

EDP RENOVÁVEIS

UTILITIES

STUDENT: LUIS VARELA FILIPE

COMPANY REPORT

03 JANUARY 2012

Uncertainty Ahead

Strains on credit lead to slower growth

A Top Player in a fast growing industry

EDP Renováveis is a well-diversified pure wind player, with operating capacity in both Europe and America. Current installed capacity is over 7 GW and Pipeline exceeds 29 GW, spread over projects in different stages of maturity.

Growth Strategy: Focus on U.S. and Eastern Europe

The company's key market is the U.S. (3,323 GW installed and 18,515 GW in Pipeline), followed by Spain (2,194 GW installed and 4,018 GW in Pipeline). Future growth is expected to come mainly from U.S. and Eastern Europe (Poland and Romania). YE2012 installed capacity is expected at 8,454 GW (Vs. 2011E 7,539 GW).

Regulatory Support

We do not anticipate major changes in the regulatory schemes in place. However, the current economic crisis is a matter of concern for new regulatory frameworks, namely in what regards future US and Spanish incentives system, to be defined until the end of 2012.

Reduced Capital Needs

Increased generating capacity and decreased growth targets have allowed the company to increase the percentage on CAPEX covered by operating cash flow, thus reducing the need for new capital. Average Net Debt / EBITDA 2012-2015E at 4.56x (Vs. 2011E 5.29x).

SOTP

We maintain our Buy recommendation, valuing the company at 6,03 €/share. According to our estimates, operating capacity at YE2012 is worth 4,68 €/share, 2013-2015E pipeline is worth 0,20 €/share and Repowering & Terminal Value is responsible for the remaining 1,16 €/share.

Recommendation: BUY

Vs. Previous Recommendation

BUY

Price Target FY12: 6,03 €

Upside / (Downside) (%)

26,6%

Price (as of 3-Jan-12) 4,763 €

Reuters: EDPR.LS, Bloomberg: EDPR PL

52-week range (€) 3,73-5,27

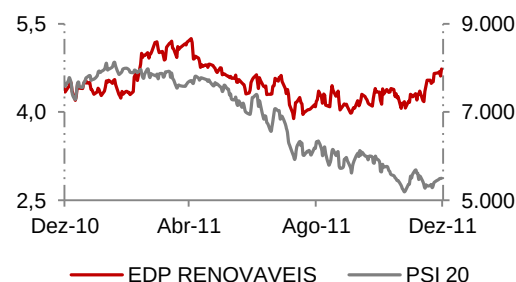
Market Cap (€m) 4.294,9

Outstanding Shares (m) 872,3

Free Float 22,5%

Average Volume (52-week) 902.935

Source: Euronext, Company Data



	3M	6M	YTD
Price Performance (%)	15,6	3,9	9,0

Source: Euronext, Nova Equity Research

(Values in € millions)	2010	2011E	2012F
Adjusted Gross Profit	948	1.179	1.363
EBITDA	713	876	1.025
EBITDA Margin	75%	74%	75%
EBIT	290	438	547
EBIT Margin	31%	37%	40%
EPS	0,09	0,17	0,23
Net Profit	80	145	205
Net Debt / EBITDA	-	5,29	4,76
EV / EBITDA (x)	14,11	11,48	9,81
EV / EBIT (x)	34,70	22,98	18,38
P/E	-	36,11	25,62

Source: Nova Equity Research

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

EDP Renováveis: Summary Tables

Income Statement (€m)	2010	2011E	2012E	2013E	2014E
Adjusted Gross Profit	948	1179	1363	1439	1519
Operating costs (Opex)	(235)	(302)	(338)	(362)	(388)
EBITDA	713	876	1.025	1.077	1.132
Depreciation and Amortization	(423)	(438)	(478)	(501)	(523)
EBIT	290	438	547	576	608
Financial Costs	(169)	(250)	(276)	(284)	(272)
Pre-tax Profit (EBT)	121	188	272	292	336
Income Taxes	(38)	(39)	(63)	(67)	(71)
Minority Interests	3	4	4	4	5
Net Income	80	145	205	220	261
Balance Sheet (€m)					
Tangible Fixed Assets	9.982	10.579	10.836	10.732	10.600
Intangibles / Goodwill	1.367	1.344	1.349	1.353	1.348
Financial Investments	64	59	61	62	61
Deferred Tax assets	39	29	32	33	32
Non-Current Assets	11.451	12.011	12.278	12.180	12.040
Inventories	24	22	24	28	25
Receivables	900	1.402	1.801	2.353	3.192
Other Current Assets	36	36	36	36	36
Cash	424	320	237	140	140
Current Assets	1.384	1.780	2.098	2.556	3.393
Total Assets	12.835	13.792	14.377	14.737	15.433
Shareholder's Equity	5.268	5.413	5.648	5.843	6.100
Minority interest	126	129	133	138	143
Dividends	-	-	29	41	44
Total Equity	5.394	5.542	5.782	5.980	6.242
Financial Debt	3.534	3.741	3.834	3.806	4.136
Provisions	54	54	54	54	54
Deferred Tax liability	372	344	353	356	351
Institutional Partnership	1.644	1.825	1.788	1.765	1.757
Accounts Payable - net	1.839	2.285	2.566	2.775	2.893
Total Liabilities	7.442	8.249	8.595	8.756	9.191
Total Equity + Liabilities	12.835	13.792	14.377	14.737	15.433
Cash Flow Statement (€m)	2010	2011E	2012E	2013E	2014E
Net Income	80	145	205	220	261
Depreciation	423	438	478	501	523
Change in Operating Assets	(170)	(500)	(402)	(555)	(837)
Change in Operating Liabilities	(51)	239	244	164	78
Cash Flow Operating Activities	282	323	525	330	26
CAPEX	(1801)	(1013)	(740)	(401)	(386)
Financial Investments	(13)	14	(5)	(2)	3
Other Cash Flows	376	179	46	49	34
Cash Flow Investing Activities	(1438)	(819)	(698)	(355)	(349)
Change in Equity	(14)	4	35	(21)	1
Change in Debt	1151	389	56	(52)	322
Cash Flow Financing Activities	1136	393	90	(73)	323
Change in Cash	(20)	(103)	(84)	(97)	()
Cash - Beginning of the Period	444	424	320	237	140
Cash - Ending of the Period	424	320	237	140	140
Growth					
Revenues (%)	n.a.	28%	17%	6%	5%
EBITDA (%)	n.a.	23%	17%	5%	5%
EBIT (%)	n.a.	51%	25%	5%	6%
Net Income (%)	n.a.	81%	41%	8%	18%
EPS (%)	n.a.	81%	41%	8%	18%
Ratios					
EBITDA Margin (%)	75%	74%	75%	75%	74%
EBIT Margin (%)	31%	37%	40%	40%	40%
ROE (%)	1,5%	2,6%	3,5%	3,7%	4,2%
Net Debt / EBITDA (x)	-	5,29	4,76	4,51	4,43
Valuation					
EV / EBITDA (x)	14,11	11,48	9,81	9,34	8,89
EV / EBIT (x)	34,70	22,98	18,38	17,47	16,54
P / E (x)	n.a.	36,11	25,62	23,83	20,12

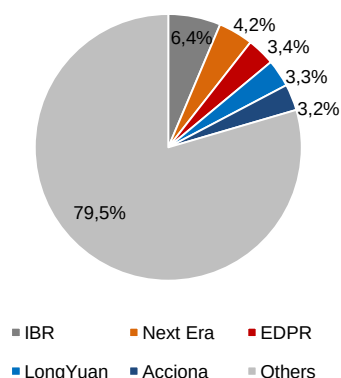
THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Table of Contents

Summary Tables	2
Investment Case	4
Company overview	6
Valuation.....	12
Key Risks.....	17
Markets & Regulation	19
Appendix	32
Disclosures and Disclaimer	35

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

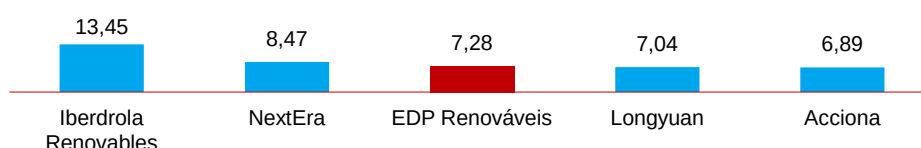
Chart 2: Global Installed Capacity by Company (YE2010)



Investment Case

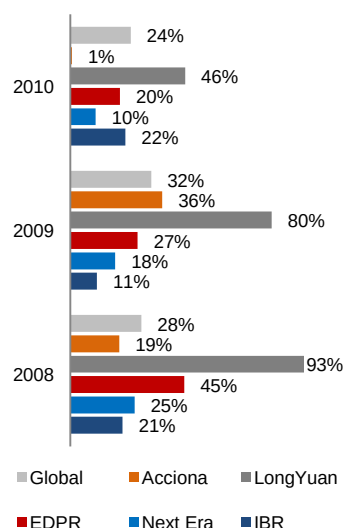
EDP Renováveis (EDPR) is a pure renewable player, and one of the leading green power generating companies in the world, with more than 7GW of installed capacity. Historically, the company presents a steady growth in installed capacity, having increased by 6x its gross MW from 2005 to 2010.

Chart 1: Top Players - Wind Installed Capacity by Company (9M 2011)



Source: EDPR, Nova Equity Research

Chart 3: YoY Growth in Installed Capacity by Company

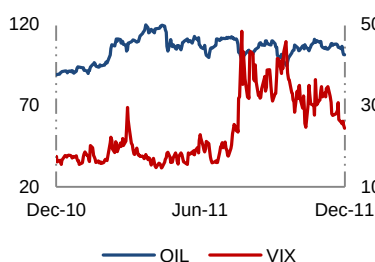


Source: GWEC, Nova Equity Research

Despite the current economic reality, investments in renewable sources of energy should continue to grow in the upcoming years, fuelled by increasing global demand¹, mainly from developing countries and emerging economies. In Europe, the RES Directive is expected to continue to boost the sector, as member states have binding targets for renewable energy shares of final energy consumption by 2020. Nevertheless, there is some concern over the possibility that financial consolidation in some EU economies may lead to a cut in incentives to the sector. In the US, industry incentives will be reviewed in 2012, but the expectations are for the current scheme to be extended, once again.

The probability of a Greek default and the contagious effect to other economies brought further instability to the markets and led to increased credit restrictions and to an overall deterioration of financing conditions. On the other side, the increased volatility of the markets also led to the escalation of the prices of fossil fuels and electricity, turning renewable energy sources more appealing.

Chart 4: OIL and VIX



Source: Bloomberg

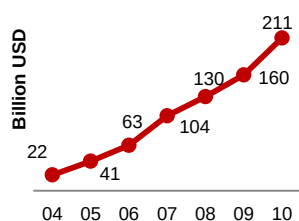
According to IEA's forecasts, renewables based generation in 2030 should be 3x the value of 2008, and its share in global electricity generation should increase from 20%² (2010) to close to 30%. Global investment in renewable energy totalled a record value of \$211 billion in 2010 (Vs. \$160 billion in 2009), with emerging economies taking the lead for the first time ever. Despite this, and given that renewables are generally more capital intensive than fossil fuels, sector's investment needs are estimated at around \$5,7 trillion over the period 2010-2035. Subsidies to the sector should also continue to increase over this

¹ Expected to increase by one third between 2010 and 2035, according to the International Energy Agency

² Mainly from hydropower (16,1%) and wind power (3%)

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Chart 5: Global New Investment in Renewable Energy 04-10



Source: REN21

period, to a value close to \$250 billion, or 0,21% of global GDP, by 2035, versus the \$66 billion in 2010, 0,1% of global GDP. Despite the magnitude of these values, they are still far from the value of fossil-fuel subsidies, which totalled \$409 billion in 2010 (0,65% of global GDP) and, without reform, are expected to reach a value of \$660 billion by 2020, or 0,7% of global GDP.

Wind remains the most attractive resource for power generation and is expected to increase, on average, 18,4%³ per year between 2011 and 2015, to a cumulative global installed capacity of 459GW in 2015 (Vs. 197GW in 2011).

With current pipeline of more than 29GW (excluding under construction), EDPR is well diversified and operates in countries with support frameworks well-defined and implemented. The company was successful in adjusting its growth strategy to reflect current economic conditions, which allowed them to maintain a lower but stable growth. Moreover, since most part of their revenues is not directly exposed to market prices (see chart 9), the company faces lower risk on cash flow from operating activities.

