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EDP Renováveis: Equity Research

“Investing in a Renewable Future - An ambitious strategy
in the wake of a global pandemic”

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Abstract

This equity research paper focuses on EDP Renováveis (EDPR) and the renewable energy market. EDPR is a renewable energy company, developing, building, and operating renewable assets. Until 2020, the Company was primarily focused on wind onshore. According to its strategic plan, EDPR aims at diversifying its portfolio mix, notably to invest in Solar PV in the next 5 years. EDPR is currently present in North America, Europe and Latin America. It was incorporated in 2008, and it is part of EDP Group (EDP owning a >70% stake). Across the globe, the push for increase in renewable energy installations are currently under way, in order to meet ambitious political goals. In the private sector, we see major companies contracting PPAs with renewable energy producers, to meet ESG driven goals due to increased pressure from stakeholders. There is no doubt about the market potential in the coming years, particularly with the expected increase in wind onshore and solar PV installations. The question is whether EDPR will be able to seize this opportunity, amidst unparalleled interest from its peers and new competitors that traditionally were not part of the renewable energy industry.

Keywords: EDPR | Renewables | Energy | Wind

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This report is part of the report (annexed) and should be read as an integral part of it.

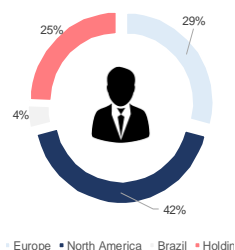
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Company overview

Employees per market as at 31.12.2020

[Source: Annual Report 2020]



EDP Renováveis, Sociedad Anónima (hereinafter referred to as “EDP Renováveis”, “EDPR” or “the Company”) was incorporated on 4 December 2007. The Company’s main activities focus in the electricity sector, and notably include planning, construction, operation and maintenance of electricity generating power stations, using renewable energy sources (mainly wind, representing 97%).

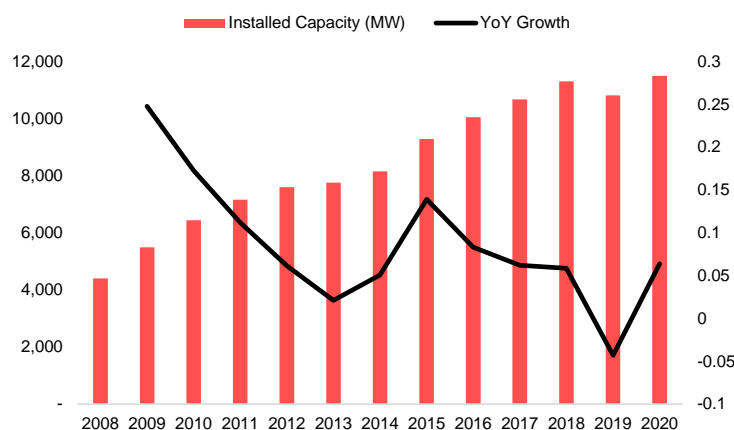
The registered offices of the company are located in Spain (in the city of Oviedo). The Company is part of the EDP Group, of which the parent company is EDP Energias de Portugal, S.A., based in Lisbon (hereafter also referred to as “EDP”).

The company was founded with the main purpose of managing and operating the growing renewable assets the EDP held in its own portfolio.

At the time of incorporation, EPDR held 3.6GW installed capacity in Portugal, Spain and USA. At the end of 2020, the Company had 11,500 MW installed capacity, generating circa 29,000 GWh of clean energy.

In 2008, EDP launched the IPO of 20% of EDPR, initially traded at € 7.65 per stock . The stock is currently listed on Lisbon’s stock exchange, Euronext Lisbon. EDPR, as well as its parent company, EDP, are both part of the PSI 20 index. As of May 2021, EDPR represented circa 12% of the PSI 20 Index (14% if excluding banks).

In terms of onshore wind production market share¹, EDPR is a leader in Portugal, owning 23% of the total installed capacity (i.e. 1.2 GW of 5.4 GW) as of 31.12.2020. In the Spanish Market, the Company owned 8% of capacity, and in US 5% (i.e. 6.2 GW of 122 GW). As for RoE, highlight goes to Romania (16% market share) and Greece (recent acquisition of 900 MW may allow EDPR to obtain above 17% market share in the coming years).



¹ Computed as EDPR’s installed capacity in each geography / total installed capacity (wind onshore) as at 31.12.2020. Sources for installed capacity of each region were obtained from the International Renewable Energy Agency (IRENA). EDPR installed capacity as at 31.12.2020 obtained from 2020 annual report.

