11% for 2010e and 14% for 2011e and our EPS forecasts by 43% for 2010e and 42% for 2011e. This is a result of both volume sales reductions and pricing decreases. We have reduced our long-term sales forecast by c40% and our long-term EPS forecast by c44%. See charts below.



HSBC versus consensus

Gamesa – Sales forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010e	2,288	2,521	3,278	2,647	5%
2011e	2,498	2,866	3,851	2,981	4%
2012e	2,638	3,217	3,658	3,251	1%

Source: Bloomberg, HSBC estimates

Gamesa – EBITDA forecast: HSBC vs consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010e	198	294	456	319	8%
2011e	242	372	539	363	-2%
2012e	253	425	510	419	-1%

Source: Bloomberg, HSBC estimates

Valuation

Using a WACC of 8.5% (beta of 1.3, EMRP of 4.5% and gross cost of debt of 6.0%) we derive fair values of EUR5.59 and EUR5.39 per share, using our two different DCF methodologies - the HSBC four-stage ROIC-based DCF and a 'classic' FCF-based DCF (for details of our DCF methodologies refer "Valuation" section above). The average of the two DCFs gives us a target price of EUR5.50 (rounded), down from EUR14 previously due to reduction in our volume sales forecast (we forecast c18GW of sales for 2010e-15e from c24GW previously)and lower price realisation. We no longer include a value for Gamesa's wind farm development pipeline as it has only had limited success in selling this pipeline over the last couple of years.

Under our research model, for European stocks with a volatility indicator, the Neutral band is 10% above and below the hurdle rate for Europe-ex UK stocks of 8.5%. Our 12-month target price of EUR5.50 implies a potential return of c8% , which is within the -1.5% to 18.5% Neutral band; thus, we rate the stock Neutral (V).

Risks

Upside risks to our view include:

- ▶ Stronger than expected order inflow
- ▶ Stronger than expected pricing

Downside risks to our view include:

- ▶ Macro issues, particularly in Southern Europe, persist putting increasing focus on governments reducing renewable incentives
- ▶ New order flow fails to materialise or is slower than expected
- ▶ Gamesa could continue to lose market share in light of fierce competition from South Korea/China and GE expanding in Europe
- ▶ Prolonged lack of financing for wind farms could dent Gamesa's clients' ability to develop their pipelines
- ▶ Pricing risk.

Financials & valuation: Gamesa Corp

Neutral (V)

Financial statements

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Profit & loss summary (EURm)				
Revenue	3,187	2,647	2,981	3,251
EBITDA	276	225	258	307
Depreciation & amortisation	-99	-100	-113	-124
Operating profit/EBIT	177	125	145	183
Net interest	-53	-75	-73	-83
PBT	122	66	101	143
HSBC PBT	122	66	101	143
Taxation	-7	-8	-25	-43
Net profit	115	58	76	100
HSBC net profit	115	58	76	100

Cash flow summary (EURm)

Cash flow from operations	65	20	246	90
Capex	-133	-180	-199	-212
Cash flow from investment	-130	-182	-200	-213
Dividends	-50	-15	-15	-19
Change in net debt	333	162	-31	143
FCF equity	-53	-111	74	-107

Balance sheet summary (EURm)

Intangible fixed assets	540	550	562	574
Tangible fixed assets	417	494	574	655
Current assets	3,632	3,475	3,480	3,613
Cash & others	801	801	801	801
Total assets	4,912	4,861	4,991	5,264
Operating liabilities	1,875	1,640	1,747	1,794
Gross debt	1,157	1,319	1,287	1,430
Net debt	355	517	486	628
Shareholders funds	1,571	1,629	1,690	1,771
Invested capital	1,913	2,077	2,068	2,248

Ratio, growth and per share analysis

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Y-o-y % change				
Revenue	-12.6	-16.9	12.6	9.1
EBITDA	-7.8	-18.6	14.8	18.9
Operating profit	-14.8	-29.5	16.2	26.1
PBT	-23.4	-45.6	51.8	41.7
HSBC EPS	-25.5	-49.9	30.1	32.2

Ratios (%)

Revenue/IC (x)	2.4	1.3	1.4	1.5
ROIC	12.4	5.5	5.2	5.9
ROE	7.5	3.6	4.6	5.8
ROA	3.5	2.8	2.9	3.3
EBITDA margin	8.7	8.5	8.7	9.4
Operating profit margin	5.5	4.7	4.9	5.6
EBITDA/net interest (x)	5.2	3.0	3.6	3.7
Net debt/equity	22.6	31.7	28.7	35.4
Net debt/EBITDA (x)	1.3	2.3	1.9	2.0
CF from operations/net debt	18.3	3.8	50.6	14.3

Per share data (EUR)

EPS Rep (fully diluted)	0.48	0.24	0.31	0.41
HSBC EPS (fully diluted)	0.48	0.24	0.31	0.41
DPS	0.00	0.06	0.08	0.10
Book value	6.46	6.69	6.94	7.28

Valuation data

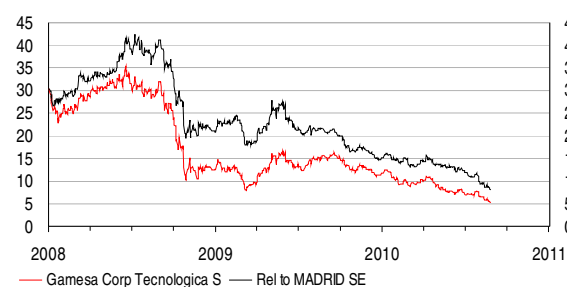
Year to	12/2009a	12/2010e	12/2011e	12/2012e
EV/sales	0.5	0.6	0.5	0.5
EV/EBITDA	5.4	7.2	6.1	5.4
EV/IC	0.8	0.8	0.8	0.7
PE*	10.7	21.4	16.4	12.4
P/Book value	0.8	0.8	0.7	0.7
FCF yield (%)	-4.7	-10.0	6.9	-10.4
Dividend yield (%)	0.0	1.2	1.5	2.0

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (EUR)	5.10	Target price (EUR)	5.50	Potent'l return (%)	7.8
Reuters (Equity)	GAM.MC	Bloomberg (Equity)	GAM SM		
Market cap (USDm)	1,584	Market cap (EURm)	1,254		
Free float (%)	68	Enterprise value (EURm)	1627		
Country	Spain	Sector	ELECTRICAL EQUIPMENT		
Analyst	Robert Clover	Contact	44 20 7991 6741		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

Hansen Transmissions (HSN LN)

- ▶ Market leader in the fastest growing multi-MW wind turbine gearbox segment
- ▶ Sales agreement with Sinovel, Chinese number-one and the world's fastest growing wind turbine manufacturer, is a big positive
- ▶ We reiterate OW(V) rating although our target price falls to 95p from 135p due to reduced market growth forecasts

Leading technology...

Hansen is a leader in Multi-MW (1.5-6MW) wind turbine gearbox segment. Hansen has decided strategically to focus on the multi-MW segment as it is the fastest growing segment with customers increasingly moving towards larger turbine sizes. It also helps Hansen to fend off the competitive pressure as Multi-MW gearboxes are technologically more difficult to manufacture as opposed to smaller gearboxes.

Hansen has been consistently able to improve its per MW sales realisations from EUR67,000/MW in 2005 to EUR100,000/MW in 2010 (an increase of c50%) by increasingly moving its sales mix towards higher capacity gearboxes.

...winning customers

A key driver for Hansen to drive market share is a continued addition of new customer accounts. We believe that as product deployment in China shifts towards higher MW turbines, Hansen, with its superior technology offering and local production base, could penetrate further accounts in this market. In particular, Sinovel as the Chinese number-one and world's fastest growing wind turbine manufacturer is a key customer addition for Hansen. Sinovel ranked

no.3 globally in 2009. Furthermore, we believe that as leader of the multi-MW class gearboxes, Hansen is well placed to benefit from the expected boom in offshore demand (offshore turbines require larger gearboxes).

FY 2011 guidance

Hansen has guided for revenue growth of 5-10% for FY11 with revenue being back-end loaded. It maintains that it expects improving industry investment from second half of CY10. It will continue to diversify its customer base and will consider careful deployment of capital for capacity expansion. Hansen has currently guided for capex of EUR30m for FY11.

We note that Hansen has further reduced its capacity expansion plan for FY2011 and FY2012 by 1,600MW (600MW in Belgium, 600MW in India and 400MW in China) and 400MW (reduced by 500MW in India and increased by 100MW in China) respectively while maintaining its FY2013 target of 14.3GW.

