FLASH NOTE – IBERDROLA

SEPTEMBER 2020

Iberdrola (Ticker: IBE)

Iberdrola, S.A.	
Ticker MyBolsa/website BiG	IBE
Ticker BiGlobal Trade	IBE
Ticker BiGTrader24	IBE
Ticker BiG Power Trade	IBE
P/E Ratio 2020E	19.13
P/BV Ratio	1.89
EV/EBITDA	11.25

Source: BiG Research

Price and Performance (Values in EUR)	
Price	10.73
52 Week High	11.52
52 Week Low	7.76
YTD	16.9%
Average Daily Volume (mı	19,088,820
Market Cap (mn)	68,136
Beta	0.75
Dividend	0.37
EPS	0.54

Source: BiG Research

Consensus (last 5m)	
Buy	12
Hold	16
Sell	4

Source: BiG Research

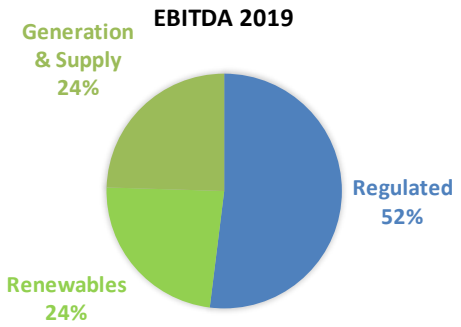
Financial Information	
Sales (EUR mn)	36,438
EBITDA (EUR mn)	10,405
Nº of Employees	35,120
ROA	3.0%
ROE	9.5%
D/E	0.6%
Dividend Yield	3.7%

Source: BiG Research

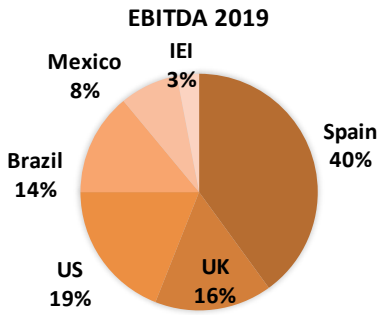
Notes:
All quotes were updated in Bloomberg at closing prices of 02/09/2020.

Description

Iberdrola is Europe's largest utility company by market capitalization. The company divides its operations in three segments – renewable energy (production of energy from wind onshore and offshore, hydro, minihydro, solar and others sources); network business (which builds, operates and maintains electricity lines, substations, transformation centres and other infrastructures) and wholesale and retail business (production of energy from nuclear, gas combined cycle, cogeneration and coal sources). Iberdrola was created in 1992 from the merger between Hidroeléctrica Española and Iberduero.



Source: Company data



Source: Company data

Investment Thesis

Quality Portfolio: Iberdrola's exposure to wind and solar represents around 24% of EBITDA and its exposure to dirty energy sources such as coal is only 2% of installed capacity.

Future growth in renewables: The company has 8.6 GW in renewable energy projects under construction of which 3.2 GW in Iberia, 0.9 GW in UK, 2.1 GW in US, 0.8 GW in Mexico, 1 GW in Brazil and 0.5 GW in other countries. At completion (mostly until 2023) these will increase in 30% the renewables production capacity of Iberdrola. Iberdrola intends to invest around EUR 10 bn per year in new projects and distribution networks but always at an attractive rate of return. Iberdrola had at mid 2020 14 GW of projects with permits and further 37 GW of project permits in process.

Stability of regulated business: Around 50% of Iberdrola's EBITDA comes from its regulated business which historically has proven to have a high degree of stability, being exception only years where hydro production in Brazil market was below normal levels.

Main risks: For Iberdrola, the main risks are sudden negative changes in regulation of distribution business, climate events which may cause lower hydro, wind or solar energy generation and possible increase in bad debts by retail customers.

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IS (EUR mn)	2019	2018	2017
Revenues	36,438	35,076	31,263
Procurements	20,175	19,641	17,900
Gross Profit	16,263	15,435	13,364
Net Personnel Expense	2,146	2,020	2,172
Net External Services	2,184	2,135	1,999
Levies	1,829	1,931	1,875
EBITDA	10,104	9,349	7,319
Amortisations & Provisions	4,227	3,910	4,606
EBIT	5,877	5,440	2,713
Financial Result	1,149	1,143	940
Taxes	914	960	-1,397
Minorities	408	323	366
Net Income	3,406	3,014	2,804

Source: Company Data

Balance Sheet (EUR mn)	2019	2018	2017
Cash & Equivalents	2,113	2,801	3,197
Trade and other receivables	11,016	8,336	7,560
Inventories	2,848	2,447	2,202
Financial assets	6,917	6,369	6,337
Property Plant & Equipment	73,413	66,600	64,862
Intangible Assets	20,368	21,000	21,148
Deferred tax assets	5,695	5,486	5,382
Total Assets	122,369	113,039	110,689
Debt	38,926	38,162	37,295
Provisions	6,685	6,028	6,114
Deferred tax liabilities	9,359	9,042	8,558
Deferred Income	6,386	6,301	6,244
Trade and Other Payables	13,817	9,530	9,746
Total Liabilities	75,174	69,063	67,956
Total Equity	47,195	43,977	42,733
Equity + Liabilities	122,369	113,039	110,689