Strategic advantages

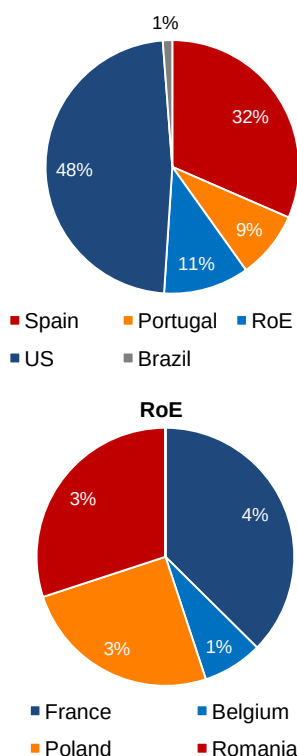
With increasing presence in the sector, and maintaining its ability to meet growing demand for generating capacity, we consider EDPR's key competitive advantages to be:

- **Early-mover** – Operating Wind since 1996, EDPR has been able to acquire and secure strong pipeline in some of the most attractive locations, which helps explaining the above market load factors achieved (see chart 14). We expect part of the company's current pipeline, mainly in the US, to be in locations with high wind resources not fully exploited and, as so, we consider the company will continue to benefit from its early mover position.
- **Stable and predictable projects** – The Company is focused on markets with stable and supportive regulation, and has low exposure to market prices (see chart 9), which allows for an accurate prediction of cash flows.
- **Pure-Wind** – EDPR concentrated its entire activity on Wind, the most attractive resource for power generation. We consider that the expertise and know-how gained allowed for a level of specialization and

³ GWEC – Global Wind 2010 Report

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Chart 7: EDPR Installed Capacity Breakdown (9M 2011)



Source: EDPR

experience that has to be taken into account, namely in terms of wind assessment knowledge and optimal placement of turbines in the field. Although hard to quantify, we understand the optimization of such variables should have a positive effect on Cash Flows, thus translating a comparative advantage.

- Grows with the market – With strong pipeline (see table 1) in some of the most attractive locations and markets in terms of regulatory framework, the company has the flexibility to adjust its growth strategy according to each one's development.

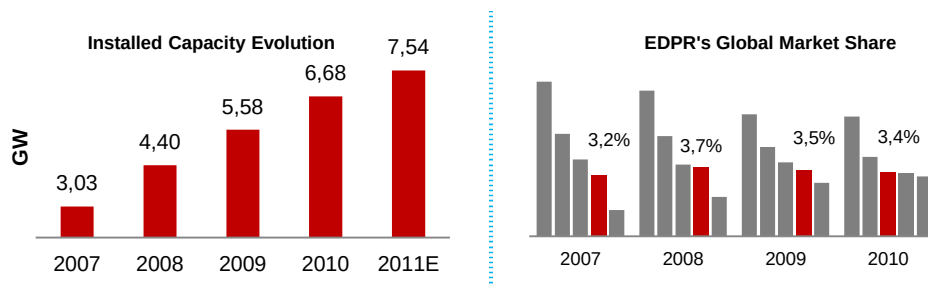
Company Overview

Profile

EDPR is 77,5% owned by Portuguese utility EDP, and is responsible for holding and operating EDP's European and North American renewable energy assets and activities. It has moved from an Iberian focused company to a global player, operating in Europe, US and Brazil. With operating capacity exceeding 7GW and a pipeline of more than 29GW, the company has been able to maintain a steady growth in the markets in which it operates.

EDPR's installed capacity is mainly located in Spain and the US (see Chart 7), but the company is increasing its exposure to Eastern Europe Economies (Poland and Romania) and Brazil.

Chart 6: EDPR Installed Capacity and Market Share



Source: Nova Equity Research

Inception

The company's history goes back as early as 1993, when Genesa (company integrated in the Group) installed its first wind farm. Since then, the business has grown and the expansion strategy was focused mainly in selective acquisitions

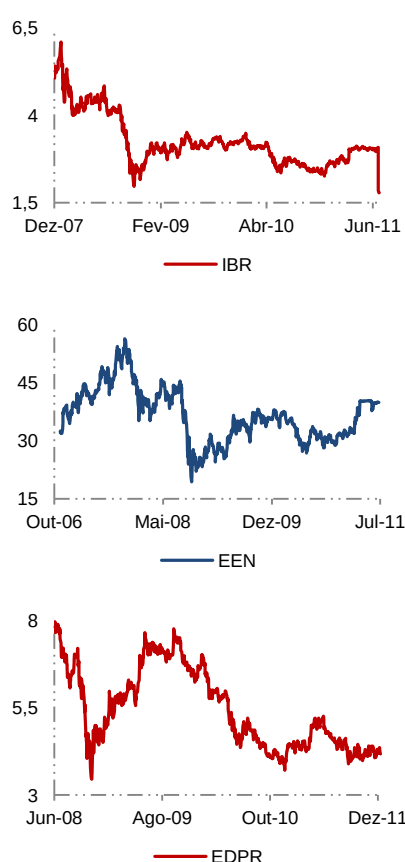
THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

and the development of Greenfield projects. Acquisitions targeted pipelines rather than existing capacity, so as to assure potential for future growth.

Going Public

Taking advantage of the increased investment and momentum of the industry, renewable energy companies have started going public in a big way in the last 5 years. In June 2008, EDPR sold 22,47% of its share capital in what was the largest operation of its kind in Western Europe during that year. Before that, EDF Nouvelles (EEN) sold roughly 20% of its share capital in 2006 and Iberdrola Renovables (IBR) accomplished the second largest IPO in 2007, placing also 20% of its share capital in the market. The rationale behind these was that the development and operation of generation assets from renewable sources were activities with low visibility in the markets and a small number of competitors. This, along with the momentum of the sector, was perceived by the companies as an opportunity to emphasize the value and visibility of their renewable energy divisions and, as so, for value creation.

Chart 8: Share Price Evolution



Source: Bloomberg

The unfolding of the economic and financial crisis and the consequent cooling of the global economy brought uncertainty to the markets and, with it, credit became scarcer and more expensive. Concerns about the reduction of incentives and subsidies to the sector also emerged, as there was an increasing pressure for governments to cut spending. All these, allied to the capital intensive profile of the renewables industry, were seen as threats to the growth prospects of “green” companies, putting a downward pressure on their share prices.

As the crisis escalated, the need to increase efficiency and reduce costs led to a trend of re-incorporation of green companies, and both IBR and EEN were already merged by acquisition. With this, companies try to avoid the risk of cannibalization of shareholders when competing for equity. The resulting company ends up larger and with a reinforced structure, and thus better suited to undertake more demanding projects (in terms of financial resources needed), with less limitations. Synergies also play a role here, and estimates for the case of IBR point to an annual value of €20 million in cost savings, starting in 2012.

In the case of EDPR, although the company is publicly listed in NYSE Euronext Lisbon, EDP Group still retains full control, owning 77,5% of the shares. Though the company has been able to secure finance needs so far, financing costs have increased, initial capacity targets were not met⁴ and the growth objectives had to

⁴ Initial target consisted of average 1,4GW yearly additions, to a cumulative 10,5GW of installed capacity by 2012.

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

be adjusted. As current debt market conditions will likely continue to inflate financing costs, affecting profitability, we understand the reintegration of EDPR into EDP is a possibility that cannot be discarded. Furthermore, China's largest clean energy group (China Three Gorges) just acquired 21,35% of EDP's share capital and stated their specific interest in the renewables business, committing to invest €2 billion in it until 2015. As so, we consider this strategic partnership will increase EDP's focus on the green business, thus leaving the door open for a possible merger of operations in the future.

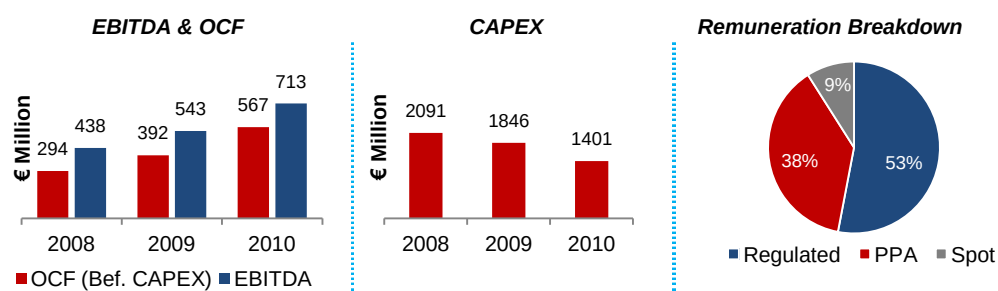
Strategy

EDPR's growth strategy targets a balance between growth, profitability and controlled risk. This explains the focus on geographies where the regulatory environment is stable and supportive, and therefore allow for a reasonable prediction of cash flows. It also helps explaining the focus on Wind, given that it remains the most attractive resource in terms of technological maturity and cost-efficiency.

The company targeted 10,2 GW of installed capacity by YE2012, but this figure was reviewed due to the macro environment. Considering EDPR's new forecasts for yearly additions in 2011 and 2012 (800-900MW from 1,4GW), we expect the company to have a total of 8,4GW of operating capacity by YE2012.

Despite having downward adjusted its growth targets, the company has been able to maintain stable growth, while at the same time reducing capital needs and exposure to market prices.

Chart 9: Stable Growth

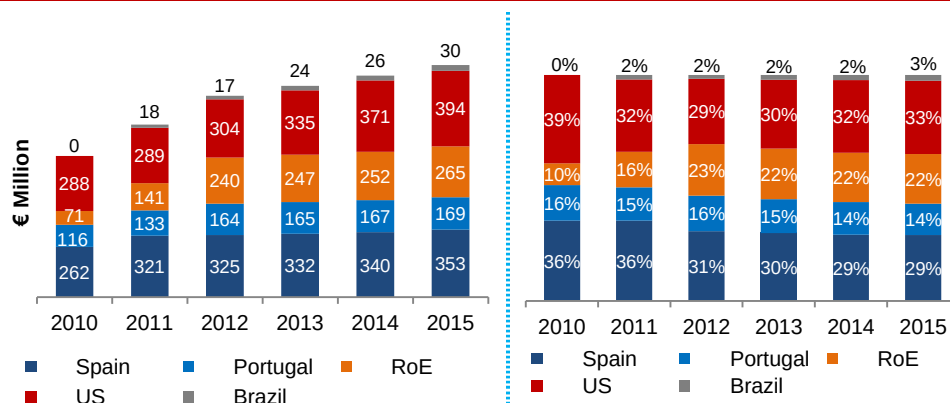


US and Spain remain EDPR's most important markets, accounting for 80% of the company's installed capacity. Nevertheless, as Iberian markets get more mature and, consequently, less attractive, we expect a transfer of capacity to the more appealing Eastern Europe and Brazil, which we forecast will grow considerably in the near future (see Markets and Regulation). Apart from these, we understand

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

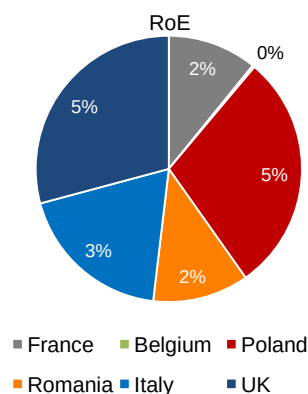
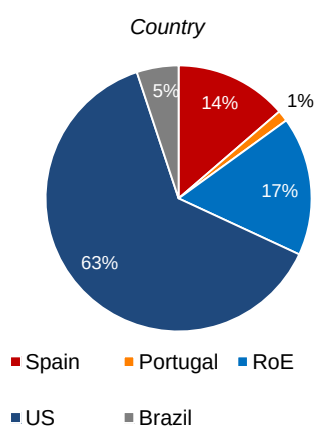
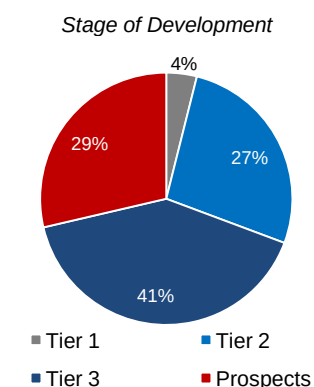
US will continue to be the main driver of growth in the upcoming years, as a consequence of the increasing political and regulatory support to the sector. We also expect the focus in the US market to be further reinforced by the current uncertainty in the European markets generated by the sovereign debt crisis.

Chart 10: EBITDA Forecasts



Source: Nova Equity Research

Chart 11: Pipeline Breakdown (9M 11)



Source: EDPR

For all the markets in which EDPR is present, the company has projects in different stages of development. Pipeline is classified according to time to market expectations, which in turn depend on the completion of several milestones, such as site selection, wind measurement, land agreements or the availability of interconnections.

Table 1: Capacity Portfolio (9M 2011)

	Installed	Under Construction	Pipeline ⁵			Prospects ⁶	Total
			Tier 1	Tier 2	Tier 3		
Spain	2.194	57	142	259	1916	1.701	4.018
Portugal	599	20	156	6	35	200	397
RoE	759	99	76	735	2.424	1.730	4.965
US	3.323	314	775	6.718	6.935	4.087	18.515
Brazil	84	-	-	153	641	700	1.494
Total	6.959	490	1.149	7.871	11.951	8.418	29.389

Source: EDPR

Choosing which projects to execute depends on the assessment of each one's perceived NPV. Although the company typically refuses developing with an IRR/WACC ratio lower than 1,4, projects are analyzed on a case by case basis. Construction phase takes on average 6 months to be completed and it's pattern follows a back-end loaded profile, with around 60% of new capacity being added in the last quarter.