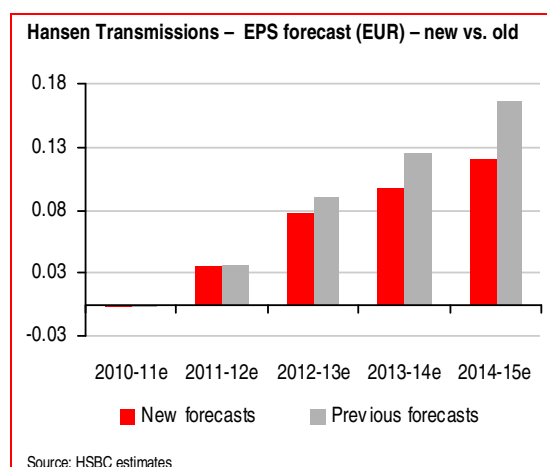
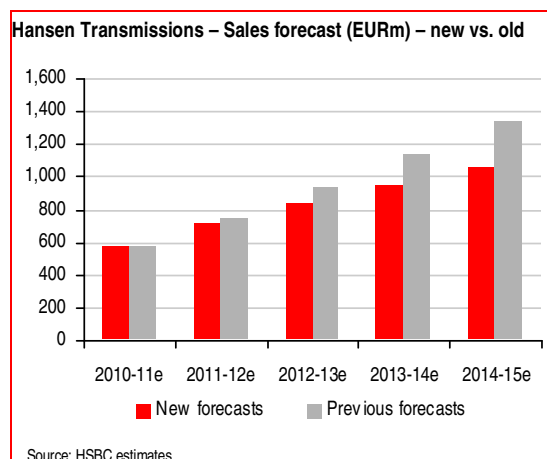
James Magness*
Analyst
HSBC Bank plc
+44 20 7991 3464
jjames.magness@hsbcib.com

Robert Clover*
Analyst
HSBC Bank plc
+44 20 7991 6741
robert.clover@hsbcib.com

*Employed by a non-US affiliate of HSBC Securities (USA) Inc., and is not registered/qualified pursuant to FINRA regulations

Impact of changes on our forecast

We have cut our sales revenues forecasts by 3% for FY2012e and 10% for FY2013e and our EPS forecasts by 4% for FY2012e and 11% for FY2013e. This is a result of volume sales reductions due to reduced market share that we assume for Hansen. We still expect Hansen to gain market share - up from the 13% level in 2009 to 20% in 2015e - but previously we had more aggressive assumptions (26%). We have reduced our long-term sales forecast by c39% and our long-term EPS forecast by c38%. Our forecasts for FY11 remain unchanged. See charts below.



HSBC versus consensus

Hansen Transmissions – Sales forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010e	486	561	588	573	2%
2011e	622	714	793	722	1%
2012e	754	852	987	842	-1%

Source: Bloomberg, HSBC estimates

Hansen Transmissions – EBITDA forecast: HSBC vs consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010e	49	64	78	59	-8%
2011e	81	102	134	88	-14%
2012e	111	133	164	120	-10%

Source: Bloomberg, HSBC estimates

Valuation

Using a WACC of 9.0% (beta 1.3, equity risk premium of 4.5% and cost of debt 5.5%, debt/equity of 20%), we derive fair values of 113p and 124p, using our two different DCF methodologies - the HSBC four-stage ROIC-based DCF and a 'classic' FCF-based DCF (discussed below), which gives an average fair value of 119p. We have applied to this a 20% discount (previously 30%) as the stock overhang risk due to the possibility of Suzlon divesting some or all of its c26% stake in Hansen after the expiry of its six month lock-in period in May 2010. This gives us our target price of 95p (rounded), down from 135p previously due to lower industry demand forecasts and also more conservative market share assumptions for Hansen.

We have lowered the discount from 30% to 20% as we believe that the 10% discount applied earlier to reflect the execution risk due to Hansen's aggressive factory expansion in India and China has now dissipated with Hansen's management guiding for limited capacity additions in FY11 and phasing 2011-12 capacity additions to align with market conditions.

Under our research model, for stocks with a volatility indicator, the Neutral band is 10ppt above and below the hurdle rate for UK stocks of 8.0%. Our 12-month target price of 95p implies a potential return of c76% , which is above the Neutral band; thus, we maintain our Overweight (V) rating.

Risks

Downside risks to our view include:

- ▶ Overhang risk from the possibility of Suzlon selling down its remaining 26% stake in Hansen
- ▶ Hansen may experience some weakness in its order book, if Suzlon experiences any financial problems
- ▶ A more prolonged than expected downturn in global wind demand
- ▶ Governments could stop subsidising the wind industry

Financials & valuation: Hansen Transmissions

Overweight (V)

Financial statements

Year to	03/2010a	03/2011e	03/2012e	03/2013e
Profit & loss summary (EURm)				
Revenue	532	573	722	842
EBITDA	42	59	88	120
Depreciation & amortisation	-42	-49	-48	-43
Operating profit/EBIT	0	10	40	77
Net interest	-11	-12	-14	-14
PBT	-12	-2	26	63
HSBC PBT	-12	-2	26	63
Taxation	3	0	-6	-14
Net profit	-9	-1	20	49
HSBC net profit	-9	-1	20	49

Cash flow summary (EURm)

Cash flow from operations	75	44	28	61
Capex	-81	-31	-46	-51
Cash flow from investment	-80	-31	-46	-51
Dividends	0	0	0	0
Change in net debt	5	-13	19	-10
FCF equity	-5	12	-20	11

Balance sheet summary (EURm)

Intangible fixed assets	11	11	11	11
Tangible fixed assets	587	570	568	576
Current assets	466	483	562	623
Cash & others	149	149	149	149
Total assets	1,066	1,065	1,143	1,211
Operating liabilities	146	159	198	227
Gross debt	283	270	289	279
Net debt	134	121	140	130
Shareholders funds	599	598	617	666
Invested capital	770	756	794	833

Ratio, growth and per share analysis

Year to	03/2010a	03/2011e	03/2012e	03/2013e
Y-o-y % change				
Revenue	-12.6	7.7	25.8	16.6
EBITDA	-55.6	40.9	50.4	36.2
Operating profit	-100.5		299.1	92.1
PBT	-118.9			145.9
HSBC EPS	-119.0			149.0

Ratios (%)

Revenue/IC (x)	0.7	0.8	0.9	1.0
ROIC	0.0	1.0	4.0	7.3
ROE	-1.4	-0.2	3.2	7.6
ROA	0.4	1.1	3.2	5.5
EBITDA margin	7.8	10.2	12.2	14.3
Operating profit margin	-0.1	1.7	5.5	9.1
EBITDA/net interest (x)	3.6	5.0	6.2	8.9
Net debt/equity	22.3	20.3	22.6	19.5
Net debt/EBITDA (x)	3.2	2.1	1.6	1.1
CF from operations/net debt	56.1	36.2	19.9	47.1

Per share data (EUR)

EPS Rep (fully diluted)	-0.01	0.00	0.03	0.07
HSBC EPS (fully diluted)	-0.01	0.00	0.03	0.07
DPS	0.00	0.00	0.00	0.00
Book value	0.89	0.89	0.92	0.99

Valuation data

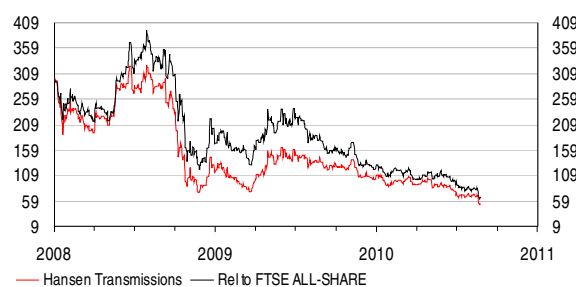
Year to	03/2010a	03/2011e	03/2012e	03/2013e
EV/sales	1.1	1.0	0.8	0.7
EV/EBITDA	13.9	9.6	6.6	4.8
EV/IC	0.7	0.7	0.7	0.7
PE*			22.5	9.0
P/Book value	0.7	0.7	0.7	0.7
FCF yield (%)	-1.0	2.8	-4.5	2.5
Dividend yield (%)	0.0	0.0	0.0	0.0

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (GBPp)	54	Target price (GBPp)	95	Potent'l return (%)	75.6
Reuters (Equity)	HSNT.L	Bloomberg (Equity)		HSN LN	
Market cap (USDm)	559	Market cap (GBPm)		363	
Free float (%)	29	Enterprise value (EURm)		564	
Country	United Kingdom	Sector		MACHINERY	
Analyst	James Magness	Contact		44 20 7991 3464	

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

Nordex (NDX1 GR)

- ▶ Q2 margin recovery and solid order intake development, relatively outperforming many sector competitors
- ▶ Undemanding valuation with respective 2010e-11e EV/EBITDA of 4.1x and 2.9x and significant discounts to its wind peers
- ▶ Reiterate our EUR10 TP and Overweight (V) rating

Good set of Q2 results

Nordex posted Q2 results on 8 August which were mostly in-line with our expectations. While Q2 revenues of EUR199m (vs. EUR202m consensus) were still 29% below Q2 2009, they were up 32% sequentially (Q1: EUR151m). With a Q2 EBIT margin of 3.4% (EUR6.7m EBIT, vs. EUR6.8m consensus and EUR9.2m in Q2 09) in the seasonally weaker H1, the company is on good track to beat our full-year EBIT margin estimate of 3.3% which we consider conservative.

Valuation not demanding

Based on our current estimates Nordex trades at 18.5x and 11.4x PE and 4.1x and 2.9x EV/EBITDA for 2010e-11e respectively. The good set of Q2 results further supports our view that Nordex has passed its fundamental troughs (please see our note *'Recent share price weakness brings medium-term upside potential'* from 18 May). We have an Overweight (V) rating on the stock and a target price of EUR10.

Order flow shows good momentum....

With Q2 order intake worth EUR258m (vs. EUR71 in Q1 and EUR205m in Q2 09), Nordex achieved the strongest intake in two years, which led to the

first positive development of the order backlog since the beginning of the past recession. As a result, the total backlog amounts to cEUR2.3bn, including EUR481m worth of firmly financed contracts which puts the company in a good position, thanks to the recently achieved momentum.