The Company has very low exposure to market prices. Low volatility is one of the main assets of EDPR, since it allows it to operate under remarkable certainty, as this trait renders the Company stable and predictable revenues and cash flows². In Europe, EDPR's electricity is sold in Spain, Portugal, France, Italy and Poland through regulated tariffs, physical or financial PPAs. In North America, the vast majority of the plants are under PPAs or long-term financial contracts. Only 6% of total production was subject to merchant market in 2020.

Key Financial Indicators

EDPR closed 2020 FY with revenues amounting to € 1.7bn, and EBITDA of €1.6bn, which translates into a record high EBITDA / Revenue margin of 96%³. This increased efficiency is partially related to increased in "Other operating income" caption, which includes capital gains in relation to sell-down transactions⁴. Revenues decreased 5% *vis-à-vis* 2019 mainly due to sell-down assets deconsolidation (-€129 million) and lower wind resource (-€89 million).

Income Statement (Million €)	Historical Period		
	2018	2019	2020
Consolidated			
Revenues	1697	1824	1731
Op. costs & Other op. income	-397	-176	-70
EBITDA	1,300	1,648	1,661

The Company had an average 2x Net Debt / EBITDA, considering the period 2018-2020 (2.1x in 2020). In terms of debt profile, interest bearing liabilities were comprised of 17% bank loans and other, whereas the remaining 83% were intra-group financing instruments. Net financial expenses decreased by 18% with YoY comparison being impacted by lower average cost of debt (3.5% in 2020 vs 4.0% in 2019).

To be noted that, as further explained in the sections dedicated to CAPEX and the Company's strategy, debt is expected to play a non-negligible part on the financing structure of the new additions in the coming years as EDPR expects debt in relation to new additions to be somewhere between €1bn and €3.5bn (i.e. between 5% and 18% of total funding necessary to execute the upcoming capacity expansion)⁵. As per its NA tax equity⁶ investors, EDPR had €1.9bn liability as of December 2020. Additional tax equity debt is expected to be incurred up to €2bn in the context of the ongoing expansion.

² Head of Project Finance in one of the largest Iberian Banks - "The renewables industry is today the preferred asset class for project finance. There is a perfect match between this contractual structure (project finance) that requires stable and predictable revenues and the renewables industry" (Outlook For The Portuguese Renewable Industry In 2021: [Webinar](#) organized by M&A Community, April 2020).

³ All-time average = 76.6% | 2018-2020 average = 87.5%

⁴ €444 million in 2020 (+€99 million than 2019).

⁵ EDPR Strategic Update 2021-2025 and transcript of the EDP Strategic Update 2021-2025 webcast held on 21 February 2021, notably Miguel Stilwell D'Andrade's intervention.

⁶ Financing structure (US) where the tax equity investor contributes capital in exchange of tax benefits and cash distributions during the 1st ten years the park operates, or until investment is recovered.

Competitive analysis

EDPR develops its activity in a highly competitive environment. Some established renewable producers have been growing and achieving scale, in some cases for periods of more than two decades, developing skills, investing in capex resources and specialized operational teams⁷. Additionally, competition from other players is to be expected: as discussed more in-depth in sections below, one key trend underpinning clean energy investment is the entrance of oil & gas major players in the renewables industry⁸. For the purpose of our analysis, we highlight the following entities due to similarity of business activity (mainly or exclusively renewable players), geography in which they are present (European / Iberian DNA, presence in NA in some cases), scale or other features such as targets for the coming years in line with (or rather, in competition with) EDPR's:



Iberdrola: Spanish multinational electric utility. The company is a leading producer of wind power, and one of the world's biggest electricity utilities.



Ørsted: Danish multinational power company based in Fredericia, Denmark. It is the largest energy company in its country. The company develops, builds, and operates offshore and onshore wind farms, solar farms, energy storage facilities and bioenergy plants.

Acciona: it is active in the energy and infrastructure business, internationally. It develops, builds, operates, and maintains wind, solar PV, solar thermal, hydro, and biomass plants. The company, via its subsidiary Acciona Energy, produces 21 terawatt-hours of renewable electricity a year.

Audax: a renewable energy company with headquarters in Barcelona, Spain. The company is specialized to the development of wind farms. It is also engaged in production of solar and biomass energy.



Name	Mkt Cap (M EUR)	Last Px (EUR)	EBITDA:2020	EBITDA:2019	Tot Assets:2020
IBERDROLA SA	71,466	11.14	9,629.00	9,806.00	122,518.00
ORSTED A/S	46,675	111.04	2,217.11	2,474.10	26,435.47
EDP RENOVAVEIS SA	16,973	17.67	1,641.96	1,616.22	18,162.55
ACCIONA SA	7,340	133.80	1,170.45	1,328.14	18,267.96
FALCK RENEWABLES SPA	1,572	5.40	193.11	191.46	1,970.36
ELECNOR SA	905	10.40	202.02	372.67	3,046.63
AUDAX RENOVABLES SA	820	1.86	66.44	73.25	1,146.62

⁷ <https://www.eia.gov/todayinenergy/detail.php?id=46376>

⁸ GWEC - Global Wind Report 2021; BNN Bloomberg – “How an Oil Company Becomes a Renewables Company”.