⁵ Tier 1 - Average time to market < 18 months; Tier 2 - Average time to market > 18 months and < 36 months; Tier 3 - Average time to market > 36 months

⁶ Projects at an initial phase of wind analysis and site feasibility

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

According to EDPR reviewed figures, and taking into account the foreseeable effects of the current financial crisis, we remain cautious about capacity growth in the coming years. We expect the company to increase its operating capacity by 862MW in 2011 and 915MW in 2012, in line with the company's estimates. Although the growth targets for the period starting in 2012 have not yet been revealed, we estimate annual additions of 500MW in the triennium 2013-2015.

Table 2: Capacity Forecasts

	2010	2011E	2012E	2013E	2014E	2015E	CAGR 10-15E
Spain	2050	2251	2305	2397	2430	2496	4%
Portugal	838	924	1161	1161	1161	1161	7%
RoE	551	858	1272	1290	1334	1390	20%
France	284	306	357	357	362	368	5%
Belgium	57	57	69	69	70	70	4%
Poland	120	190	476	494	521	550	36%
Romania	90	285	285	285	285	299	27%
Italy	-	20	85	85	96	102	-
US	3224	3422	3632	3992	4404	4762	8%
Brazil	14	84	84	114	125	145	60%
Total	6677	7539	8454	8954	9454	9954	8%

Source: Nova Equity Research

Chart 12: Top 10 Wind Turbine Manufacturers (2010)

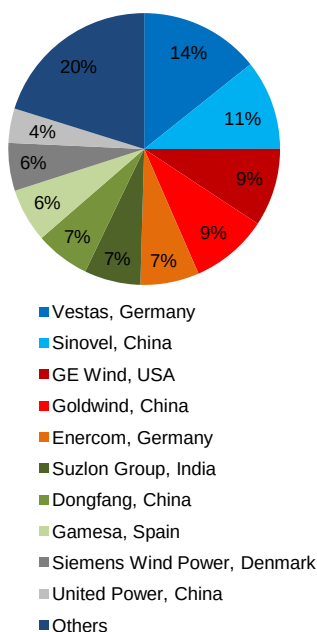
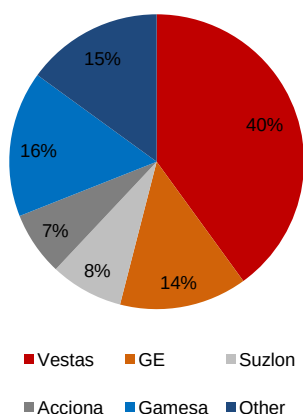


Chart 13: EDPR Suppliers (YE 2009)



Source: EDPR; Nova Equity Research

Turbines and Suppliers

Wind turbines are responsible for 75% to 80% percent of CAPEX, on average, with the remaining 25% to 30% attributable to the so called Balance of Plant, comprising civil works, infrastructures and connection to the grid, among others. Given the wide variety of turbines in the market, each with specific characteristics and production patterns, the decision process of which turbine to use usually implies analysis of both the site and turbine characteristics so as to optimize future production.

Turbines cost is mainly driven by technological developments, prices of raw materials (mainly steel) and balance between demand and supply. Nevertheless, history has shown that a large proportion of cost reductions have also come from the learnings and economies of scale associated with large-scale global deployment.

After a period of supply imbalances and inflated prices caused by the boom in the sector, we expect the industry to catch up with growing demand, driving prices down. Also, turbine manufacturers are increasingly covering the full supply chain, which, along with wind operator's tendency to secure long-term contracts, reduces the risk of scarcity and prices volatility. On the other side,

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

technological development implies investment in R&D, meaning higher costs and, therefore, higher selling prices. All in all, as the market walks the learning curve (see Appendix II), we expect further decreases in turbine prices over time.

EDPR has a diversified base of turbine suppliers, focused on players with proven track records. This grants the company the flexibility to select the most adequate turbine for each site, while also helping to mitigate potential risks associated to buying turbines from less-established companies. It also reduces turbine's performance and technological risk, which is particularly relevant when considering that the majority of the company's suppliers are top players in their markets. Furthermore, EDPR strategically secures part of its turbine needs two to three years in advance, thus avoiding turbine market's unpredictability and safeguarding the probability of projects execution.

Site Selection

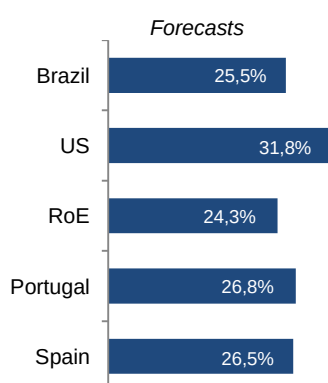
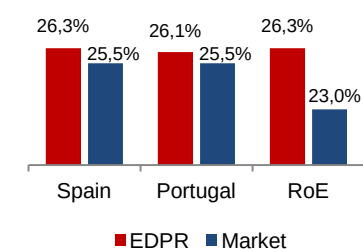
Apart from issues like accessibility and grid connection, the main driver of site selection is the load factor or, in other words, the fraction of time a turbine is effectively producing energy during a day or year. Load factors vary according to the geography, with windy locations benefiting from higher load factors.

To assess the potential of a given site, in-depth analysis about wind patterns and behavior is always performed (usually no less than 24 months of data collection). The knowledge gathered will, in turn, help the company define the layout of the project and the placement of the turbines so as to maximize its efficiency.

Being an earlier mover in most of its markets and having extensive experience in analyzing and measuring wind potential allowed the company to secure some of the best locations, with premium load factors. We expect part of EDPR's current pipeline, mainly in the US, to be in locations with high wind resources not fully exploited and, as so, we consider the company will continue to benefit from its early mover position.

Although the best sites will tend to become scarcer as markets mature, we understand technological developments will make available sites that currently cannot be explored. Adding this to the fact that wind availability has been historically stable, we forecast long term load factors to be in line with the company's historical values.

Chart 14: Avg. Load Factors
(2007-2009)



Source: EDPR; Nova Equity Research

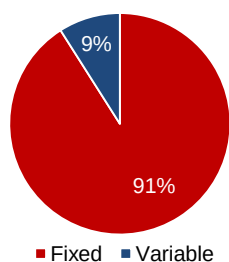
THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Financing

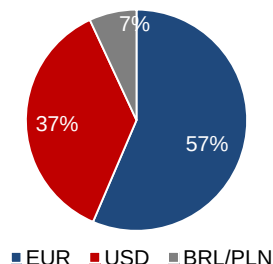
The company's funding strategy aims at supporting growth while maintaining a solid and sustainable capital structure. EDPR's debt has a long term maturity profile (78% matures after 2018) and more than 90% of it was contracted at fixed rates. This matches the business model with the Cash-Flow profile, while also allowing the company to minimize exposure to interest rates volatility.

Chart 16: Debt Profile

Type

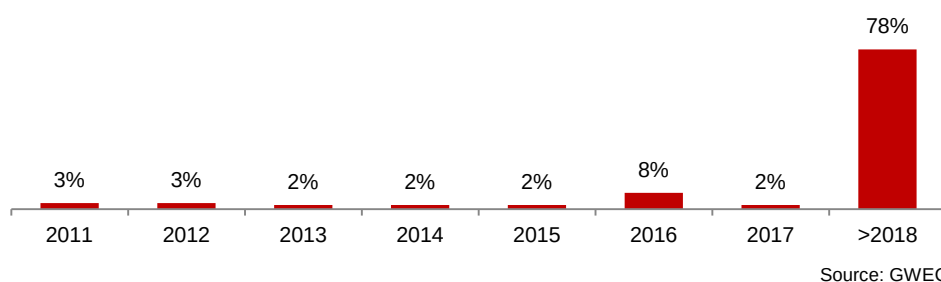


Currency



Source: EDPR

Chart 15: Debt Distribution



Source: GWEC

Financing is secured through three different sources: the most important is the parent company (EDP), which has committed to finance EDPR's investment plan (at market spreads); Institutional Partnerships, in the US, allow the company to finance on average 50% of a project's initial investment (see Markets and Regulation); Project Finance is mainly used for projects in markets relatively new to the company, or when financing conditions are better than those of EDP loans.

Valuation

We valued EDPR using a DCF based sum-of-the-parts (SoP). Assets were evaluated country-by-country on the basis of operating capacity (YE 2012E), projects to be installed until 2015 and Repowering/Terminal Value.

We considered three different scenarios (see Appendix IV), to which we attributed different probabilities of occurring. Weighting the scenarios by their probabilities, we estimate EDPR's equity to be worth **€ 6,03 per share (price target YE2012)**, denoting a buy recommendation.

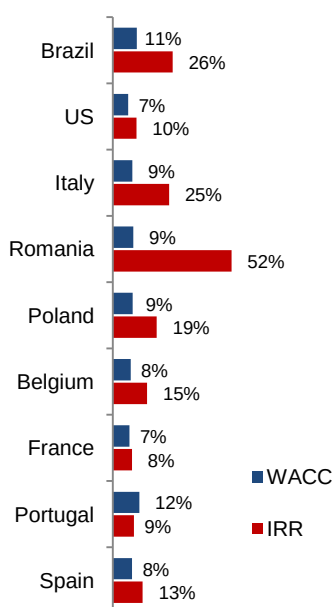
THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Table 3: SoP Valuation

	Cons. Capacity	€ mn	€ / share	% EV
Operating Wind Farms (2012E)				
Spain	2.305	2.434	2,79	24%
Portugal ⁷	1.161	860	0,99	8%
RoE	1.272	2.297	2,60	22%
USA	3.632	2.154	2,48	21%
Brazil	84	171	0,21	2%
Total Value Existing Business	8.454	7.916	9,07	77%
Pipeline (2013E-2015E)				
Spain	191	11	0,01	0%
Portugal	0	0	0,00	0%
RoE	118	127	0,15	1%
USA	1.130	171	0,20	2%
Brazil	61	49	0,06	1%
Repowering & Terminal Value		1.990	2,28	19%
Total Enterprise Value	9.954	10.264	11,77	100%
Net Debt 2011 (incl. TEI)		4.631	5,31	
Minorities & Provisions		183	0,21	
Investments (Divestments) ⁸		102	0,00	
SoTP Equity Value / Target Price (Base Case Scenario) - 85% Probability		5.143	6,01	
SoTP Equity Value / Target Price (Bear Case Scenario) - 5% Probability		3.062	3,62	
SoTP Equity Value / Target Price (Bull Case Scenario) - 10% Probability		6.355	7,39	
Weighted SoTP Equity Value / Target Price		5.160	6,03	

Source: Nova Equity Research

Chart 17: WACC & IRR



Source: Nova Equity Research

Each market was valued separately, in its own currency. For markets with currencies other than Euro, resulting values were converted to Euros at the one year forward rates (25-11-2011), so as to match the horizon of this recommendation. All Cash-Flows are on a nominal basis, and were adjusted for inflation⁹.

Portfolio

Operating capacity per market was valued considering the year in which the assets became operational and the regulatory framework in place at the time, as well as the framework than currently applies.

⁷ Includes capacity attributable to EDPR under the consortium Eólicas de Portugal

⁸ Includes investments in working capital, financial investments and other investments

⁹ IMF's estimates

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Regarding Pipeline, we chose not to attribute value to Tier 3 and Prospects' plans, since visibility at these stages is scarce and time to market is too long, resulting in the erosion of the potential value of projects. For those classified as Tier 1 and Tier 2, we considered the implementation schedule will take into consideration projects expected returns, with those presenting higher IRR/WACC ratios being executed first.

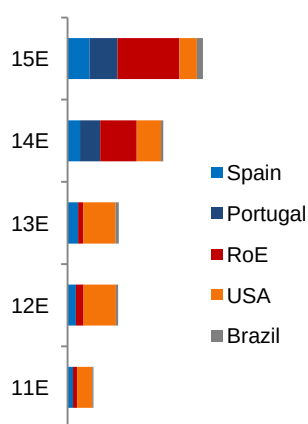
Although the company has been awarded 1,3 GW of wind offshore in the UK, part of the project's details is still uncertain, and construction and operation of the project will only start after 2015. Again, we consider visibility is scarce and time to market is too long and, as so, we do not attribute value to offshore capacity.

Terminal Value

Terminal value was assumed to be the biggest between salvage value (usually 20% of the initial capex) and repowering the asset at the end of its useful life. The latter assumes capex and opex evolve with inflation and incentive schemes converge to market prices.