Nordex: published order backlog

	MW	Q-o-q	Y-o-Y
Q1 2010	2300	21%	-8%
Q4 2009	1900	-4%	-34%
Q3 2009	1970	-14%	-35%
Q2 2009	2300	-8%	-30%
Q1 2009	2500	-14%	-24%
Q4 2008	2900	-5%	-12%
Q3 2008	3044	-8%	5%
Q2 2008	3300	0%	32%
Q1 2008	3300	0%	94%
Q4 2007	3300	14%	136%
Q3 2007	2900	16%	
Q2 2007	2500	47%	
Q1 2007	1700	21%	

Source: HSBC

FY2010 forecasts

In terms of the full-year outlook, Nordex is guiding for a rather uninspiring 2010 sales level of EUR1.2bn (HSBCe EUR1.3bn, consensus EUR1.25bn), which is however paired with a more ambitious target EBIT margin of 4% (HSBCe 3.3%, consensus 3.5%) which leaves room for upgrade potential in the market, in our view. Further we find the topline target to be on the

Burkhard Weiss *
Analyst
HSBC Trinkaus & Burkhardt
AG, Germany
+49 211 910 3722
burkhard.weiss@hsbc.de

*Employed by a non-US affiliate of HSBC Securities (USA) Inc., and is not registered/qualified pursuant to FINRA regulations

conservative side as management states that it has three quarters of it already secured through existing orders and fixed service contracts. Specifically, Nordex expects accelerated order bookings in H2 2010 based on current project negotiations. The company expects volume of those orders to be worth cEUR650m of which cEUR190-250m can possibly be turned into sales in H2 2010.

HSBC vs. consensus

Our estimates are driven by what we consider to be a conservative outlook, the strong international competition as well as the expectation of wind turbine price pressure in the coming two years. Furthermore, two of the largest wind energy markets, the US and China, are currently problematic as the former is currently weak and has legislative uncertainties to resolve and the latter is increasingly characterised by 'local-to-local' business which makes it harder for international players to participate. While we are slightly above consensus regarding 2010e-12e sales expectations (between 4-7%), we are between 0.5% and 7% below the market expectations for 2010e-12e EBITDA due to the aforementioned price pressure.

Nordex – Sales forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010e	1174.0	1244.3	1567.0	1300.0	4.5%
2011e	1293.0	1502.2	2300.0	1600.0	6.5%
2012e	1417.0	1819.3	3144.0	1900.0	4.4%

Source: Bloomberg, HSBC

Valuation

Based on a DCF methodology (WACC of 9.85% based on a risk-free rate of 4.0%, an equity risk premium of 4.5% and a beta of 1.3) we derive a target price of EUR10. Under our research model, the Neutral band for stocks with a volatility indicator is 10 percentage points above and below our hurdle

Nordex – EBITDA forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010e	56.7	69.1	94.2	66.0	-4.5%
2011e	73.1	97.8	173.0	90.6	-7.4%
2012e	119.5	126.9	268.0	126.3	-0.5%

Source: Bloomberg, HSBC

rate of 8.5% for Europe ex-UK stocks, resulting in a Neutral band of -1.5% to 18.5% around the current share price. For Nordex, our target price of EUR10 implies a potential return of c47%, which is above the Neutral band and hence we rate the stock Overweight (V).

This is also broadly supported by our international wind sector peer valuation which, for Nordex, shows that with 2010e-11e EV/EBITDA multiples of 4.1x and 2.9x, the company trades at discounts of 57% and 55%, respectively. On a 2010e-11e PE basis the multiples of 18.5x and 11.4x represent respective discounts of 12% and 16% to its sector peers.

Notable key downside risks remain:

- ▶ Potential loss of market share caused by fierce competition in the EU as large companies like Siemens or GE expand operations
- ▶ Slower-than-expected recovery in H2 2010 or greater-than-expected price pressure as industry production capacity is still significantly above demand
- ▶ The general issue of governmental support for wind power as well as the lower cost of substitutes (ie oil or gas) remain noteworthy
- ▶ Also, should the Q3 order intake fall below market expectations, the company will likely have a difficult time convincing the market it can meet its full-year guidance.

Financials & valuation: Nordex

Overweight (V)

Financial statements

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Profit & loss summary (EURm)				
Revenue	1,183	1,300	1,600	1,900
EBITDA	58	66	91	126
Depreciation & amortisation	-18	-23	-26	-31
Operating profit/EBIT	40	43	65	96
Net interest	-6	-6	-5	0
PBT	35	37	59	96
HSBC PBT	35	37	59	96
Taxation	-11	-12	-20	-32
Net profit	24	25	40	64
HSBC net profit	24	25	40	64

Cash flow summary (EURm)

Cash flow from operations	30	224	83	121
Capex	-29	-82	-112	-112
Cash flow from investment	-44	-97	-127	-127
Dividends	0	0	0	0
Change in net debt	36	-127	-9	-18
FCF equity	-32	105	-63	-34

Balance sheet summary (EURm)

Intangible fixed assets	51	61	66	69
Tangible fixed assets	98	163	260	353
Current assets	645	701	812	963
Cash & others	160	220	220	260
Total assets	840	996	1,208	1,455
Operating liabilities	300	450	588	697
Gross debt	101	34	26	48
Net debt	-59	-186	-194	-212
Shareholders funds	345	370	410	474
Invested capital	334	255	330	428

Ratio, growth and per share analysis

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Y-o-y % change				
Revenue	4.1	9.9	23.1	18.8
EBITDA	-26.5	13.8	37.4	39.5
Operating profit	-36.5	7.9	50.5	47.4
PBT	-45.6	5.8	61.6	60.8
HSBC EPS	-49.7	2.9	61.6	60.8

Ratios (%)

Revenue/IC (x)	3.9	4.4	5.5	5.0
ROIC	9.2	9.8	14.9	16.9
ROE	7.2	6.9	10.2	14.5
ROA	3.5	3.6	4.3	5.2
EBITDA margin	4.9	5.1	5.7	6.7
Operating profit margin	3.4	3.3	4.1	5.0
EBITDA/net interest (x)	9.2	10.5	16.8	
Net debt/equity	-16.9	-49.8	-47.2	-44.6
Net debt/EBITDA (x)	-1.0	-2.8	-2.1	-1.7
CF from operations/net debt				

Per share data (EUR)

EPS Rep (fully diluted)	0.36	0.37	0.60	0.96
HSBC EPS (fully diluted)	0.36	0.37	0.60	0.96
DPS	0.00	0.00	0.00	0.00
Book value	5.17	5.53	6.13	7.09

Valuation data

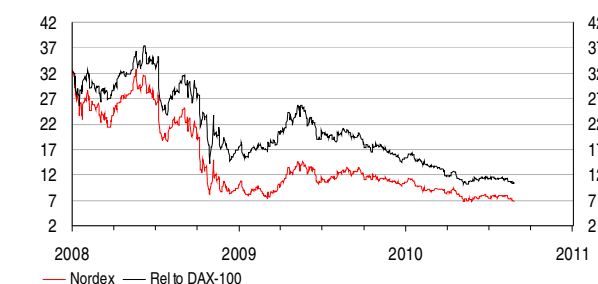
Year to	12/2009a	12/2010e	12/2011e	12/2012e
EV/sales	0.3	0.2	0.2	0.1
EV/EBITDA	6.8	4.0	2.8	1.9
EV/IC	1.2	1.0	0.8	0.6
PE*	19.0	18.5	11.4	7.1
P/Book value	1.3	1.2	1.1	1.0
FCF yield (%)	-7.1	23.2	-13.9	-7.4
Dividend yield (%)	0.0	0.0	0.0	0.0

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (EUR)	6.82	Target price (EUR)	10.00	Potentl return (%)	46.6
Reuters (Equity)	NDXGk.DE	Bloomberg (Equity)	NDX1 GR		
Market cap (USDm)	576	Market cap (EURm)	456		
Free float (%)	75	Enterprise value (EURm)	265		
Country	Germany	Sector	ENERGY EQUIPMENT		
Analyst	Burkhard Weiss	Contact	+49 211 910 3722		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

Stated accounts as of 30 Sep 2005 are IFRS compliant

REpower (RPW GR)

- ▶ Weak start into FY 2010/11 with Q1 characterised by low capacity utilisation and sector price pressure
- ▶ Potential share overhang and unclear outcome of Suzlon solution remains a share price driver in both directions
- ▶ Downgrade to Neutral (V), reduce target price to EUR115 (from EUR150) after slow Q1 and weak earnings development

Q1 2010/11 disappoints on the top- and bottom-line

REpower reported weak Q1 figures with sales down 29% y-o-y to EUR213m and a sharp drop in EBIT to EUR1.5m (-86% y-o-y) due to continuous price pressure and low capacity utilization. On the other hand, the company was able to increase its gross margin by 4.8 ppts to 24.9% on back of supply chain shifts towards lower-cost countries and improved efficiency. Via further productivity improvements and supply chain optimisation, management plans to further increase its gross margin in the coming quarters. With new order intake of 346 MW (Q1 09/10: 65 MW) the total order backlog now stands at 2,095 MW compared to 1230 MW a year ago.

REpower – Order backlog development

	MW	q-o-q	y-o-y	EURbn	q-o-q
Q1 2010/11	2095	0%	70%	2.4	37%
Q4 2009/10	2100	51%	59%	1.8	4%
Q3 2009/10	1391	6%	-7%	1.7	6%
Q2 2009/10	1307	6%	-9%	1.6	10%
Q1 2009/10	1230	-7%	-19%	1.5	-3%
Q4 2008/09	1317	-12%	-7%	1.5	-6%
Q3 2008/09	1503	5%	16%	1.6	5%
Q2 2008/09	1432	-6%	17%	1.5	-5%
Q1 2008/09	1523	7%	48%	1.6	15%

Source: HSBC, company data

Potential Suzlon deal remains share price catalyst

In our previous notes we mentioned continuous issues with regard to Suzlon's troubled balance sheet and its attempt to improve this situation. In addition there still exist financing issues for the combined group (Suzlon/REpower), as REpower's EUR600m syndicated loan with a German bank consortium required that there is no control- or profit transfer agreement with its majority shareholder Suzlon. This is the main reason why – so far – no agreement of such nature has been signed.

We previously highlighted that we believe there is a chance that Suzlon will solve its financing issues and therefore the company will proceed with a 'contract-of-domination' due to the strategic importance of REpower for Suzlon. However, in mid-August the Economic Times reported that Suzlon is in talks to sell a 25 percent stake in Repower for USD500m. According to the report, Suzlon is in separate talks with TPG Capital and an US-based fund. We expect the imminent stock overhang will likely weigh on the share price until a final resolution has been found.