EDPR vs Iberdrola⁹

Although not being a pure-renewable player¹⁰ EDPR and Iberdrola share a comparable strategy for the coming years, and thus the comparison between both companies is relevant. For reference purposes, Iberdrola had 34,923 MW installed capacity (renewable sources) as of 2020, (i.e. 3x EDPR's capacity). Its EBITDA¹¹ amounted to € 2,500 million in 2020, (i.e. 1.6x EDPR's EBITDA¹²). Iberdrola's Renewables EBITDA has grown at an average annual rate of 15%, vs. EDPR's 8% for the same period. Iberdrola has set an ambitious target for 2025, which notably aims at doubling its installed renewable capacity. Iberdrola's target in terms of growth in net capacity, portfolio mix¹³ and geographic presence expected is in line with EDPR's own target. Thus, we expect strong competition between these two companies, in the context of the implementation of their strategic growth.

Non-traditional competitors (Oil & Gas)¹⁴

One trend to keep an eye on is the push being made by oil & gas companies who want to build lower-carbon portfolios. Clean energy investments made by these companies have been above USD 12 bn per year since 2018 (roughly around 6% total oil sector CAPEX). Some of the biggest investors being Total, Repsol, Shell, and Galp. Around 80% of their investments focused on wind and solar in 2020. Those companies have set goals of, for example, achieving "Net Zero" by 2050 and ambitious renewable investment targets. Push made by this investor will potentially have a non-negligible impact on the renewable M&A market.

⁹ Please note that hydroelectric production activity is classified within the Renewables business by Iberdrola, hindering the comparability between both companies, since hydro may not be found at the level of EDPR's portfolio mix.

¹⁰ Iberdrola is not a pure-renewable player (renewables represented 63% of its portfolio)

¹¹ We have only considered Iberdrola's EBITDA in relation to renewables (Page 12 of 2021 Integrated Report)

¹² Implying Iberdrola's lower EBITDA/MW ratio.

¹³ Over 50% in Solar PV + over 50% of the remaining in wind onshore: Page 31 of Iberdrola's Integrated Report 2021.

¹⁴ BloombergNEF and GWEC | GLOBAL WIND REPORT 2021, page 32.

Strategy

In March 2019, EDPR has designed a strategy for the period 2019-2022 supported on the so-called “Three Pillars”: selective growth, self-funding, and operational excellence. This (now outdated) strategic plan included the following features:

Selective Growth	Self-Funding	Operational Excellence
<ul style="list-style-type: none"> • ~7.0 GW cumulative build-out • Geographical diversification • Technological diversification 	<ul style="list-style-type: none"> • > €8.0 bn of investments financed by sell-down & asset's cash flow • > €4.0 bn of sell-down proceeds • € 4.0 bn of net investments 	<ul style="list-style-type: none"> • 33% load factor in 2022 • > 97.5% availability • Core OPEX/MW -1% CAGR

On February 2021, EDPR presented an update to this plan, which sets very ambitious goals and extends the visibility of the Company’s strategy beyond 2022 (until 2025). The most important feature of this updated strategy are as follows:

Gross additions	21-23	24-25	TARGET	Geography	GW	%
GW per period	10.5	9.2	19.7	Europe	6.7	34%
				North America	8.8	45%
				LatAm	2.9	15%
				Rest of World	1.3	7%

The Company’s gross additions target of 19.7 GW is divided into two periods: between 21-23 the EDPR expects to add circa 18% each year on average, while the remaining 46% are expected to be added in the period 2024-2025 (23% average per year). In order to grasp the ambitious plan in comparison to the previously set target (2019-2022), it should be noted that, on average, EDPR is now expected to add, in gross terms, 3.9 GW yearly, while before it was planning to add 1.75 GW (+2.2x). As per target geographies, EDPR expects to reinforce its presence in the LatAm region (currently, 4% of its activity is in Brazil) and is also looking for opportunities in other parts of the world¹⁵. In terms of total additions, EDPR expects to by 2025 to have 25Gw of installed capacity, up from 12GW as at 2020. This gives us an important clue: as part of the financing structure of this strategy, EDPR is implicitly aiming at selling around 6.7Gw.