CAPEX

Chart 18: CAPEX Forecasts



Source: Nova Equity Research

Given that a significant part of EDPR's suppliers operate globally, we understand supply contracts should be flexible enough to allow for delivery in any of the company's geographies. We thus assumed capex does not vary across markets.

We also considered that 50% of a project's capex takes place in the year it starts operating, while the remaining is retained in the previous year. Total value is depreciated over a period of 25¹⁰ years, equivalent to the average useful life of a wind farm.

OPEX

Opex consists of Operations & Maintenance (O&M) and Overhead Costs. Usually contracts specify that suppliers have to guarantee O&M for a certain period of time, as well as to maintain availability levels above defined thresholds. When this period ends, the company has to decide whether to extend the contract or to assure in-house maintenance.

Although the company's increase in capacity should drive O&M costs up, we expect a decrease in overhead costs, leading to a dilution of the fixed costs on a MW basis.

¹⁰ In 2011, EDPR reviewed from 20 to 25 years the average useful life of its assets

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Remuneration

Prices received for the generated electricity vary according to country and regulatory frameworks, which we assumed as they are currently (see Markets and Regulation), and moving towards a market prices mechanism.

We expect Iberian market prices to follow the Iberian Energy Market Operator (OMIP) futures curves until 2013, and linked to inflation thereafter.

In Portugal, we assumed subsidized prices will converge to market prices at the end of the 15th year of operation. In Spain, older capacity will be kept in the RD 432/2004 framework until 2012, in which date the company will have to change it to the RD 661/2007 structure.

In France, as in Portugal, regulated prices will be replaced by market prices at the end of the 15th year of operation. We expect these to follow the French Baseload Futures¹¹ curve until 2014 and linked to inflation thereafter.

In the remaining European markets, the frameworks in place consist basically of market prices plus the sale of Green Certificates. We assumed the market component to evolve according to local electricity price futures curves¹², if data is available, and linked to inflation thereafter. We expect Green Certificates to also evolve according to inflation.

In the US, we assumed the company will sell 80% of its production through PPA's, being the remaining 20% sold at market prices. These, in turn, were assumed to evolve according to NYMEX PJM futures curve until 2016, and linked to inflation thereafter.

Table 4: Power Prices Forecasts: Futures Curves

	2012	2013	2014	2015
Spain (EUR/MWh)	52,90	52,80	-	-
Portugal (EUR/MWh)	53,48	53,39	-	-
France (EUR/MWh)	52,71	53,38	54,00	-
Poland (PLN/MWh)	201,99	214,45	220,75	-
Romania (RON/MWh)	47,57	-	-	-
US (USD/MWh)	50,93	54,01	57,00	59,50

Source: Nova Equity Research

¹¹ Negotiated in the European Energy Exchange (EEX)

¹² Data for Italy: Italian Power Exchange (GME); Data for Poland: Polish Power Exchange (POLPX); Data for Romania: Romanian Power Exchange (OPCOM).

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Dividends

We assumed a payout ratio of 20%, in line with company's guidelines, starting in 2012.

Table 5: Main assumptions

	2009	2010	2011E	2012E	2013E	2014E	2015E
Production (GWh)	10.907	14.353	17.420	19.313	20.602	21.912	23.193
Capacity (MW)	5.576	6.677	7.539	8.454	8.954	9.454	9.954
Spain							
Production (GWh)	3.275	4.355	5.094	5.151	5.358	5.433	5.584
Inst. Capacity (MW)	1.861	2.050	2.251	2.305	2.397	2.430	2.496
CAPEX/MW (€m)	1,634	1,297	1,317	1,307	1,296	1,286	1,276
Opex/MWh (€)	15,34	15,65	14,59	14,81	15,01	15,24	15,50
Avg. Load Factor (%)	26%	27%	26%	26%	26%	26%	26%
EBITDA Margin (%)	81%	79%	82%	81%	80%	80%	80%
Portugal							
Production (GWh)	1.275	1.472	1.653	2.196	2.196	2.196	2.196
Inst. Capacity (MW)	680	838	924	1.161	1.161	1.161	1.161
CAPEX/MW (€m)	1,634	1,297	1,3168	1,3066	1,2964	1,2862	1,276
Opex/MWh (€)	17,54	17,89	19,05	19,32	19,60	19,88	20,20
Avg. Load Factor (%)	29%	29%	27%	27%	27%	27%	27%
EBITDA Margin (%)	83%	82%	81%	79%	79%	79%	79%
RoE							
Production (GWh)	426	804	1.736	2.459	2.497	2.588	2.703
Inst. Capacity (MW)	397	551	858	1.272	1.290	1.334	1.390
CAPEX/MW (€m)	1,634	1,297	1,317	1,307	1,296	1,286	1,276
Opex/MWh (€)	-	-	18,85	19,14	19,48	19,83	20,23
Avg. Load Factor (%)	24%	24%	24%	24%	24%	24%	24%
EBITDA Margin (%)	69%	91%	89%	91%	91%	91%	92%
US							
Production (GWh)	5.905	7.689	8.755	9.325	10.304	11.422	12.395
Inst. Capacity (MW)	2.624	3.224	3.323	3.422	3.632	3.992	4.404
CAPEX/MW (\$m)	2,348	1,736	1,743	1,730	1,716	1,703	1,689
Opex/MWh (\$)	17,55	17,90	21,80	22,15	22,46	22,83	23,25
Avg. Load Factor (%)	31%	31%	32%	32%	32%	32%	32%
EBITDA Margin (%)	75%	75%	67%	66%	66%	65%	65%
Brazil							
Production (GWh)	26	30	182	182	247	273	315
Inst. Capacity (MW)	14	14	84	84	114	125	145
CAPEX/MW (R\$m)	4,083	2,881	3,295	3,269	3,244	3,218	3,193
Opex/MWh (R\$)	36,00	37,81	39,71	41,60	43,48	45,43	47,49
Avg. Load Factor (%)	26%	26%	25%	25%	25%	25%	25%
EBITDA Margin (%)	-	-	87%	86%	86%	86%	86%

Source: Nova Equity Research

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

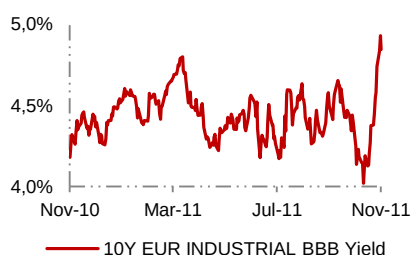
WACC

Cost of equity was calculated as the sum of the risk free rate plus both country and market risk premiums, multiplied by levered betas. Country risk¹³ premiums consist in the difference between local Sovereign yield and the lowest 10-year sovereign yield from the currency zone¹⁴. Market premium, usually assumed in the range of 4% to 6%, was assumed at 6%, as current financial instability will likely lead to the demand of higher premiums.

Table 6: WACC assumptions

	SP	PT	RoE					US	BR
			FR	BG	PL	RO	IT		
Risk Free	2,3%	2,3%	2,3%	2,3%	4,1%	4,6%	2,3%	2,0%	6,1%
Country Risk Premium	4,4%	10,4%	1,4%	3,6%	2,0%	1,5%	4,3%	-	5,3%
Market Premium	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
Beta	0,90	0,92	1,06	0,88	0,96	0,97	0,91	0,86	0,88
Cost of Equity	11,6%	17,3%	10,1%	10,7%	11,8%	12,0%	11,7%	7,1%	15,9%
Cost of Debt ¹⁵	6,9%	6,9%	6,9%	6,9%	8,8%	11,0%	6,9%	6,9%	11,2%
After-tax Cost of Debt	4,9%	5,1%	4,6%	4,6%	7,2%	9,2%	5,0%	4,3%	7,4%
Cost of Inst. Part.	-	-	-	-	-	-	-	8,0%	-
Leverage	50%	50%	50%	50%	50%	50%	50%	30%	50%
Tax Equity	-	-	-	-	-	-	-	50%	-
WACC	8,2%	11,2%	7,4%	7,6%	9,5%	10,6%	8,3%	6,7%	11,6%

Source: Nova Equity Research



Our estimates imply a premium over market consensus:

Table 7: Valuation Vs. Consensus

	2011E	2012E	2013E	2014E	2015E
EBITDA					
Nova Equity Research	876	1.025	1.077	1.132	1.186
Bloomberg Consensus	810	941	1.074	1.172	1.248
EBIT					
Nova Equity Research	438	547	576	608	640
Bloomberg Consensus	396	486	589	665	720
EPS					
Nova Equity Research	0,17	0,23	0,25	0,30	0,31
Bloomberg Consensus	0,16	0,21	0,27	0,31	0,36

Source: Nova Equity Research Estimates

Key Risks

Wind availability – Given its profile as a pure wind player, wind availability and strength is crucial for the company's output and profitability. Despite seasonality

¹³ Damoradan, Aswath, "Measuring Company Exposure to Country Risk: Theory and Practice", Stern School of Business, Sept. 2003

¹⁴ European Countries: yield on 10 year German Government Bund; Others: yield on 10 year Treasury Bond

¹⁵ Prob. of Default: 1% (Rate for European BBB companies, S&P 2011); Recovery Rate: 49,5% (08-10 average across all financial instruments, S&P 2011)

Source: Bloomberg

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

and the possibility of punctual climate events, wind availability has been historically stable and is not expected to change in the future. Nevertheless, a 1% decrease in the average load factor would imply a 2,33% reduction in our valuation, to € 5,89 per share.

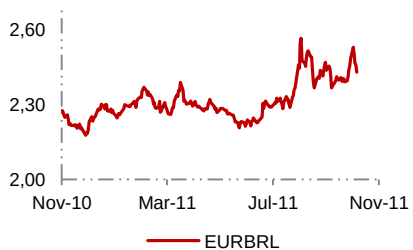
Regulation – With the development of the sector still highly dependent on supportive regulatory frameworks, uncertainty in this matter can jeopardize EDPR's future earnings and profitability. Current economic and financial crisis poses a real threat to the company, as remuneration schemes for EDPR's two biggest markets (Spain and US) will be reviewed in 2012. In the US, we expect the current scheme to be extended, once again, but in what concerns Spain, we remain cautious. We understand the country is facing increasing pressured to equilibrate its public accounts and, with this, there is the real possibility of reducing incentives to the renewables sector. Also, local laws and regulations may pose barriers and delay project's building or execution phases, with relevant costs to the company.

Competition – As the industry develops, competition is expected to increase, both in terms of the number of players in the market and of the availability of alternative technologies and sources of energy. As the bidding process for available sites becomes tougher, it will be it harder to secure the best spots.

Financing – Current economic and financial crisis is putting strains on credit and, as so, financing is more difficult and expensive. Although EDPR is financed mainly through the parent company, spreads are increasing across the board, posing a serious threat to future growth. Also, as the crisis deepens, fewer companies are presenting high taxable income figures, which in turn will make harder for EDPR to secure Institutional Partnership deals. The company has reviewed downwards its growth targets to 2012. A 100 bps increase in the company's financing costs leads to a 7,91% reduction in our valuation, to € 5,60 per share.

Suppliers – Although the company contracts part of its turbines needs two to three years in advance, volatility in the prices of raw materials, as well as the demand-supply balance of the industry, may lead to changes in the prices of turbines, which account for about 80% of a project's CAPEX. A €100th/MW increase in the price of a turbine has a negative impact of 3,86% in our valuation, to € 5,80 per share.

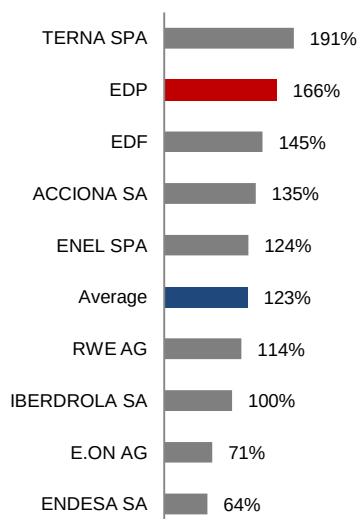
Energy Prices – Even though the company has a relatively low direct exposure to market prices of energy, changes here have material impacts, both direct and



Source: Bloomberg

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Chart 19: Utilities Debt/Equity Ratio



Source: Bloomberg

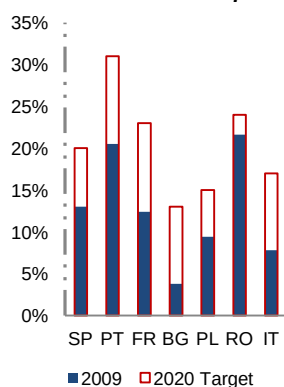
indirect, on EDPR's future prospects. Given that close to 40% of company's revenues is under PPA's, a decrease in wholesale energy prices would pressure new PPA's prices down, compromising future profitability in key markets (mainly US and Spain). A 5% decrease in average market prices would have a negative impact of 2,57% in our valuation, to € 5,78 per share.