Burkhard Weiss *
Analyst
HSBC Trinkaus & Burkhardt
AG, Germany
+49 211 910 3722
burkhard.weiss@hsbc.de

*Employed by a non-US affiliate of HSBC Securities (USA) Inc., and is not registered/qualified pursuant to FINRA regulations

Outlook for 2010e-12e

REpower continues to expect 10-20% top line growth to cEUR1.5-1.6bn and an EBIT margin of 7.5%-8.5% translating into an EBIT of about EUR108m to EUR133m. Nevertheless, given the poor figures from competitors (e.g. Vestas, Gamesa) as well as due to our lowered growth expectations for the wind industry and ongoing turbine price pressure we remain clearly more cautious. For 2010e we lower our sales forecast by 12% to EUR1.5bn and our EBIT forecast by 13% to EUR90m. We continue to expect an EBIT margin of 6% which is significantly (1.5 ppts) below the lower end of the current management FY2010 EBIT guidance. We have adjusted our 2011e forecasts inline with that.

REpower – Changes to our estimates				
(EURm)		2010e	2011e	2012e
Sales	New	1500.0	1800.0	2050.0
	Old	1711.1	2053.3	n/a
	Change	-12%	-12%	n/a
EBIT	New	90.0	99.0	117.0
	Old	103.5	123.3	n/a
	Change	-13%	-20%	n/a
Net income	New	57.2	61.3	73.2
	Old	64.7	76.1	n/a
	Change	-12%	-19%	n/a

Source: HSBC estimates

HSBC vs. consensus

Compared to consensus we are more cautious on the margin development. However, we note that consensus consists of only one or two other brokers and thus the comparison might not be meaningful.

REpower – HSBCe vs. consensus				
(EURm)		2010e	2011e	2012e
Sales	HSBCe	1500.0	1800.0	2050.0
	Consensus	1499.5	1716.8	1602.7
	Difference	0%	5%	28%
EBIT	HSBCe	90.0	99.0	117.0
	Consensus	126.1	112.1	125.0
	Difference	-29%	-12%	-6%
Net income	HSBCe	57.2	61.3	73.2
	Consensus	68.6	72.4	82.2
	Difference	-17%	-15%	-11%

Source: HSBC estimates, Bloomberg consensus

Valuation

Based on our updated estimates and unchanged assumptions (ungeared cost of equity of 10.5%, beta 1.5, equity risk premium of 4.5% and a risk-free rate of 4.0%) our DCF-model yields a fair value of EUR115 per share (previously EUR125). We have previously incorporated a strategic domination premium of 20% to our DCF value, which we estimated Suzlon would have to pay to the remaining minorities. Given the current uncertainties surrounding the Suzlon stake, we now refrain from applying such a premium and thus our target price is EUR115 (previously EUR150).

Under the HSBC research model for European stocks with a volatility indicator the Neutral band is ten percentage points above and below the hurdle rate of 8.5%. Our 12-month target price of EUR115 implies a potential return of 16.8%, which is in the Neutral band; thus, we downgrade REpower to Neutral (V).

Risks

Upside risks to our view include:

- ▶ Stronger than expected demand growth
- ▶ Stronger than expected pricing

Downside risks to our rating and target price include:

- ▶ Various risk scenarios resulting from the unclear Suzlon strategy
- ▶ Stronger-than-expected competition resulting in increasing price pressure
- ▶ Regulatory challenges hindering a faster realisation of offshore projects, particularly in the German home market

Financials & valuation: REpower Systems

Neutral (V)

Financial statements

Year to	03/2010a	03/2011e	03/2012e	03/2013e
Profit & loss summary (EURm)				
Revenue	1,304	1,500	1,800	2,050
EBITDA	119	119	132	153
Depreciation & amortisation	-21	-29	-33	-36
Operating profit/EBIT	98	90	99	117
Net interest	-16	-10	-13	-14
PBT	84	82	88	105
HSBC PBT	84	82	88	105
Taxation	-26	-25	-26	-31
Net profit	58	57	61	73
HSBC net profit	58	57	61	73

Cash flow summary (EURm)

Cash flow from operations	108	98	70	114
Capex	-56	-50	-55	-55
Cash flow from investment	-69	-37	-54	-59
Dividends	0	0	0	0
Change in net debt	-87	-24	-19	-54
FCF equity	-75	100	-21	26

Balance sheet summary (EURm)

Intangible fixed assets	43	31	31	36
Tangible fixed assets	147	167	188	207
Current assets	827	1,030	1,152	1,334
Cash & others	216	250	290	340
Total assets	1,033	1,244	1,387	1,592
Operating liabilities	411	522	532	610
Gross debt	58	67	88	83
Net debt	-158	-183	-202	-257
Shareholders funds	464	517	578	652
Invested capital	389	455	550	627

Ratio, growth and per share analysis

Year to	03/2010a	03/2011e	03/2012e	03/2013e
Y-o-y % change				
Revenue	7.8	15.1	20.0	13.9
EBITDA	30.2	0.3	10.7	16.1
Operating profit	27.9	-8.5	10.0	18.2
PBT	9.5	-2.5	7.2	19.4
HSBC EPS	9.6	-0.6	7.2	19.4

Ratios (%)

Revenue/IC (x)	3.4	3.6	3.6	3.5
ROIC	17.9	14.9	13.8	13.9
ROE	13.2	11.7	11.2	11.9
ROA	7.3	6.0	5.7	5.9
EBITDA margin	9.1	8.0	7.3	7.5
Operating profit margin	7.5	6.0	5.5	5.7
EBITDA/net interest (x)	7.2	11.7	10.0	10.9
Net debt/equity	-33.2	-34.6	-34.3	-38.7
Net debt/EBITDA (x)	-1.3	-1.5	-1.5	-1.7
CF from operations/net debt				

Per share data (EUR)

EPS Rep (fully diluted)	6.25	6.22	6.66	7.96
HSBC EPS (fully diluted)	6.25	6.22	6.66	7.96
DPS	0.00	0.00	0.00	0.00
Book value	50.49	56.22	62.88	70.84

Valuation data

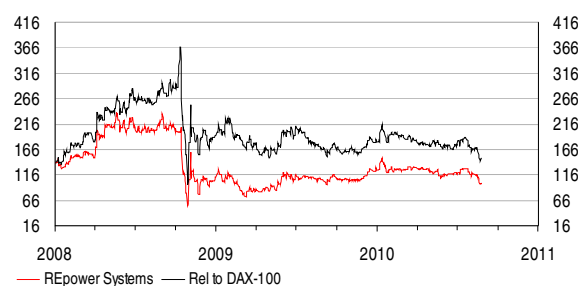
Year to	03/2010a	03/2011e	03/2012e	03/2013e
EV/sales	0.6	0.5	0.4	0.3
EV/EBITDA	6.2	6.0	5.2	4.2
EV/IC	1.9	1.6	1.3	1.0
PE*	15.7	15.8	14.8	12.4
P/Book value	2.0	1.8	1.6	1.4
FCF yield (%)	-8.4	11.2	-2.3	2.9
Dividend yield (%)	0.0	0.0	0.0	0.0

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (EUR)	98.48	Target price (EUR)	115.00	Potentl return (%)	16.8
Reuters (Equity)	RPW Gn.DE	Bloomberg (Equity)	RPW GR		
Market cap (USDm)	1,144	Market cap (EURm)	906		
Free float (%)	9	Enterprise value (EURm)	711		
Country	Germany	Sector	ENERGY EQUIPMENT		
Analyst	Burkhard Weiss	Contact	+49 211 910 3722		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

Suzlon (SUEL IN)

- ▶ Suzlon continues to grapple with very weak order flow and significantly diminished order book
- ▶ With order book currently at c0.25X annual capacity, Suzlon will have significantly underutilised capacity in FY11, we believe
- ▶ We cut our target price to INR42 (from INR50) and reiterate our Underweight (V) rating

Too much capacity, too few orders

The woes of Suzlon, India's largest wind turbine manufacturer and global no.6, don't seem to be over. The order flow which it needs to keep its factories running profitably has failed to materialise so far. Suzlon's order backlog as of 11 August 2010 was 1,458 MW, an increase from 1126 MW as on 26 May 2010. During the period Suzlon received orders of 489MW from the Indian market and 51MW from China.

An Australian order which we had expected to come Suzlon's way from AGL Energy Limited for Macarthur wind farm went to Vestas. As announced by AGL previously on 1 March 2010, the wind farm was to consist of 174 Suzlon S88 turbines for a total capacity of 365MW. However, in August, AGL gave the order for 425MW of turbines for the said wind farm to Vestas, highlighting the competitive nature of the market which is currently oversupplied and where wind turbine manufacturers are competing fiercely to fill their factory capacity.

We estimate Suzlon has manufacturing capacity of c5.7GW and this implies that its order book is just 0.25X its annual capacity.

Suzlon has stated in the past that it needs to sell c2,000MW of turbines to break-even at the PBT level. We expect that Suzlon is unlikely to reach this level of sales in FY11e (We forecast c1.5GW of sales for FY11e) and thus is likely to report a loss for the FY. However, on a quarterly basis the quantum of loss may diminish from Q1 to Q4 as volumes pick-up due to seasonal variations. Q4 is generally the strongest quarter in terms of sales for Suzlon.

Going gets tough in the Indian market

Suzlon is also facing the threat of increasing competition in its domestic market of India. Suzlon has dominated the wind turbine market in India till now with more than 50% market share but with the entry of Spanish turbine manufacturer Gamesa, Suzlon is going to have tough competition.