As of 31 March 2021, EDPR has increased its operating portfolio in the first quarter of the year to 12.5 GW, +1.9 GW than in the same period of the previous

¹⁵ The Company seems open to discuss additions in new markets, but there is no indication as to where these may be located other than “criteria for market entry: strong fundamentals and market size, low risk contracted profile” – P.7 of Strategic Update 2021-2025.

Technologies: Big bet on solar

In terms of technology to be acquired, highlight goes to Solar PV, EDPR's big bet for the coming period, estimated by EDPR to be 47% of new acquisitions (i.e. around 9.3 Gw). Unlike wind onshore, we do not forecast any sell-down activity to occur within this technology until 2025, since average asset age sold in the past transactions was of 4.9 years¹⁶. In other words, acquisitions in Solar PV in our model are the same in gross and in net terms.

Solar is an energy source with remarkable potential, based on forecast future additions across all regions where EDPR is currently present (and others as well¹⁷). Depending on execution of strategic plan (notably, with the distribution per country of new installations in solar and depending on the volume and profile of sell-down assets), EDPR could have to acquire up to 9% of all new estimated additions in solar PV within the countries where EDPR is already present. Total additions per country¹⁸ in solar PV, by 2025, are estimated to be around 92Gw¹⁹, whereas forecasted addition of Solar PV may reach 9.3Gw²⁰ in 2025 (as per EDPR's strategy). For the purpose of computation of forecasted acquisitions in this section we have considered only 93% of EDPR's estimated additions, as roughly 7% is expected to be acquired the "Rest of the World" region, where we have no comparison possible against expected future installations.

¹⁶ Please refer to "Sell-down Strategy" section.

¹⁷ "[...] Whereas China is the largest investor in renewable energy firms, they may be one of the largest polluters in the world but are taking all the necessary steps to curb pollution by switching to greener fuel alternatives. China is planning to implement the solar system in rural areas entirely to avoid the usage of fossil fuel" in Huang J., Li W., Guo L., Hu X., Hall J.W. - Renewable energy and household economy in rural China. For reference, China is currently the world's largest solar energy market in terms of solar energy production and solar power consumption, according to IEA.

¹⁸ Considering the following countries: Spain, Portugal, France, Belgium, Italy, Poland, Romania, US, Canada, and Brazil.

¹⁹ Sources for current and forecasted total wind and solar capacity: IRENA and National energy and climate plans (NECPs) for European countries (Spain, Portugal and RoE region).

Valuation

The valuation methodology was based on a Sum of the Parts (“SoTP”) Discounted Free Cash Flow (DCF) Model. For the purpose of the DCF, we split the Company’s activities into the following parts: Spain, Portugal, RoE, North America (US and Canada), Mexico, and LatAm. When necessary, we have considered a capacity coefficient (weight of installed capacity per region on total capacity on a given year) to split balance sheet items per each of the parts.

We have built two scenarios (base-case, and pessimistic) and we have weighted them according to different probabilities (90% and 10%, respectively). In general terms, the base-case scenario represents our view, based on historical information available and forecasts, on what is most likely to be the future of EDPR. This is the scenario to which we generally refer to in the Valuation section and across this equity research paper. Nevertheless, in the context of our analysis we have encountered uncertainty which we had to reflect on the final EV computation. For this reason, we have weighed in our pessimistic scenario, in which we rely on a less optimistic outlook for increase in installed capacity. This is mainly driven by an evolution towards a more competitive landscape, not only with existing renewable players, but mainly due to competition with large-scale utility and oil & gas players. Furthermore, we have adjusted the forecast on total installations per country in which we expect EDPR to be present going forward and considering current market share per region. By doing these two things, we ended up reducing total market of installed capacity, on the one hand, and EDPR expected acquisition of market share on the other hand (due to increased competition). Moreover, the pessimistic scenario assumes that capital gain / MW on sell-down strategy will decrease in the future (with direct impact on forecasted cash flows). This is due to the fact that we see an increase in sales in sight, not only from EDPR, but other reference players with ambitious expansion plans relying on asset rotation strategies as well (e.g., Iberdrola). Therefore, we have applied a discount factor on the reference²¹ we used for capital gain on sales forecast.

Scenario	EV	Net Debt	Equity Value	# Outstanding Shares	Share Price	% Weight	Price Target
Base-case scenario	28,303.87	6,652	21,652	960,558,162	EUR 22.5	90%	EUR 21.85
Pessimistic scenario	21,621.31	6,652	14,969	960,558,162	EUR 15.6	10%	

Base case (90%) + Pessimistic (10%)	
Share price	EUR 21.85
Share price as of 20.5.2021	EUR 19.65
Upside / (Downside)	12%
RECOMMENDATION	BUY

²¹ I.e., average gain / MW sold between 2019-2020.