Exchange Rates – With a relevant exposure to currencies other than Euro (mainly USD), fluctuations in foreign exchange rates would affect company's profitability. Given the amplitude of the exposure to USD, we estimate that a 100bps depreciation of the dollar would have a negative impact of 0,61% in our valuation, to € 5,99 per share. Also, a generalised 100 bps depreciation of the other currencies (except USD) against the Euro would have a negative impact of 0,39%, to a price target of € 6,01.

Capital Structure – Despite having reviewed its growth strategy, EDPR average Net Debt / EBITDA in the triennium 2012-2015 is expected at 4.56x, above company guidance of 4.0x. Given current market conditions and the increased cost of financing, additional capital contribution may be needed to sustain future growth. Also, As EDP is the prime source of financing for the company, and given that it is more leveraged than its peers, we are concerned about the effect of a possible weakening of its capital structure on EDPR's future financing.

PPA's Counterparty risk – As one of the companies with the highest number of PPA's closed in the US, the company has limited exposure to market prices but have increased its exposure to counterparty risk. EDPR deals are usually settled for 20 years, with public state companies, and assure both prices (escalators of 11% to 12% for new contracts, so as to minimize differences to market prices) and quantities (full output coverage). We estimate current price differences to be less than 5%, which, in a scenario of counterparty default (which we do not anticipate), would have a limited impact on EDPR Cash Flows.

Chart 20: % of Green Energy in Gross Final Consumption



Source: European Commission

Markets and Regulation

Global energy landscape will change with the expected increase in world energy demand in the upcoming years, mainly fuelled by emerging economies. According to the International Energy Agency (IEA), global primary energy demand will increase 36% between 2008 and 2035, or 1,2% per year, on average. Having become the world's largest energy user, China alone will account for 36% of the expected increase, followed by India's contribution of 18%.

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Electricity demand will continue to grow more than any other final form of energy, and investments in energy generation are expected to (further) shift to lower-carbon technologies. IEA forecasts renewables-based generation to increase from 2% in 2008 to around 33% in 2035 (comparable to coal), mainly from wind and hydropower.

Investment and development of green generating capacity still depends heavily on Governments incentives and on the existence of supportive regulatory frameworks. The rise in fossil fuel prices, improvements in green technologies and greater pressure for emissions reduction have led to the implementation of real policies to foster green development.

The latest joint initiative was the Durban summit, aimed at negotiating a new climate deal, with legal force, and which required both developed and developing countries to cut their carbon emissions. Although there was an agreement which, for the first time ever, included the world's biggest emitters of CO₂ (China, India and the US), the results were modest. Even though the participating countries approved the extension of the Kyoto protocol beyond 2012 and, furthermore, agreed on the definition of a new global program or result with legal force until 2015, this should only be in effect from 2020 onwards and, according to the scientific community, by then it may be too late to avoid adverse climate effects.

Historically, the European Union has taken the lead in the support to green sources of energy and sustainable development. The most recent and significant initiative is the approval of the RES Directive 2009/28/EC, published in 2009, and which defines mandatory green energy targets for all EU economies. According to the law, 20% of total EU energy consumption in 2020 should come from renewable sources. Moreover, there should be a reduction in greenhouse emissions of at least 20% of 1990 levels and, improvements in energy efficiency should account for another 20% reduction in primary energy consumption.

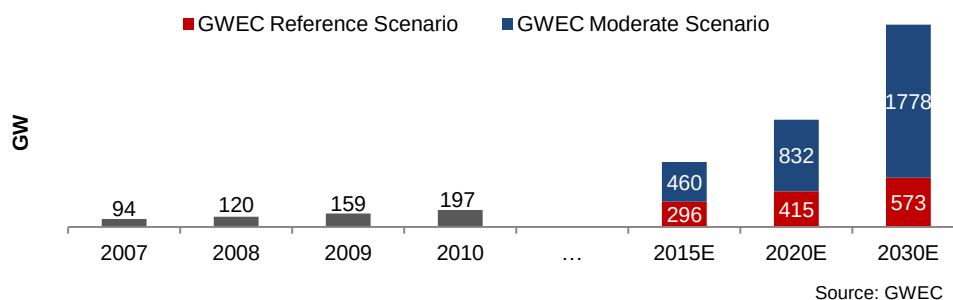
Previous policies include the White Paper on Renewable Sources of Energy (double the percentage of green energy in total EU consumption between 1997 and 2010) and the Directive 2001/77/CE (reinforced the White Paper by defining individual targets for each country).

Effective technological improvements over the last 20 years led to increased efficiency and higher wind turbines capacity. This, along with the development of the wind turbines industry led to a decrease in production costs and, therefore, in the cost of wind power (80% decrease over the last 20 years), turning wind into the most attractive green resource. Also, the relative short time to market (1 to 3

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

years), and the fact that it does not prevent the simultaneous use of land for other uses made it increasingly competitive.

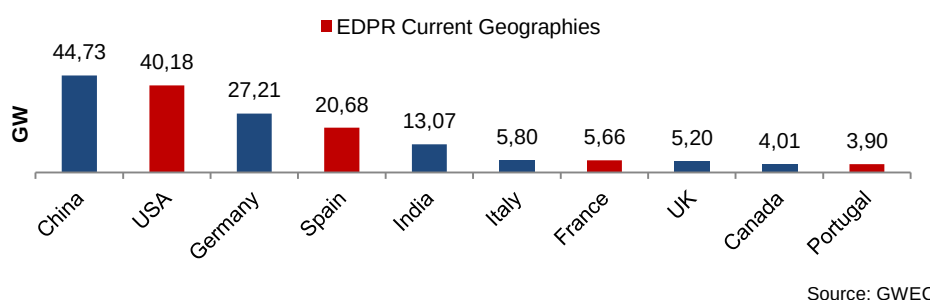
Chart 21: Global Cumulative Wind Power Installed Capacity



Wind power capacity additions in 2010 totalled 38,3GW (Vs. 38,8GW in 2009), representing a 24% yoy increase in cumulative capacity. According to GWEC, Wind installed capacity will more than double until 2015 and in 2020 it should be more than 4 times the capacity in 2010 (moderate scenario).

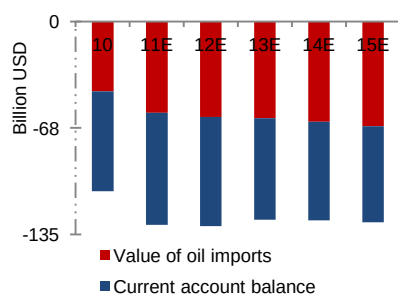
China has become the world leader in terms of installed capacity (45GW), followed by the US (40GW) and Germany (27GW). Although ranking 5, India is expected to have one of the fastest growth rates in the upcoming years.

Chart 22: Top 10 markets by Wind Installed Capacity (YE 2010)



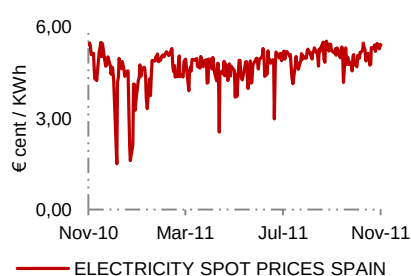
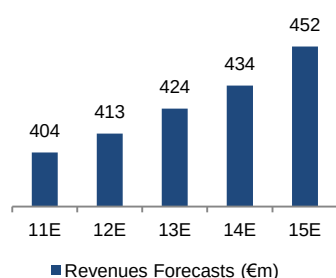
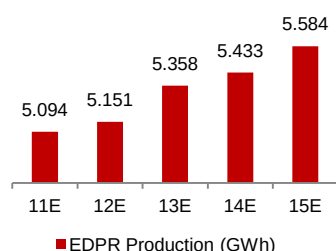
Iberia

SPAIN



Having a mature wind industry, Spain ranks fourth worldwide in terms of installed capacity, with over 20GW of operating capacity at the end of 2010. The country has one of the highest growth rates in installed capacity, with a CAGR of 32% in the period 1998-2010. Government commitment to the 2009/28/EC RES Directive pointed to a total of 38GW of wind capacity installed by 2020, but the figure was adjusted by the Renewables Energy Plan 2011-2020 to a value of 35,75GW.

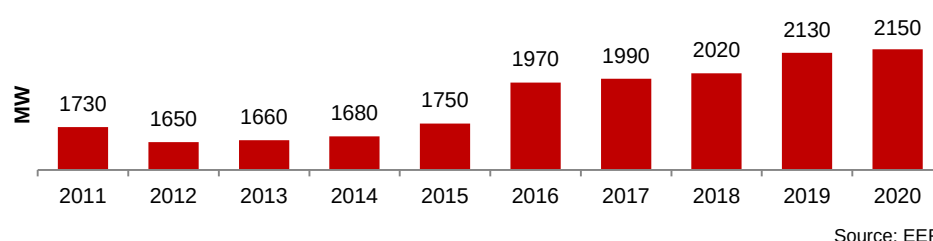
THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)



Source: Bloomberg, Nova Equity Research

Wind is the third source of electrical generation, covering 16,6% of total demand, after gas and nuclear. The European Wind Energy Association (EWEA) expects this value to increase to 26.9% by 2020, with an estimated installed capacity of 41GW, above the government target of 35,75GW and the Spanish Wind Association (AAE) estimates of 39,4GW. Despite the prospects (see chart 23), we remain cautious about the short-term evolution of the Spanish market, as the government faces a €22 billion deficit and the commitment assumed implies additional investments in the renewables sector of close to €60 billion in the period 2011-2020.

Chart 23: Country annual MW additions forecast 2011-2020



In 2010, EDPR was the third player in the country's wind energy market, with 1,86 GW installed (9% market share), only behind Iberdrola Renovables with 5,17GW (25%) and Acciona Energia with 4,04GW (19,5%).

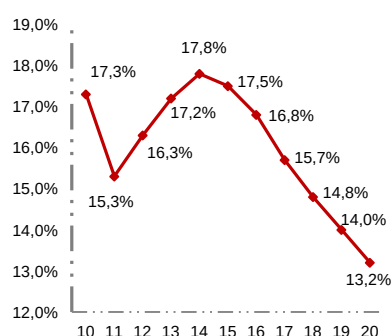
Regulatory support in Spain is based on a feed-in tariff scheme, which is divided in two different regimes, applicable according to the date in which the assets become operational. Operating capacity under the market option of Real Decreto 436/2004 has to be in new remuneration scheme by 2013.

Table 8: Remuneration System

	RD 436/2004	RD 661/2007
Applicability:	Wind Farms before 2008. Those under market option have to change to RD 661/2007 until 2012.	Compulsory for all wind farms that started operation after 2008
Fixed Tariff:	Fixed Tariff, no time limit	Fixed Tariff (€79,1/MWh) for 20 years; annual update according to CPI-x ¹⁶
Market Tariff:	Pool + Premium (38,3€/MWh)	Pool + Premium (€20,1/MWh) with Cap (€91,7/MWh) and Floor (€76,9/MWh). Except for market prices, all values are fixed and indexed to CPI-x ³
% of EDPR Assets:	53%	47%

Source: EDPR

Chart 24: Tariffs / Sector Total Costs 2010-2020



Source: IDAE

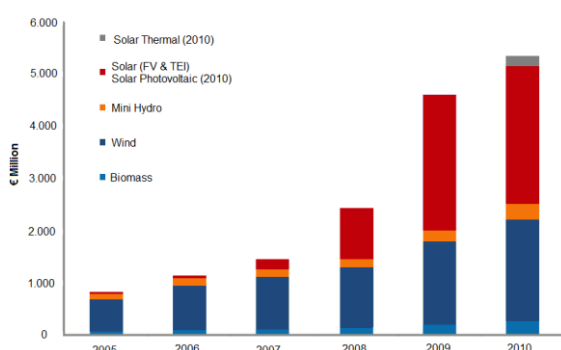
¹⁶ x equals 0,25% until 2012 and 0,5% thereafter

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

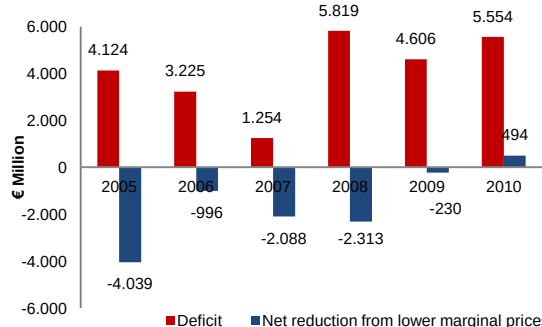
Current regulation (Decreto Real 661/2007) expires in 2012, and no further directives have been approved yet. However, there were some amendments¹⁷ to the regulatory scheme in place, which confirm government's concern about the cost of the renewable sector and its impact on the rising deficit. Indeed, the cost (tariffs) of the expansion of the renewables sector over the last years, added to the pool prices kept artificially stable since 2000, led to a cumulative deficit value close to €22 billion. Furthermore, forecasts point to additional €24 billion needed in tariffs between 2011 and 2020 to support government commitments. Although the sector is having a positive macroeconomic impact on the economy, namely through the reduction of fossil-fuel imports, job creation or even the development of infrastructures and export capacity, it does so at the cost of increasing the deficit, which will eventually have to be corrected.