Gamesa started operations at its India facility in early 2010 with an initial production capacity of 200 MW per year. Gamesa has said that it expects to obtain a market share of c10% in India during the first year of product sales and to double

Robert Clover *
Analyst
HSBC Bank plc
+44 20 7991 6741
robert.clover@hsbcib.com

Shishir Singh *
Analyst
The Hongkong and Shanghai
Banking Corporation Limited (HK)
+852 2822 4292
shishirkumarsingh@hsbc.com.hk

Charanjit Singh*
Analyst
HSBC Bank Plc
+91 80 30013776
charanjit2singh@hsbc.co.in

*Employed by a non-US affiliate of HSBC Securites (USA) Inc., and is not registered/qualified pursuant to FINRA regulations

manufacturing capacity to 400 MW in 2011. We believe that some of the market share gains for Gamesa would be at the cost of the incumbent market leader Suzlon.

Q1FY11 net loss wider than market expectations

Suzlon announced its Q1FY11 results on 13 August. As expected the results were disappointing but what came as a surprise was the quantum of loss. On consolidated basis, Suzlon's Q1 FY 2010-11 sales of cINR24bn were c5% below consensus but the net loss of INR9.1bn was more than three times the consensus estimate of INR2.76bn loss. EBITDA was negative INR5.5bn vs. market expectation of positive INR 0.5bn, primarily driven by higher fixed costs (especially employee costs) spread over lower volume sales, foreign exchange loss of 1.26bn and somewhat higher raw material costs (including projects bought out).

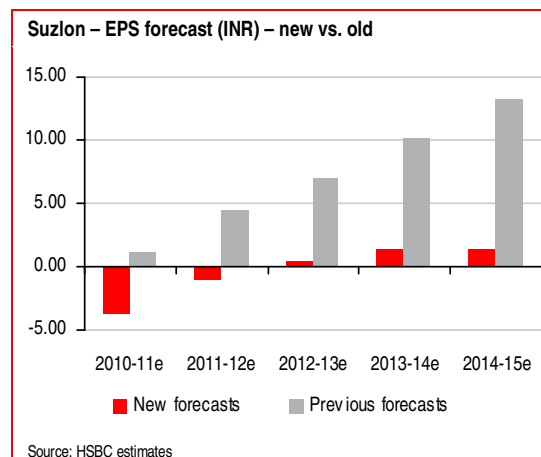
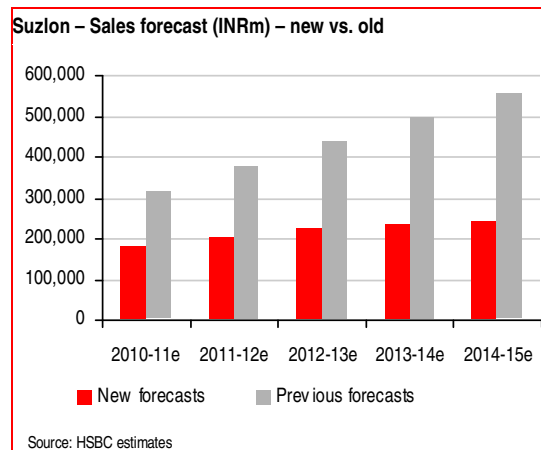
FY2011 guidance

Suzlon did not give any explicit revenue guidance for FY2010-11 but reiterated that revenue for FY2010-11 would be heavily back ended due to possible order re-scheduling. We believe that this lack of guidance indicates management's lack of visibility in the prevailing scenario. REpower's guidance of a 10-20% increase in sales and an increase in EBIT margin from 7.5% to 8.5% was quoted.

Impact of changes on our forecast

We have cut our sales revenues forecasts by 42% for FY11 and 46% for FY12. This reduction is due to the combined effect of the deconsolidation of Hansen and our cut in our sales forecast for Suzlon and REpower. The company's management in a conference call on 31 May 2010 (FY10 annual results call) had expressed their willingness to sell the Hansen stake. Also given the Suzlon's financial

position we believe that a stake sale is possible. We therefore assume that during the current year Suzlon will sell their 26% stake in Hansen. We assume sale price at 20% discount to the current market price following the precedent of previous 35% stake sale on 17 November at close to 20% discount to market price. Our EPS has decreased from INR1.11 to negative INR3.70 in FY11e and to negative INR0.99 from INR 4.36 in FY12e. See charts below.



HSBC versus consensus

Suzlon – Sales forecast: HSBC vs. consensus (INRm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010-11e	175,426	200,183	235,115	182,008	-9%
2011-12e	216,744	250,093	309,765	206,476	-17%
2012-13e	248,808	271,393	314,152	227,880	-16%

Source: Bloomberg, HSBC estimates

Suzlon – EBITDA forecast: HSBC vs. consensus (INRm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010-11e	1,266	11,457	20,877	10,477	-9%
2011-12e	13,163	21,530	30,267	16,402	-24%
2012-13e	19,841	26,918	35,501	20,720	-23%

Source: Bloomberg, HSBC estimates

implies a potential return of -15.3%; thus, we reiterate our Underweight (V) rating.

Risks

Upside risks to our view include:

- ▶ Stronger-than-expected order inflow and regulatory stimulus
- ▶ Stronger-than-expected pricing
- ▶ Stronger-than-expected margins

Valuation

We have employed two DCF methodologies to value Suzlon – HSBC's four-stage ROIC-based DCF and a 'classic' FCF-based DCF. Using a WACC of 11.5% (beta 1.2, EMRP of 7%, and a cost of debt of 7.5%), we derive fair values of INR55 and INR51 per share, using our two DCF methodologies - the HSBC four-stage ROIC-based DCF and a 'classic' FCF-based DCF. This gives us an average value of INR53, to which we apply a discount of 20% to reflect concerns over the lack of visibility of strategy for REpower's consolidation and the somewhat opaque disclosure. The resulting target price is INR42 (rounded).

We have revised the market share assumptions for Suzlon as per our global market share model. The cuts to our estimates result mostly from deconsolidating Hansen due to a sell-down in Suzlon's stake in Hansen to 26%. The combined effect of these has resulted in our target price decreasing from INR50 to INR42.

Under our research model, for stocks with a volatility indicator, the Neutral band is 10ppt above and below the hurdle rate of 10.5% for India stocks. Our 12-month target price of INR42

Financials & valuation: Suzlon Energy Ltd

Underweight (V)

Financial statements

Year to	03/2010a	03/2011e	03/2012e	03/2013e
Profit & loss summary (INRm)				
Revenue	207,792	182,008	206,476	227,880
EBITDA	9,430	10,477	16,402	20,720
Depreciation & amortisation	-6,630	-5,514	-5,896	-6,292
Operating profit/EBIT	2,800	4,963	10,506	14,428
Net interest	-11,950	-10,636	-11,969	-12,548
PBT	-6,337	-6,108	-769	2,574
HSBC PBT	-8,456	-4,978	-769	2,574
Taxation	-3,561	-47	-635	-1,355
Net profit	-9,827	-6,459	-1,729	830
HSBC net profit	-11,945	-5,329	-1,729	830

Cash flow summary (INRm)

Cash flow from operations	6,007	-18,411	35	9,130
Capex	-10,906	-5,596	-6,490	-7,295
Cash flow from investment	-19,958	-5,596	-6,490	-7,295
Dividends	-13	0	0	-62
Change in net debt	-20,361	4,693	4,094	-4,723
FCF equity	-17,381	-29,265	-10,037	-2,372

Balance sheet summary (INRm)

Intangible fixed assets	65,186	47,469	47,625	48,079
Tangible fixed assets	40,555	42,492	40,248	39,456
Current assets	171,982	171,545	179,553	187,663
Cash & others	29,043	31,057	33,417	36,367
Total assets	290,218	269,516	275,435	283,208
Operating liabilities	84,267	46,874	45,176	48,443
Gross debt	126,679	133,387	139,841	138,069
Net debt	97,637	102,330	106,424	101,702
Shareholders funds	66,012	71,434	69,705	72,473
Invested capital	164,413	183,575	188,832	190,389

Ratio, growth and per share analysis

Year to	03/2010a	03/2011e	03/2012e	03/2013e
Y-o-y % change				
Revenue	-20.9	-12.4	13.4	10.4
EBITDA	-68.2	11.1	56.6	26.3
Operating profit	-88.3	77.2	111.7	37.3
PBT	-188.4			
HSBC EPS	-205.2			

Ratios (%)

Revenue/IC (x)	1.0	1.0	1.1	1.2
ROIC	2.2	2.9	10.3	3.6
ROE	-15.7	-7.8	-2.4	1.2
ROA	2.6	2.1	8.4	2.8
EBITDA margin	4.5	5.8	7.9	9.1
Operating profit margin	1.3	2.7	5.1	6.3
EBITDA/net interest (x)	0.8	1.0	1.4	1.7
Net debt/equity	140.8	136.9	145.8	134.2
Net debt/EBITDA (x)	10.4	9.8	6.5	4.9
CF from operations/net debt	6.2		0.0	9.0

Per share data (INR)

EPS Rep (fully diluted)	-6.31	-3.70	-0.99	0.42
HSBC EPS (fully diluted)	-7.67	-3.05	-0.99	0.42
DPS	0.00	0.00	0.00	0.06
Book value	42.40	40.93	39.94	36.56

Valuation data

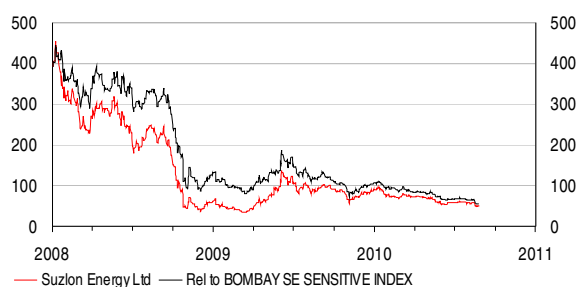
Year to	03/2010a	03/2011e	03/2012e	03/2013e
EV/sales	0.8	1.0	0.9	0.8
EV/EBITDA	18.5	17.6	11.5	8.9
EV/IC	1.1	1.0	1.0	1.0
PE*				118.4
P/Book value	1.2	1.2	1.2	1.4
FCF yield (%)	-22.7	-35.7	-12.3	-2.9
Dividend yield (%)	0.0	0.0	0.0	0.1