Chart 25: Market Summary

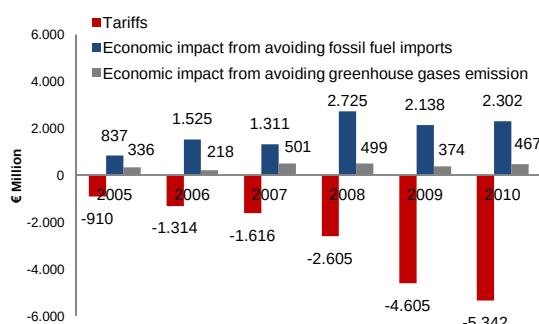
Economic support (tariffs) for renewables in Spain



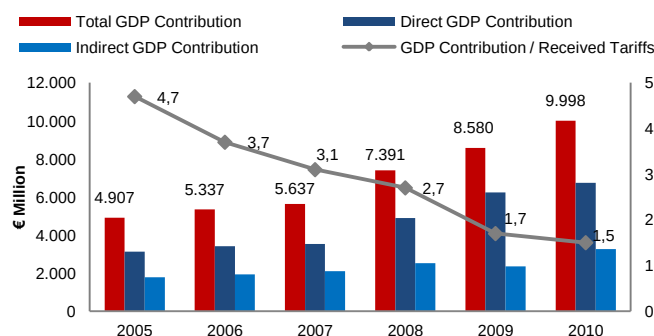
Evolution of the annual electricity tariff deficit



Size of Special Regime Subsidy in relation to avoided CO₂ Emissions



Renewables GDP Contribution



Source: APPA

We expect a government effort in the reduction of the existing deficit mainly through taxation on the demand side (price increases) but also through a decrease in the support to the sector (decreases in tariffs, mainly concerning photovoltaic incentives), as current economic reality is pressuring the

¹⁷ Temporary 35% cut of the reference premium applicable to wind capacity under Real Decreto 661/2007, during 2011 and 2012.

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

government to cut spending. Although there are rumours about the possibility of the government applying a lower support scheme with retroactive effects, we do not expect it to happen, as it would undermine regulatory credibility. All in all, we expect the growth in the sector to decelerate in the coming years, as there will be an increased focus on mitigating current imbalances.

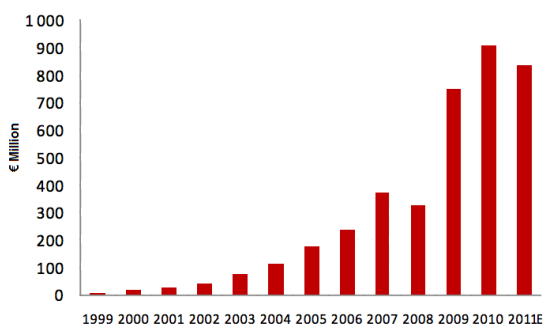
PORTUGAL

Portugal is one of the leading countries in what concerns wind power penetration, with 15.5% of its electricity demand covered by almost 4GW of installed capacity at the end of 2010. Government commitment to the 2009/28/EC RES Directive points to a total of 6,8GW of wind capacity installed by 2020.

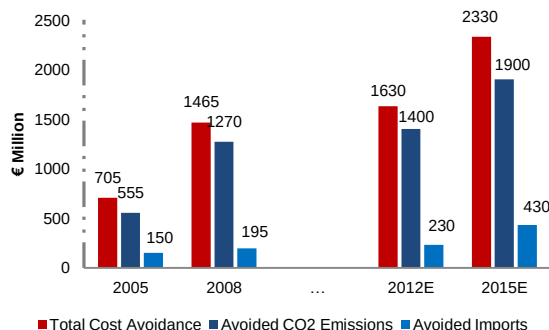
The EWEA expects wind to cover 28,1% of total electricity demand by 2020 (Vs. 15,5% in 2010), with an expected installed capacity of 7,5GW, above the government target of 6,8GW. Despite the prospects, we are cautious about the evolution of the market in the upcoming years, as we understand the government is being pressured to reduce the support to the sector. Indeed, the memorandum of understanding signed with the IMF and the European Union clearly states the need to review the efficiency of the support schemes in place, and also to assess the possibility of renegotiating existing contracts in view of lower feed-in tariffs, as a way to reduce the existing deficit (€1.759 million). Although expecting lower support for future operating capacity, we not do anticipate major changes to existing contracts, as it would undermine government credibility.

Chart 26: Market Summary

PRE¹⁸ Additional Costs (support to the sector)



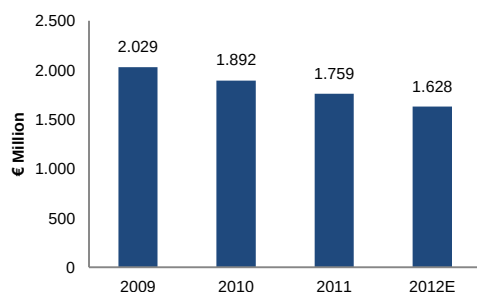
Cost avoidance by the Renewable Energy Sector



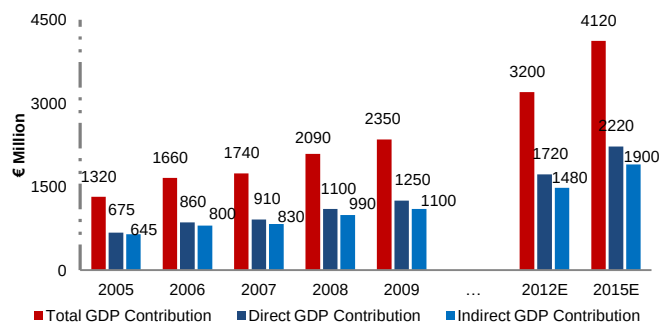
¹⁸ Production of Electricity from Renewable Energy

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Accumulated Deficit

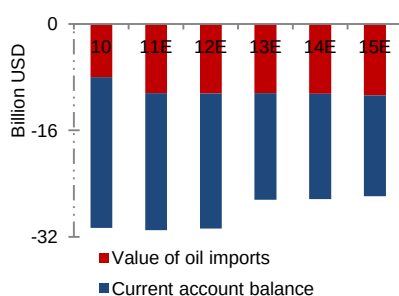


Renewables GDP Contribution

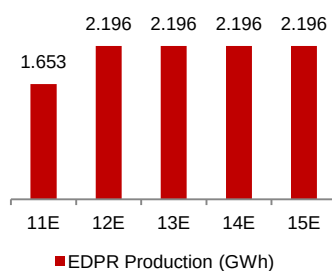


Source: ERSE, APREN

EDPR ranks second in the Portuguese market, with an installed capacity of 599MW (15.3% market share), only behind IberWind, with 680MW (18%). The company holds a 40% participation in the Eólicas de Portugal Consortium (ENEOP), which is an entity created to win a wind energy tender of 1,2GW in 2005-2006. Through this participation, EDPR owns additional 480MW, which will be operational until 2013. Apart from these, we do not expect EDPR to increase its presence in the Portuguese market in the coming years.



As in Spain, regulatory support in Portugal is based on a feed-in tariff scheme. Remuneration depends on a number of factors, such as the dimension of the plant or the number of operating hours, and is set for the first year of operation and then updated according to CPI.



For wind farms licensed before February 2006 (DL 33A/2005), price for the first 15 years is set between €85/MWh and €95/MWh, depending on the load factors achieved, with higher load factors getting higher remuneration. For the remaining wind farms, price for the first 33GWh produced up to a 15 years limit varies between €73/MWh and €74/MWh, also depending on the load factor achieved.

In both regimes, system is replaced after 15 years by a market price plus green certificate structure, if applicable. Otherwise, current scheme remains in place for 5 additional years.

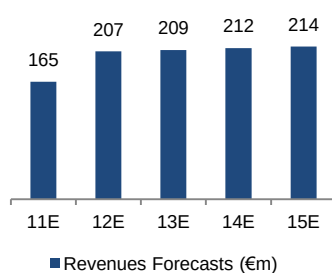
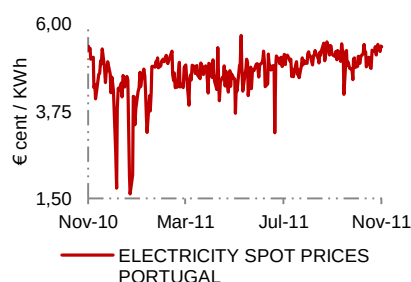


Table 9: Remuneration System

	Before DL 33A/2005	After DL 33A/2005
Applicability:	Wind Farms licensed until February 2006	Wind Farms licensed after February 2006
Evolution	CPI; remuneration is updated since the publication of the law	CPI; remuneration is constant in nominal terms until the first year of operation

Source: IMF, Nova Equity Research

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)



Source: Bloomberg

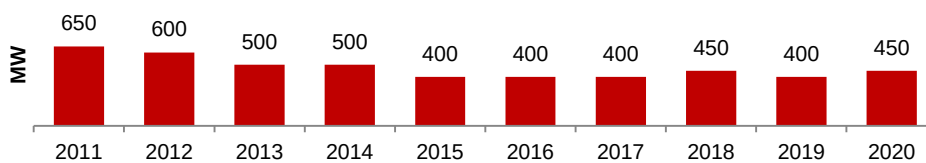
Duration: 15 years since the publication of DL 33A/2005, market price + green certificate thereafter, if applicable 33GWh of production up to 15 years limit, market price + green certificates thereafter, if applicable

% of EDPR Assets: 65% 35%

Source: EDPR

We understand the economic and financial adjustment programme signed with the IMF and the European Union will most likely imply a decrease in the support to the sector, which, along with the existing credit restrictions, should lead to a deceleration of the market in the upcoming years.

Chart 27: Country annual MW additions 2011-2020



Source: EER

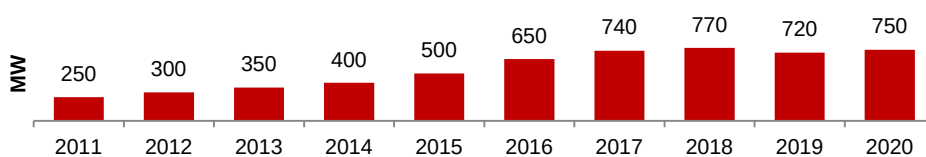
Rest of Europe

POLAND

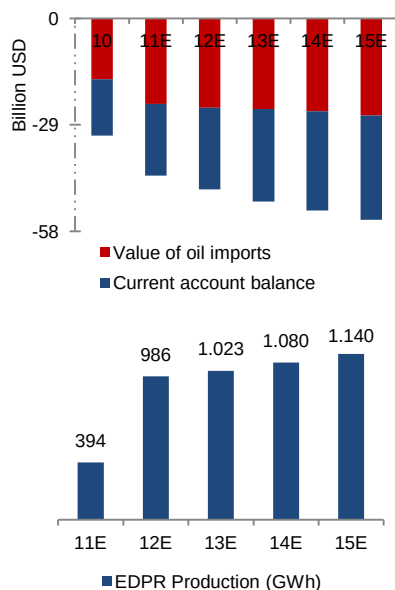
Poland is a relatively new market for wind energy (or any other source of green energy), with close to 95% of its electricity production dependent on coal. Wind is the only green technology attracting investment, and there is currently a significant pipeline of projects to be implemented all over the country. Installed capacity in 2010 totalled 1,1GW, and Government commitment to the 2009/28/EC RES Directive points to a total of 6,65GW of wind capacity installed by 2020.

The EWEA expects wind to cover 13,8% of total electricity demand by 2020 (Vs. 1,6% in 2010), with an expected installed capacity of 10,5GW, 58% above the government target.

Chart 28: Country annual MW additions 2011-2020

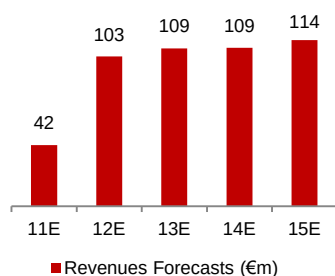


Source: EER



Source: IMF, Nova Equity Research

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)



Source: Nova Equity Research

Remuneration is based on market prices plus green certificates (GC) but there is also the option of choosing a regulated price, negotiated every 12 months. The green certificates are issued to assure established quotas are met, and there is substitute fee for non-compliance with GC obligation.

Table 10: Remuneration System

System	Market Price plus Green Certificates
	Regulated Tariff
Remuneration:	Regulated Tariff: PLN 195.3/MWh for 2011
	Substitute Fee: PLN 274.9/MWh for 2011
	Option to negotiate long-term PPA's
Source: EDPR and NREAP	

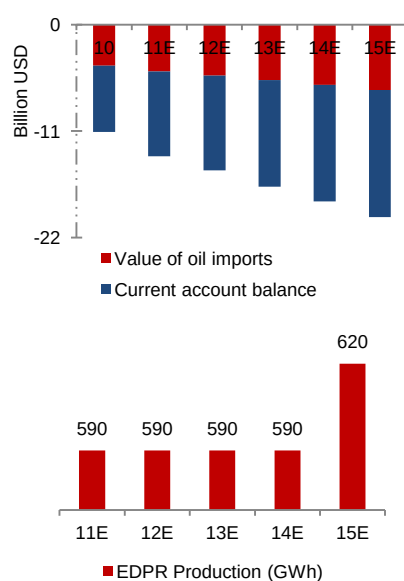
Wind generating capacity is expected to boom in the upcoming years, fuelled by both the package of regulation plus binding targets and the support schemes currently available to investors, such as EU cohesion¹⁹ and structural²⁰ funds. Also, given the prospects of reduced support to the sector in more mature markets, we expect attentions to shift to less developed economies, such as Poland, which have good prospects (commitment to increase by 500% its operating capacity) and a supportive framework. Nevertheless, the lack of development of the grid infrastructure, added to both the vague system of rules that allocate costs between operators and producers and the fact that the best wind resources are located in nature reserve areas, are clear obstacles to the development of the sector. We expect EDPR to increase its exposure to the Polish market by 500MW between 2011 and 2015.

ROMANIA

Wind market in Romania is still very residual, with only 462MW installed at the end of 2010. Government goals are, however, ambitious, with the commitment to the 2009/28/EC RES Directive pointing to a total of 4GW of wind capacity installed by 2020.

The EWEA expects wind to cover 10,1% of total electricity demand by 2020 (Vs. 1,7% in 2010), with an expected installed capacity of 3GW, below the government target of 4GW.

As with the Polish case, Romanian remuneration framework consists on market prices plus the sale green certificates with limited upside and downside,

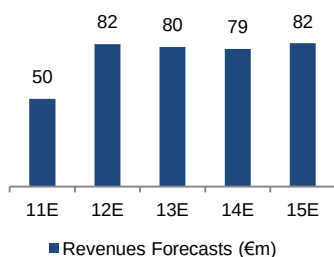


Source: IMF, Nova Equity Research

¹⁹ Operational Programme Infrastructure and Environment

²⁰ Regional Operational Programmes

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)



Source: Nova Equity Research

supported by renewables quotas. Wind generators receive 2 GC per MWh produced until 2017 and there is also the option to negotiate long-term PPA's, as well as loan guarantees and tax exemptions for this kind of investments. Again, we consider this to be a market with good prospects, as the government committed to increase by more than 700% its current operating capacity. Nevertheless, the unpredictable legal situation (amendments to the regulatory scheme still pending approval by the European Commission) and grid deficient capacities are posing a threat to the development of the sector. We expect EDPR to increase its exposure to the Romanian market by 347MW between 2011 and 2015.

Table 11: Remuneration System

System	Market Price plus Green Certificates
	2 GC received for each MWh produced until 2017
Remuneration:	GC Cap - €56,2/MWh ; GC Floor - €27,6/MWh
	Option to negotiate long-term PPA's

Source: EDPR and NREAP

Other Markets

Table 12: Remuneration Systems (details in Appendix III)

France	Belgium	Italy
Feed-in- tariff, stable for 15 years	Market Prices + Green Certificates (GC)	Market Prices + Green Certificates (GC)
Decree 2006 (Wind Farms after July 2006):	Wallonia: GC Cap - €100/MWh ; GC Floor - €65/MWh	1 GC received for each MWh produced
First 10 years: €82/MWh, Inflation type indexation;	Flanders: GC Cap - €125/MWh ; GC Floor - €80/MWh	GC Price : Reference Value – Average Market Price
Years 11 to 15: €82/MWh @2.400hours decreasing to €28/MWh @3.600hours, depending on load factor;	Option to negotiate long-term PPA's	
Years 16 onwards: Market Prices		

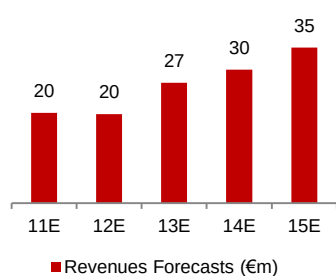
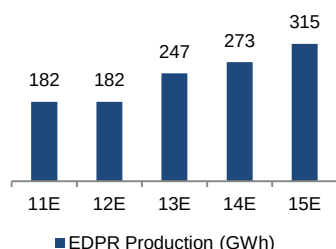
Source: EDPR and NREAP

Brazil

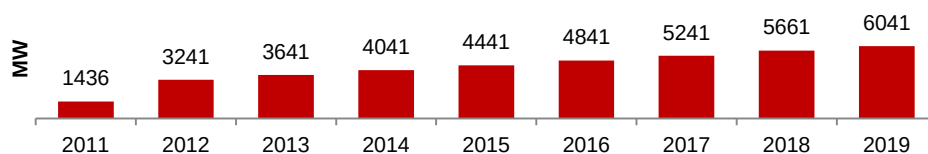
Although the large unpopulated land areas, the coastline of more than 9.000 km and the estimated wind power potential of more than 350GW make the country one of the potential wind energy giants, the fact is that only now is the sector starting to boost. Wind installed capacity in 2010 totalled 931MW, which represent a 54,2% yoy increase. The national Electrical Energy Ten Year Plan 2010-2019 forecasts a total of 6GW installed by 2019, meaning an expected CAGR of 23%

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Chart 29: Wind Installed Capacity Forecasts (2011-2019)



Source: Nova Equity Research



Source: REEP

Brazilian remuneration framework consists of the PROINFA Program and a tender system, depending on the date the asset was licensed. The PROINFA Program was established with the objective of developing green sources of energy and increasing its share of the country's electricity supply to 10% by 2020. It applies to assets licensed before 2011, for which the program guarantees long term PPA's. For assets licensed after 2011 there is a tender system in place, with auctions held by the National Electric Energy Agency (ANEEL).

Table 13: Remuneration System

	PROINFA	Tender System
Applicability:	Wind Farms licensed before 2011	Wind Farms licensed after 2011
System	20 year PPA's	Wind Auctions
% of EDPR Assets:	100%	0%

Source: GWEC and ANEEL

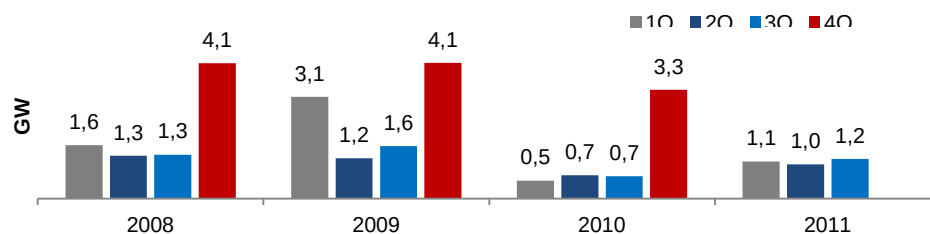
We consider EDPR's exposure (84MW's installed) to the Brazilian market to be a strategic option. As the market develops and becomes more attractive, we expect the company to capitalize on the fact that it had already secured its presence in the market.

USA

After a period of unprecedented growth, with record yearly additions, the US wind industry disappointed in 2010, with "only" 5GW installed during the year (VS 10GW in 2009), being no longer the biggest wind market by installed capacity. This slowdown, caused by economic uncertainty and the lack of a consistent policy to the sector, was apparently temporary and 9M 2011 figures show that the industry is recovering its pace.

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Chart 30: Wind Power installations by Quarter



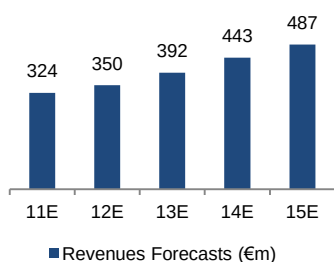
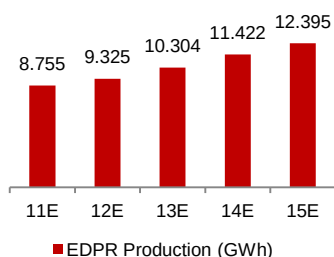
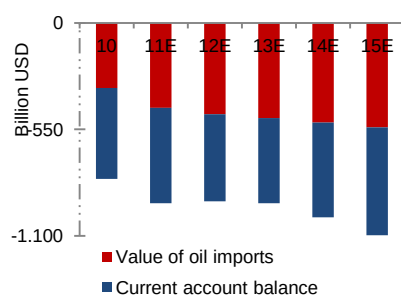
Source: REEP

Wind energy currently generates 2% of US electricity demand, but analysts estimate that, with the right incentives, this value can climb to around 20% in 2030. These prospects, along with the good wind conditions and supportive policies, sustained EDPR's significant investment in this market over the last years. The company ranked third by wind installed capacity in 2010, with a total of 3,3GW installed, behind NextEra Energy Resources (8 GW) and Iberdrola Renewables (4,3 GW).

The major threat to the sector continues to be the lack of consistent national policy. Nevertheless, an increasing percentage of US states have been active in pursuing local targets for renewable energy, through the Renewable Portfolio Standards (RPS), which require states to generate a defined percentage of electricity from green sources.

Remuneration framework in the country combines fiscal benefits with long-term PPA's and a green certificates market. At a Federal level, and by far the most relevant incentive in place, the Production Tax Credits (PTCs) are income tax credits attributed on a per MWh basis for green generated electricity, which apply for the first ten years of operation (adjusted yearly according to inflation). Enacted in 1992 for the first time, PTCs incentive expired in 1999, but since then it was subsequently extended for periods of two or three years each time. There were however three exceptions (1999, 2011 and 2003), in which the program was not extended, resulting in major drawbacks in capacity additions in the following years. The last extension of the incentive was approved by the American Recovery and Reinvestment Act (ARRA) and assures applicability until December 2012. ARRA also introduced an alternative to the PTCs, which consists in the monetization of the tax incentives, thus allowing producers to receive an Investment Tax Credit (ITC) equal to 30% of the total investment in the project.

Also in what concerns fiscal benefits, the Modified Accelerated Cost Recovery System (MACRS) allows for a depreciation of 95% of the assets over the first five



Source: IMF, Nova Equity Research

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

years of operation, instead of the usual 20, thus contributing to a faster recovery of the investment through depreciation deductions.

Since EDPR does not (usually) generate enough taxable income to take full advantage of the tax benefits, the company engages in partnership structures that transfer the tax credits to third parties, also known as Tax Equity Investors (TEI). These acquire their interests in the partnerships paying an upfront cash payment equivalent to roughly the net present value of the tax benefits (typically 50%-60% of CAPEX). In return, they receive the federal tax benefits associated to the project plus a part minor part of the operating cash flow until obtaining a defined IRR, generally over a 10 years period. EDPR manages and operates the wind farms, keeping day-to-day control of the projects.

Wind farms remuneration comes from the sale of Renewable Energy Certificates (RECs) plus either the negotiation of long term PPA's or the sale of the generated electricity at market prices.

Local RPS guarantees the existence of a market for RECs, which are attributed to producers and certify that a given amount of electricity was generated by a renewable resource.

Most of EDPR's capacity in the US is remunerated through PPA's, which may be indexed to inflation or have defined price escalators (11% to 12% for new contracts), and some of them already incorporate the delivery of RECs. These contracts are usually settled in terms of installed capacity, assuring full output coverage. Furthermore, the maturity of the deals is generally 20 years, and the counterparties are usually public state companies.

Although historically the company has been able to secure competitive contracts, current economic events are putting pressure in the markets and the company faces the risk of scarcer good deals and increased exposure to merchant prices volatility.