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (INR)	49.60	Target price (INR)	42.00	Potent'l return (%)	-15.3
Reuters (Equity)	SUZL.NS	Bloomberg (Equity)	SJEL IN		
Market cap (USDm)	1,846	Market cap (INRm)	86,571		
Free float (%)	10	Enterprise value (INRm)	184,200		
Country	India	Sector	ELECTRICAL EQUIPMENT		
Analyst	Robert Clover	Contact	44 20 7991 6741		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

Vestas (VWS DC)

- ▶ Vestas is most geared to demand recovery and should benefit more than other wind turbine manufacturers when demand recovers
- ▶ Vestas is our preferred stock in the challenged OEM sector. However, we note that whilst we believe it is undervalued, in the short term it may lack performance catalysts
- ▶ We cut target price to DKK300 from DKK425 due to lower industry growth expectations but we maintain the OW(V) rating

Profit warning and H1 numbers

Vestas' 18th August H1 results were not a pretty sight. They were significantly below expectations with a large EBIT loss, attributed to very low levels of operational gearing in H1 (20% we estimate). To make matters worse, the company also issued a profit warning, reducing revenue expectations for the full year to EUR6bn from EUR7bn and EBIT margins of 5-6% from 10-11%. The stock fell 23% on the day.

Operational gearing is likely to recover in 2011

With this as a backdrop, investors may rightly ask why we still have Vestas on an OW(V) rating. Well, following the share price correction, we believe that the stock looks undervalued, even on our reduced estimates. In addition, Vestas has flagged that the profit warning has resulted mostly from lower than expected operational gearing expectations. We do expect that with the strong order flow that Vestas has shown in H1 (5.7GW)

that volumes will recover in 2011. With roughly 7GW of expected sales in 2011, we would expect that margins will also recover to around 10-11% from the expected depressed levels of 2010. One key piece of guidance that was unchanged on the results was the reiteration of expected 8-9GW of orders expected to come in 2010. This underpins our expectations for 2011e volume, operational gearing and resultant margin recovery in 2011e.

In addition we note the following positives:

- ▶ **Vestas is most geared to demand recovery** - We believe that Vestas is most geared to demand recovery due to its exposure to small high growth markets and to smaller Independent Power Producers (IPPs). During the credit crisis, IPPs have found it difficult to secure finance for their projects and we believe that with the recent thaw in the finance markets this segment should again start placing orders thereby reviving growth.
- ▶ **Exposure to high growth offshore market in Europe** - Vestas and Siemens are the

Robert Clover*
Analyst
HSBC Bank plc
+44 20 7991 6741
robert.clover@hsbcib.com

James Magness*
Analyst
HSBC Bank plc
+44 20 7991 3464
jjames.magness@hsbcib.com

*Employed by a non-US affiliate of HSBC Securities (USA) Inc., and is not registered/qualified pursuant to FINRA regulations

market leaders in the offshore turbine market with c40% and c50% of the cumulative market share (in MW) as at the end of 2009 (source: EWEA).

- ▶ **Market share gains expected** - We believe that Vestas should improve its market share, particularly in China, where its market share has fallen from c23% in 2006 to c4% in 2009 as some of the smaller Chinese players drop out of the market. We estimate Vestas's global market share should increase by 1.5 percentage points from 14.5% in 2009 to 16.0% in 2014. This should see Vestas defend its position as no. 1 player.

Undervalued - but share price performance may remain challenged short- term?

In spite of the medium term positives we see for Vestas, we believe that the stock may remain challenged in the short term. Management credibility has taken a severe dent over the profit warning, and as a result of this, the market seems disinclined to give Vestas the benefit of the doubt over the 2011e margin recovery. Vestas will need to show further order flow to get the stock moving as well as solid quarterly results and a decent outlook statement for 2011 on 26th October 2010. Continued strong order flow beyond 2010 will be contingent on a good result to the US legislative debate, which currently appears to have stalled.

Target price cut due to lower industry growth expectations

We have cut our target price for Vestas to DKK300 from DKK425 earlier due to the lower growth expectations for the wind industry. Our five year demand CAGR (2009-14e) for new installations is down from 7.5% to 7.0% and the 10-year demand CAGR (2009-14e) is down from 6.7% to 5.5%.

We have more conviction on Vestas than on Gamesa

We have greater conviction on Vestas than on Gamesa as it is more geographically diversified and in our view, more geared to recovery in the wind turbine market due to its exposure to smaller IPPs. We expect that Vestas's volumes will recover in 2011 with the strong order flow that Vestas has shown in H1 (5.7GW), and along with it Vestas's margins to around 10-11% from the expected depressed levels of 2010.

Order flow improving...

Vestas's published order book at the end of June 2010 improved markedly in Q2 with 41% yoy growth, and 93% sequential growth with the backlog standing at 5,061MW. Vestas showed over 3GW of new order inflow in Q2, almost as much as the whole of 2009, and has shown 5.7GW of new orders YTD.

Vestas also announced on 26 April, a 1,500MW order with EDPR (with an option for an additional 600MW), representing c17% of the total expected order inflow of 8-9GW for 2010e. The wind turbines are to be delivered in 2011 and 2012.

Vestas: published order backlog

	MW	Q-o-q	Y-o-Y
30-Jun-10	5,061	93%	41%
31-Mar-10	2,618	54%	-43%
31-Dec-09	1,700	-44%	-65%
30-Sep-09	3,014	-16%	-48%
30-Jun-09	3,596	-21%	-45%
31-Mar-09	4,570	-5%	7%
31-Dec-08	4,806	-18%	9%
30-Sep-08	5,848	-10%	48%
30-Jun-08	6,529	52%	44%
31-Mar-08	4,283	-3%	-3%
31-Dec-07	4,415	12%	10%
30-Sep-07	3,946	-13%	
30-Jun-07	4,535	3%	
31-Mar-07	4,400	10%	

Source: HSBC

FY10 forecasts

We revise our forecast to take into account the revised guidance given by Vestas for FY10. We now forecast sales of c5.5GW for Vestas for FY10e from c6.1GW previously. We have also reduced our EBIT margin forecast for FY10e to 5.1% at the lower end of the Vestas's guidance of 5-6%. We expect Vestas's EBIT margin to bounce back to 10.5% in FY11e (still lower than our previous estimate of 11.3%) and to reach 12.8% in FY2015e (previously estimated to be 13.3%).

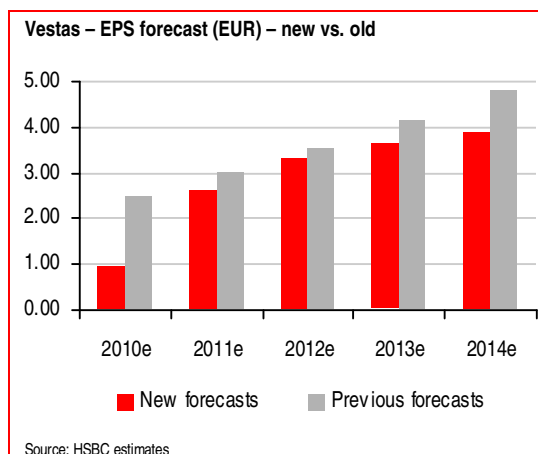
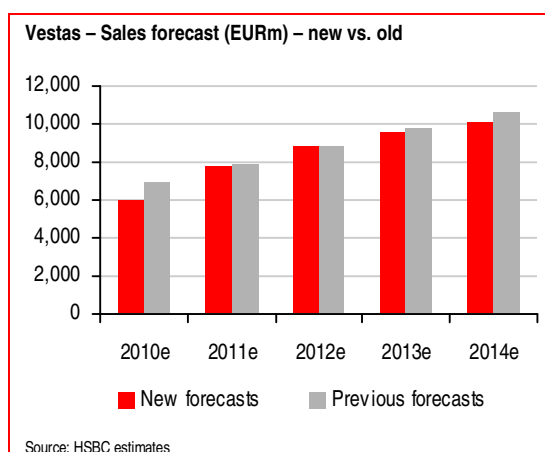
Impact of changes on our forecast

We have cut our sales revenues forecasts by 14% and our EPS forecasts by 61% for 2010e. For 2011e we have cut our revenue and EPS estimates by 2% and 12% respectively.

We have cut our EPS to EUR0.97 from EUR2.52 in FY10e and to EUR2.65 from EUR3.01 in FY11e.

We have reduced our long-term sales forecast by c8% and our long-term EPS forecast by c12%.

See charts below.



HSBC vs. consensus

Vestas – Sales forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010e	5,831	5,999	6,125	6,024	0%
2011e	6,605	7,468	9,050	7,805	5%
2012e	6,722	8,666	10,408	8,810	2%

Source: Thomson Financial DataStream, HSBC

Vestas – EBITDA forecast: HSBC vs. consensus (EURm)

Year	Low	Mean	High	HSBC	HSBC % above/(below) mean
2010e	539	594	647	604	2%
2011e	816	1,029	1,341	1,120	9%
2012e	938	1,256	1,599	1,359	8%

Source: Thomson Financial DataStream, HSBC

Valuation

Using unchanged assumptions of a WACC of 9.0% (beta of 1.3, EMRP of 4.5% and gross cost of debt of 6.0%), we derive fair values of DKK258/share and DKK286/share using our two different DCF methodologies (the HSBC four-stage ROIC-based DCF and a 'classic' FCF-based DCF). This gives us an average of DKK272/share. We have applied a 10% premium (same as previously) this due to Vestas' market/technology position, profitability and the fact that Vestas is notably more liquid than all other pure-play wind turbine manufacturer stocks. This gives a rounded

target price of DKK300 (versus our prior target price of DKK425).