Table 14: Remuneration System

Electricity + Green Price	+	Tax incentives
Long term PPA		PTC, ITC (30% of investment) or Cash Grant in lieu of ITC
or		and
Power Price + REC		MACRS (depreciation of 95% of the asset over the first 5 years)

Source: EDPR

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Appendix

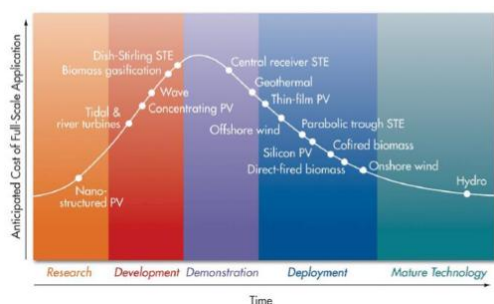
Appendix I: Wind Valuation by Country and Year – NPV per MW, including Terminal Value & Repowering (€ m)

Year Beginning Operations	Spain	Portugal	RoE					US	Brazil
			France	Belgium	Poland	Romania	Italy		
<2005	10,08	5,88	1,13	-	-	-	-	1,17	-
2006	1,40	1,23	1,00	-	-	-	-	0,63	-
2007	2,85	1,25	1,10	-	-	-	-	0,75	-
2008	1,44	1,26	1,20	2,71	-	-	-	0,77	-
2009	1,46	2,31	1,16	2,74	2,48	-	-	3,80	2,92
2010	1,48	2,33	1,23	-	-	3,24	-	3,72	-
2011	1,55	1,05	1,29	-	2,59	3,41	3,30	0,88	2,13
2012	0,90	0,40	0,66	2,21	1,95	-	2,33	0,57	-
2013	0,22	-	-	-	1,20	-	-	0,22	0,77
2014	0,24	-	- 0,03	1,41	1,15	-	2,19	0,22	0,77
2015	0,23	-	- 0,02	-	1,10	1,77	2,13	0,22	0,77

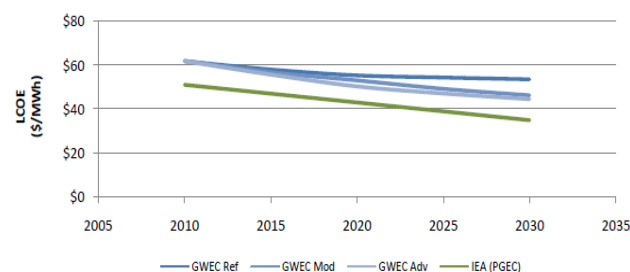
Source: Nova Equity Research

Appendix II: Wind power learning curve and cost projections (all values in Australian dollars)

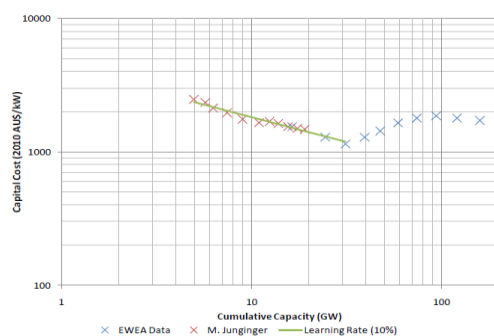
Apart from Hydro Technology, Onshore Wind is the most mature amongst green technologies. It is in the deployment phase, which means costs will tend to further decrease, although at lower rates, as technology approaches the maturity phase.



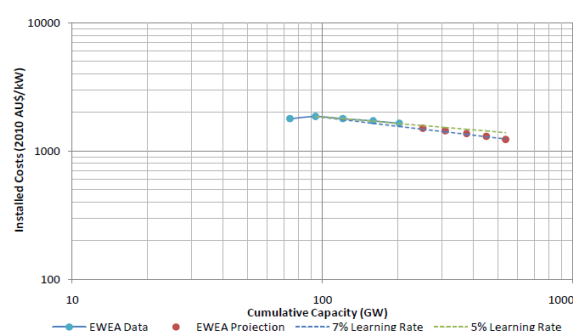
GWEC and IEA's cost projections considering Technology Innovation, improvements in Wind Resource Assessment and Economies of Scale and Volume Effects:



According to the experience curve for Wind power capital cost, costs have decreased with capacity increases, at an observed learning rate of 10% (based on historical records).



Cost data and projections with two different learning rates: IEA projection of 7% and EWEA projection 10%.



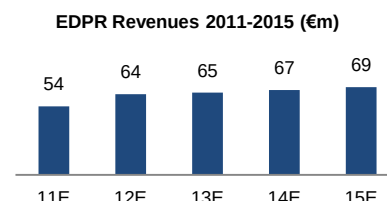
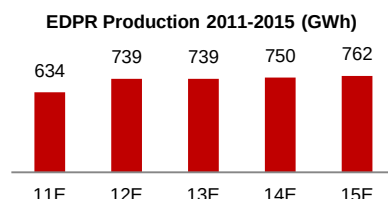
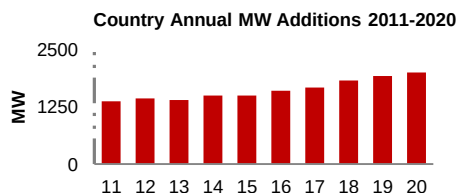
Source: Renewable Energy Technology Cost Review – Melbourne Energy Institute, March 2011

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Appendix III: RoE Markets Summary

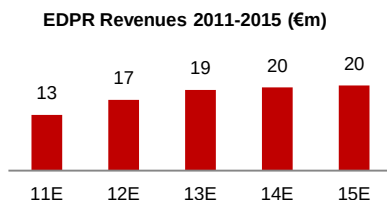
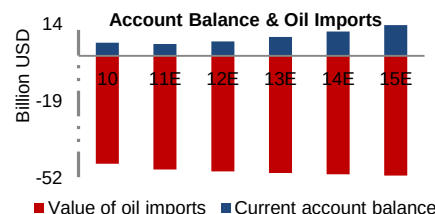
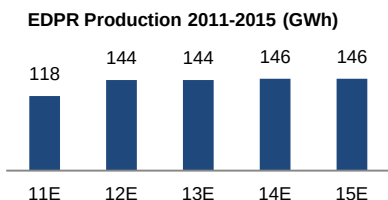
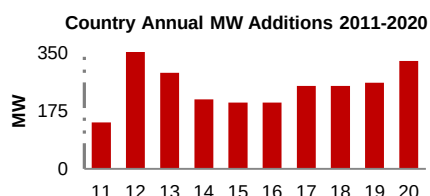
France: Second largest wind potential in Europe, and ranks seventh worldwide in terms of installed capacity. Considerable growth is expected, given the Government target of 25GW of wind capacity installed by 2020, versus the existing 5.6GW in 2010.

The EWEA expects wind to cover 10,8% of total electricity demand by 2020 (Vs. 2,3% in 2010), with an expected installed capacity of 23GW, below the government target of 25GW.



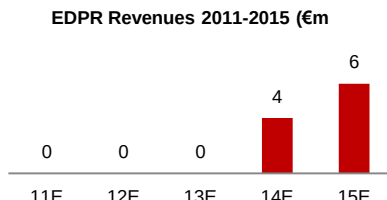
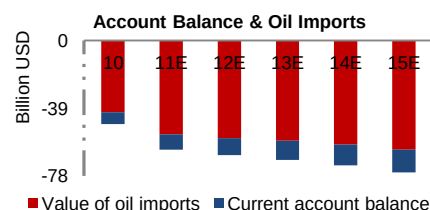
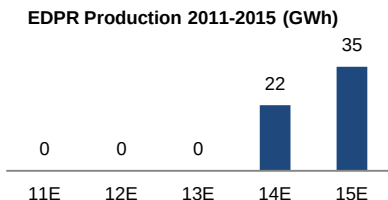
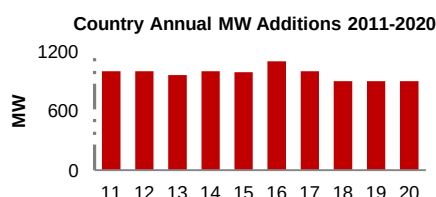
Belgium: Currently with 911MW of wind installed capacity, Government commitment points to a total of 4,32GW of wind capacity installed by 2020, which represents one of the most ambitious goals amongst European countries.

The EWEA expects wind to cover 10,2% of total electricity demand by 2020 (Vs. 2,3% in 2010), with an expected installed capacity of 3,9GW, below the government target of 4,32GW.



Italy: Wind installed capacity in Italy has been steadily increasing over the last years, to a value of 5,797GW in 2010. Government commitment points to a total of 12,68GW of wind capacity installed by 2020.

The EWEA expects wind to cover 8,7% of total electricity demand by 2020 (Vs. 3,2% in 2010), with an expected installed capacity of 15,5GW, 22% above the government target.



Source: EDPR, NREAP, EER

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Appendix IV: Scenarios

Scenario	Prob.	€ / Share	Description
Bear Case Scenario	5%	3,62	Assuming no credible and convincing solution to Europe's sovereign crisis is attained, and no balanced US deficit-reduction plan is put in place, pressures will lead to a generalized downgrade of sovereign credit ratings. This, in turn, will lead to an increase in Sovereign Debt Yields across the board. Increased uncertainty will be translated in more volatility across markets, which should have an impact in commodities and energy prices. Nevertheless, given EDPR's remuneration profile, we expect a reduced impact on Cash Flows. With financing more restricted and expensive, the company will put on hold the development of its pipeline.
Base Case Scenario	85%	6,01	Regulatory Schemes assumed as they are currently, and moving towards a market prices mechanism. Spanish tariff deficit reduced through taxation on the demand side (consumers will progressively pay the full price of the green energy consumed) and a limitation of the support to the sector, mainly concerning photovoltaic systems. In Portugal, reduction of incentives for future operating capacity. In both cases, changes have no retroactive effects, applying only to future operating capacity. Market prices evolve according to inflation. Debt yields remain inflated in the coming years, and credit restrictions will be maintained. In the US, fiscal incentives will be extended once again.
Bull Case Scenario	10%	7,39	EU governments present a concerted and convincing strategy to end the sovereign debt crisis. Actions are taken to consolidate EU member states public finances, and markets confidence is restored. Pressure eases and with it, Yields on European Sovereign debts gradually converge to historical values (before the beginning of the crisis).

	Bear Case Scenario			Bull Case Scenario		
	€ mn	€ / share	% EV	€ mn	€ / share	% EV
Operating Wind Farms (2012E)						
Spain	2.305	2,64	29%	2.623	3,01	23%
Portugal ²¹	823	0,94	10%	1.095	1,25	10%
RoE	1.935	2,19	24%	2.187	2,47	19%
USA	2.009	2,32	25%	2.157	2,49	19%
Brazil	145	0,18	2%	158	0,19	1%
Total Value Existing Business	7.217	8,27	90%	8.220	9,41	73%
Pipeline (2013E-2015E)	-	-	-	371	0,43	3%
Repowering & Terminal Value	761	0,87	10%	2.679	3,07	24%
Total Enterprise Value	7.978	9,14	100%	11.271	12,91	100%
Net Debt 2011 (incl. TEI)	4.631	5,31		4.631	5,31	
Minorities & Provisions	183	0,21		183	0,21	
Investments (Divestments) ²²	102	0,00		102	0,00	
SoTP Equity Value / Target Price	3.062	3,62		6.355	7,39	

Source: Nova Equity Research

²¹ Includes capacity attributable to EDPR under the consortium Eólicas de Portugal

²² Includes investments in working capital, financial investments and other investments

THIS DOCUMENT IS NOT AN INVESTMENT RECOMMENDATION AND SHALL BE USED EXCLUSIVELY FOR ACADEMIC PURPOSES (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

Disclosures and Disclaimer

Research Recommendations

Buy	Expected total return (including dividends) of more than 15% over a 12-month period
Hold	Expected total return (including dividends) between 0% and 15% over a 12-month period.
Sell	Expected negative total return (including dividends) over a 12-month period.

This report was prepared by a Masters of Finance student, following the Equity Research – Field Lab Work Project, exclusively for academic purposes. Thus, the author, which is a Masters in Finance student, is the sole responsible for the information and estimates contained herein and for the opinions expressed, which reflect exclusively his/her own personal judgement. All opinions and estimates are subject to change without notice. NOVA SBE or its faculty accepts no responsibility whatsoever for the content of this report nor for any consequences of its use.

The information contained herein has been compiled by students from public sources believed to be reliable, but NOVA SBE or the students make no representation that it is accurate or complete, and accept no liability whatsoever for any direct or indirect loss resulting from the use of this report or its content.

The author hereby certifies that the views expressed in this report accurately reflect his/her personal opinion about the subject company and its securities. He/she has not received or been promised any direct or indirect compensation for expressing the opinions or recommendation included in this report.

The author of this report may have a position, or otherwise be interested, in transactions in securities which are directly or indirectly the subject of this report.

NOVA SBE may have received compensation from the subject company during the last 12 months related to its fund raising program. Nevertheless, no compensation eventually received by NOVA SBE is in any way related to or dependent on the opinions expressed in this report.

The NOVA School of Business and Economics does not deal for or otherwise offers any investment or intermediation services to market counterparties, private or intermediate customers.

This report is not an investment recommendation as defined by Article 12.º-A of the Código do Mercado de Valores Mobiliários. The students of NOVA School of Business and Economics are not registered with Comissão do Mercado de Valores Mobiliários as financial analysts, financial intermediaries or entities or persons offering any services of financial intermediation, to which Regulamento 3.º/2010 of CMVM would be applicable.

This report may not be reproduced, distributed or published without the explicit previous consent of its author, unless when used by NOVA SBE for academic purposes only. At any time, NOVA SBE may decide to suspend this report reproduction or distribution without further notice.