Under our research model, for stocks with a volatility indicator, the Neutral band is 10ppt above and below the hurdle rate for Europe ex-UK stocks of 8.5%. Our 12-month target price of DKK300 implies a potential return of c32%, which is above the Neutral band; thus, we rate the stock Overweight (V).

Risks

Downside risks to our view include:

- ▶ Vestas could continue to lose market share in light of fierce competition from China, GE expanding in Europe and Siemens aiming to become a top 3 wind player by 2012
- ▶ Prolonged lack of financing could dent Vestas' clients' ability to build out their pipelines
- ▶ Pricing risk due to overcapacity in the industry
- ▶ Macro issues, particularly in Southern Europe, persist putting increasing focus on governments reducing renewable incentive
- ▶ Acquisition risk.

Financials & valuation: Vestas Wind

Overweight (V)

Financial statements

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Profit & loss summary (EURm)				
Revenue	6,636	6,024	7,805	8,810
EBITDA	1,074	604	1,120	1,359
Depreciation & amortisation	-218	-294	-297	-342
Operating profit/EBIT	856	310	823	1,017
Net interest	-48	-35	-74	-79
PBT	809	275	749	938
HSBC PBT	809	275	749	938
Taxation	-230	-77	-210	-263
Net profit	579	198	539	675
HSBC net profit	579	198	539	675

Cash flow summary (EURm)

Cash flow from operations	-36	579	184	872
Capex	-833	-1,000	-897	-963
Cash flow from investment	-833	-1,000	-897	-963
Dividends	0	0	0	-169
Change in net debt	23	421	713	92
FCF equity	-973	-414	-787	-134

Balance sheet summary (EURm)

Intangible fixed assets	812	1,092	1,428	1,775
Tangible fixed assets	1,461	1,886	2,150	2,422
Current assets	4,035	3,773	5,254	6,016
Cash & others	488	488	488	488
Total assets	6,435	6,878	8,958	10,340
Operating liabilities	2,364	2,191	2,959	3,541
Gross debt	353	774	1,487	1,578
Net debt	-135	286	999	1,090
Shareholders funds	3,364	3,562	4,101	4,776
Invested capital	3,456	4,072	5,383	6,184

Ratio, growth and per share analysis

Year to	12/2009a	12/2010e	12/2011e	12/2012e
Y-o-y % change				
Revenue	10.0	-9.2	29.6	12.9
EBITDA	33.7	-43.8	85.5	21.4
Operating profit	28.1	-63.8	165.7	23.6
PBT	13.3	-66.0	172.2	25.3
HSBC EPS	6.5	-66.9	172.2	25.3

Ratios (%)

Revenue/IC (x)	2.4	1.6	1.7	1.5
ROIC	22.5	5.9	12.5	12.7
ROE	21.8	5.7	14.1	15.2
ROA	10.6	3.4	7.5	7.6
EBITDA margin	16.2	10.0	14.3	15.4
Operating profit margin	12.9	5.1	10.5	11.5
EBITDA/net interest (x)	22.4	17.4	15.1	17.2
Net debt/equity	-4.0	8.0	24.4	22.8
Net debt/EBITDA (x)	-0.1	0.5	0.9	0.8
CF from operations/net debt		202.6	18.5	79.9

Per share data (EUR)

EPS Rep (fully diluted)	2.94	0.97	2.65	3.32
HSBC EPS (fully diluted)	2.94	0.97	2.65	3.32
DPS	0.00	0.00	0.00	0.83
Book value	16.51	17.49	20.13	23.45

Valuation data

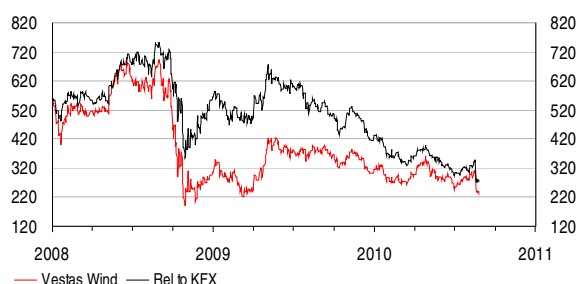
Year to	12/2009a	12/2010e	12/2011e	12/2012e
EV/sales	0.9	1.1	0.9	0.8
EV/EBITDA	5.7	10.8	6.4	5.4
EV/IC	1.8	1.6	1.3	1.2
PE*	10.4	31.5	11.6	9.2
P/Book value	1.9	1.8	1.5	1.3
FCF yield (%)	-15.6	-6.7	-12.7	-2.2
Dividend yield (%)	0.0	0.0	0.0	2.7

Note: * = Based on HSBC EPS (fully diluted)

Issuer information

Share price (DKK)	228.00	Target price (DKK)	300.00	Potent'l return (%)	31.6
Reuters (Equity)	VWS.CO	Bloomberg (Equity)	VWS DC		
Market cap (USDm)	7,876	Market cap (DKKm)	46,445		
Free float (%)	100	Enterprise value (EURm)	6505		
Country	Denmark	Sector	ELECTRICAL EQUIPMENT		
Analyst	Robert Clover	Contact	44 20 7991 6741		

Price relative



Source: HSBC

Note: price at close of 25 Aug 2010

Disclosure appendix

Analyst Certification

Each analyst whose name appears as author of an individual chapter or individual chapters of this report certifies that the views about the subject security(ies) or issuer(s) or any other views or forecasts expressed in the chapter(s) of which (s)he is author accurately reflect his/her personal views and that no part of his/her compensation was, is or will be directly or indirectly related to the specific recommendation(s) or view(s) contained therein.

Important disclosures

Stock ratings and basis for financial analysis

HSBC believes that investors utilise various disciplines and investment horizons when making investment decisions, which depend largely on individual circumstances such as the investor's existing holdings, risk tolerance and other considerations. Given these differences, HSBC has two principal aims in its equity research: 1) to identify long-term investment opportunities based on particular themes or ideas that may affect the future earnings or cash flows of companies on a 12 month time horizon; and 2) from time to time to identify short-term investment opportunities that are derived from fundamental, quantitative, technical or event-driven techniques on a 0-3 month time horizon and which may differ from our long-term investment rating. HSBC has assigned ratings for its long-term investment opportunities as described below.

This report addresses only the long-term investment opportunities of the companies referred to in the report. As and when HSBC publishes a short-term trading idea the stocks to which these relate are identified on the website at www.hsbcnet.com/research. Details of these short-term investment opportunities can be found under the Reports section of this website.

HSBC believes an investor's decision to buy or sell a stock should depend on individual circumstances such as the investor's existing holdings and other considerations. Different securities firms use a variety of ratings terms as well as different rating systems to describe their recommendations. Investors should carefully read the definitions of the ratings used in each research report. In addition, because research reports contain more complete information concerning the analysts' views, investors should carefully read the entire research report and should not infer its contents from the rating. In any case, ratings should not be used or relied on in isolation as investment advice.

Rating definitions for long-term investment opportunities

Stock ratings

HSBC assigns ratings to its stocks in this sector on the following basis:

For each stock we set a required rate of return calculated from the risk free rate for that stock's domestic, or as appropriate, regional market and the relevant equity risk premium established by our strategy team. The price target for a stock represents the value the analyst expects the stock to reach over our performance horizon. The performance horizon is 12 months. For a stock to be classified as Overweight, the implied return must exceed the required return by at least 5 percentage points over the next 12 months (or 10 percentage points for a stock classified as Volatile*). For a stock to be classified as Underweight, the stock must be expected to underperform its required return by at least 5 percentage points over the next 12 months (or 10 percentage points for a stock classified as Volatile*). Stocks between these bands are classified as Neutral.

Our ratings are re-calibrated against these bands at the time of any 'material change' (initiation of coverage, change of volatility status or change in price target). Notwithstanding this, and although ratings are subject to ongoing management review, expected returns will be permitted to move outside the bands as a result of normal share price fluctuations without necessarily triggering a rating change.

*A stock will be classified as volatile if its historical volatility has exceeded 40%, if the stock has been listed for less than 12 months (unless it is in an industry or sector where volatility is low) or if the analyst expects significant volatility. However,

stocks which we do not consider volatile may in fact also behave in such a way. Historical volatility is defined as the past month's average of the daily 365-day moving average volatilities. In order to avoid misleadingly frequent changes in rating, however, volatility has to move 2.5 percentage points past the 40% benchmark in either direction for a stock's status to change.

Rating distribution for long-term investment opportunities

As of 27 August 2010, the distribution of all ratings published is as follows:

Overweight (Buy)	50%	(21% of these provided with Investment Banking Services)
Neutral (Hold)	37%	(17% of these provided with Investment Banking Services)
Underweight (Sell)	13%	(19% of these provided with Investment Banking Services)

Information regarding company share price performance and history of HSBC ratings and price targets in respect of its long-term investment opportunities for the companies the subject of this report, is available from www.hsbcnet.com/research.

HSBC & Analyst disclosures

Disclosure checklist

Company	Ticker	Recent price	Price Date	Disclosure
ACCIONA SA	ANA.MC	62.61	27-Aug-2010	1, 2, 5, 7
CLIPPER WINDPOWER	CWPR.L	0.44	27-Aug-2010	2, 7, 11
EDP RENOVAVEIS	EDPR.LS	4.45	27-Aug-2010	6
GAMESA CORP TECNOLOGICA S	GAM.MC	5.22	27-Aug-2010	4
IBERDROLA RENOVABLES S.A	IBR.MC	2.54	27-Aug-2010	11
NORDEX	NDXGk.DE	6.87	27-Aug-2010	6, 11
REPOWER SYSTEMS	RPWGn.DE	99.45	27-Aug-2010	1, 5, 6, 11
TERNA ENERGY SA	TENr.AT	3.49	27-Aug-2010	2
VESTAS WIND	VWS.CO	234.20	27-Aug-2010	2, 7, 11

Source: HSBC

- 1 HSBC* has managed or co-managed a public offering of securities for this company within the past 12 months.
- 2 HSBC expects to receive or intends to seek compensation for investment banking services from this company in the next 3 months.
- 3 At the time of publication of this report, HSBC Securities (USA) Inc. is a Market Maker in securities issued by this company.
- 4 As of 31 July 2010 HSBC beneficially owned 1% or more of a class of common equity securities of this company.
- 5 As of 31 July 2010, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of investment banking services.
- 6 As of 31 July 2010, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of non-investment banking-securities related services.
- 7 As of 31 July 2010, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of non-securities services.
- 8 A covering analyst/s has received compensation from this company in the past 12 months.
- 9 A covering analyst/s or a member of his/her household has a financial interest in the securities of this company, as detailed below.
- 10 A covering analyst/s or a member of his/her household is an officer, director or supervisory board member of this company, as detailed below.
- 11 At the time of publication of this report, HSBC is a non-US Market Maker in securities issued by this company and/or in securities in respect of this company

Analysts, economists, and strategists are paid in part by reference to the profitability of HSBC which includes investment banking revenues.

For disclosures in respect of any company mentioned in this report, please see the most recently published report on that company available at www.hsbcnet.com/research.

* HSBC Legal Entities are listed in the Disclaimer below.

Additional disclosures

- 1 This report is dated as at 31 August 2010.
- 2 All market data included in this report are dated as at close 25 August 2010, unless otherwise indicated in the report.
- 3 HSBC has procedures in place to identify and manage any potential conflicts of interest that arise in connection with its Research business. HSBC's analysts and its other staff who are involved in the preparation and dissemination of Research operate and have a management reporting line independent of HSBC's Investment Banking business. Information Barrier procedures are in place between the Investment Banking and Research businesses to ensure that any confidential and/or price sensitive information is handled in an appropriate manner.
- 4 As of 31 July 2010, HSBC and/or its affiliates (including the funds, portfolios and investment clubs in securities managed by such entities) either, directly or indirectly, own or are involved in the acquisition, sale or intermediation of, 1% or more of the total capital of the subject companies securities in the market for the following Company(ies) : GAMESA CORP
TECNOLOGICA S
- 5 HSBC Trinkaus & Burkhardt acts as a designated sponsor to the following companies, and as such has an agreement with such companies to engage in market making activities and/or to publish research in connection with the securities of the following company(ies) : REPOWER SYSTEMS , NORDEX

Disclaimer

* Legal entities as at 31 January 2010

'UAE' HSBC Bank Middle East Limited, Dubai; 'HK' The Hongkong and Shanghai Banking Corporation Limited, Hong Kong; 'TW' HSBC Securities (Taiwan) Corporation Limited; 'CA' HSBC Securities (Canada) Inc, Toronto; HSBC Bank, Paris branch; HSBC France; 'DE' HSBC Trinkaus & Burkhardt AG, Dusseldorf; 000 HSBC Bank (RR), Moscow; 'IN' HSBC Securities and Capital Markets (India) Private Limited, Mumbai; 'JP' HSBC Securities (Japan) Limited, Tokyo; 'EG' HSBC Securities Egypt S.A.E., Cairo; 'CN' HSBC Investment Bank Asia Limited, Beijing Representative Office; The Hongkong and Shanghai Banking Corporation Limited, Singapore branch; The Hongkong and Shanghai Banking Corporation Limited, Seoul Securities Branch; The Hongkong and Shanghai Banking Corporation Limited, Seoul Branch; HSBC Securities (South Africa) (Pty) Ltd, Johannesburg; 'GR' HSBC Pantelakis Securities S.A., Athens; HSBC Bank plc, London, Madrid, Milan, Stockholm, Tel Aviv, 'US' HSBC Securities (USA) Inc, New York; HSBC Yatirim Menkul Degerler A.S., Istanbul; HSBC México, S.A., Institución de Banca Múltiple, Grupo Financiero HSBC, HSBC Bank Brasil S.A. - Banco Múltiple, HSBC Bank Australia Limited, HSBC Bank Argentina S.A., HSBC Saudi Arabia Limited.

Issuer of report

HSBC Bank plc

8 Canada Square

London, E14 5HQ, United Kingdom

Telephone: +44 20 7991 8888

Fax: +44 20 7992 4880

Website: www.research.hsbc.com

In the UK this document has been issued and approved by HSBC Bank plc ("HSBC") for the information of its Clients (as defined in the Rules of FSA) and those of its affiliates only. It is not intended for Retail Clients in the UK. If this research is received by a customer of an affiliate of HSBC, its provision to the recipient is subject to the terms of business in place between the recipient and such affiliate.

HSBC Securities (USA) Inc. accepts responsibility for the content of this research report prepared by its non-US foreign affiliate. All U.S. persons receiving and/or accessing this report and wishing to effect transactions in any security discussed herein should do so with HSBC Securities (USA) Inc. in the United States and not with its non-US foreign affiliate, the issuer of this report.

In Singapore, this publication is distributed by The Hongkong and Shanghai Banking Corporation Limited, Singapore Branch for the general information of institutional investors or other persons specified in Sections 274 and 304 of the Securities and Futures Act (Chapter 289) ("SFA") and accredited investors and other persons in accordance with the conditions specified in Sections 275 and 305 of the SFA. This publication is not a prospectus as defined in the SFA. It may not be further distributed in whole or in part for any purpose. The Hongkong and Shanghai Banking Corporation Limited Singapore Branch is regulated by the Monetary Authority of Singapore. Recipients in Singapore should contact a "Hongkong and Shanghai Banking Corporation Limited, Singapore Branch" representative in respect of any matters arising from, or in connection with this report.

In Australia, this publication has been distributed by The Hongkong and Shanghai Banking Corporation Limited (ABN 65 117 925 970, AFSL 301737) for the general information of its "wholesale" customers (as defined in the Corporations Act 2001). Where distributed to retail customers, this research is distributed by HSBC Bank Australia Limited (AFSL No. 232595). These respective entities make no representations that the products or services mentioned in this document are available to persons in Australia or are necessarily suitable for any particular person or appropriate in accordance with local law. No consideration has been given to the particular investment objectives, financial situation or particular needs of any recipient.

This publication has been distributed in Japan by HSBC Securities (Japan) Limited. It may not be further distributed, in whole or in part, for any purpose. In Hong Kong, this document has been distributed by The Hongkong and Shanghai Banking Corporation Limited in the conduct of its Hong Kong regulated business for the information of its institutional and professional customers; it is not intended for and should not be distributed to retail customers in Hong Kong. The Hongkong and Shanghai Banking Corporation Limited makes no representations that the products or services mentioned in this document are available to persons in Hong Kong or are necessarily suitable for any particular person or appropriate in accordance with local law. All inquiries by such recipients must be directed to The Hongkong and Shanghai Banking Corporation Limited. In Korea, this publication is distributed by The Hongkong and Shanghai Banking Corporation Limited, Seoul Securities Branch ("HBAP SLS") for the general information of professional investors specified in Article 9 of the Financial Investment Services and Capital Markets Act ("FSCMA"). This publication is not a prospectus as defined in the FSCMA. It may not be further distributed in whole or in part for any purpose. HBAP SLS is regulated by the Financial Services Commission and the Financial Supervisory Service of Korea.

This document is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment. HSBC has based this document on information obtained from sources it believes to be reliable but which it has not independently verified; HSBC makes no guarantee, representation or warranty and accepts no responsibility or liability as to its accuracy or completeness. The opinions contained within the report are based upon publicly available information at the time of publication and are subject to change without notice.

Nothing herein excludes or restricts any duty or liability to a customer which HSBC has under the Financial Services and Markets Act 2000 or under the Rules of FSA. A recipient who chooses to deal with any person who is not a representative of HSBC in the UK will not enjoy the protections afforded by the UK regulatory regime. Past performance is not necessarily a guide to future performance. The value of any investment or income may go down as well as up and you may not get back the full amount invested. Where an investment is denominated in a currency other than the local currency of the recipient of the research report, changes in the exchange rates may have an adverse effect on the value, price or income of that investment. In case of investments for which there is no recognised market it may be difficult for investors to sell their investments or to obtain reliable information about its value or the extent of the risk to which it is exposed.

HSBC Bank plc is registered in England No 14259, is authorised and regulated by the Financial Services Authority and is a member of the London Stock Exchange.

© Copyright. HSBC Bank plc 2010, ALL RIGHTS RESERVED. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of HSBC Bank plc. MICA (P) 142/06/2010 and MICA (P) 193/04/2010



James Magness*
Analyst
HSBC Bank Plc
+44 20 7991 3464
james.magness@hsbcib.com

James is an analyst in the Alternative Energy team based in London. He joined HSBC in August 2005 from a large accounting firm where he qualified as a chartered accountant and worked in the Valuation and Strategy team. Prior to that he graduated from Oxford University with a first class degree in Physics.



Robert Clover*
Analyst
HSBC Bank Plc
+44 20 7991 6741
robert.clover@hsbcib.com

Robert Clover is the Global Head of Alternative and Renewable Energy Equity Research and he joined HSBC in 2004. Throughout his career he has been ranked in Extel, II and Greenwich. He has an MA (Hons) from Oxford in Classics and Modern languages, is ACCA-qualified and has worked as an investment analyst since 1995.

*Employed by a non-US affiliate of HSBC Securities (USA) Inc, and is not registered/qualified pursuant to FINRA regulations.