Source: Company Data

Free Cash Flow (EUR mn)	2019	2018	2017
Operational Cash Flow	6,915	7,586	5,685
Net Income	4,794	4,348	2,026
Depreciation & Amortization	4,527	4,080	4,969
Financial Income and expenses	1,304	1,156	947
Changes in WC	-1,808	-797	-445
Other	-1,902	-1,201	-1,811
Investment Cash Flow	-7,382	-6,050	-5,193
Capex	-6,706	-6,251	-6,222
Others	-676	201	1,030
Financial Cash Flow	-277	-1,796	1,422
Debt change	99	85	3,341
Share buyback	132	-1,480	-983
Dividends	-508	-402	-937
Change in free cash flow	-744	-260	1,914
FX effects	56	-136	-150
Cash and Equivalents at end of yea	2,113	2,801	3,197

Source: Company Data

Income Statement

In 2019, EBITDA rose by 8% exceeding for the first time the EUR 10 bn. Net profit increased by 13%. Contributing positively was tariff improvements and increased demand in Brazil, increase of offshore wind production, more renewables capacity and strong performance of Generation and Supply in Mexico and Spain. The fall in hydroelectric production contributed negatively, as well as lower margins due to cap on certain electricity and gas tariffs in UK.

Non-recurring impacts 2019: Gross margin of Generation in Spain had a positive impact of EUR 87 mn due to market value long term LNG supply agreement with Pavilion Energy Trading & Supply. In Networks in Spain there was a positive contribution from fibre optic network agreements to Lyntia (+EUR 49 mn). Operating expenses increased by EUR 67 mn due to Spain and UK exit plans. Levies declined due to a double tax agreement between US and Spain that eliminates tax on dividends if an equity stake is above 80%.

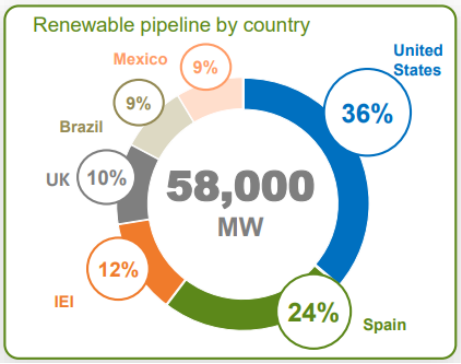
Capital Gains in 2019 reached EUR 203 mn due to agreement with Lyntia and gains in the sale of wind farms in US and real estate in Spain.

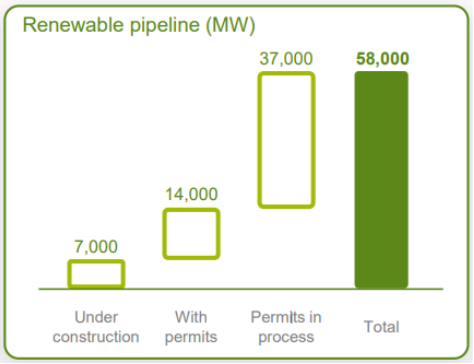
Balance Sheet

Adjusted net financial debt was at end of 2019 at EUR 37.8 bn, but decreased to EUR 37.6 bn in end of June of 2020. The cost of debt was reduced in June 2020 to 3.23%. Around EUR 22.6 bn of debt is green or sustainable.

Free Cash Flow

Gross investment in 2019 increased by 32% to EUR 8 bn mainly in networks and renewables. Iberdrola anticipates capex of around EUR 10 bn in distribution and new renewable projects in the next years:





Source: Company data

As for shareholder remuneration, due to the positive development of the business Iberdrola proposed an increase in shareholder remuneration to EUR 0.40 per share (+14% yoy). Iberdrola offers the option for shareholders to receive dividends in stocks instead of cash, but has the commitment to repurchase the amount of shares necessary to maintain the total in 6.24 bn.

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First Half 2020 earnings

In the first half Iberdrola achieved an **adjusted EBITDA growth of +4.2%** to EUR 5 bn and **invested EUR 3.6 bn**, of which 45% in networks, 45% in renewables and 10% in generation & supply and corporate.

In **Networks** business there was a decrease of 10.6% in EBITDA due to the new regulatory period in Spain and temporary impacts due to lower demand (EUR 65 mn) which should be recovered through regulatory mechanisms and due to bad debts from retail customers (EUR 35 mn).

In **Generation and Supply**, EBITDA increased by +14.3% despite Covid-19 situation which affected demand with a negative impact of EUR 92 mn and bad debt with an impact of EUR 36 mn.

In **Renewables**, EBITDA increased by 5.3% due to an increase in capacity of +6.1% and in spite of a fall in EBITDA in Spain due to lower sales price to supply business.

First Half 2020 earnings call Q&A overview (paraphrasing)

Q: Impact of Covid-19?

José Ignacio Galán (JIG): At a net profit level the impact of Covid-19 was EUR 153 mn, or 4% to 5% of annual profit. Looking forward it will depend on the progression of the virus but we see good signs of stabilization on demand and prices of power. At the same time we are negotiating with regulators and expect to recover partially this impact.

Q: Expectation of EBITDA growth this year?

JIG: Expect between middle to high single digit growth in net profit, but will depend on the progress of the virus towards the rest of the year.

Q: Details on the expectation of Brazil tariff review, and will they take into account volumes and bad debt impacts from the crisis?

JIG: We are going to be awarded a balance loan of BRL 1.6 bn and tariff review is under negotiation. We expect to recover the extraordinary costs of BRL 100 mn.

Q: The regulatory proposal of UK is a bit tough. What are your thoughts on it?

JIG: We have been really surprised and disappointed by Ofgem draft proposal. Especially after 2 years of collaboration. Until very recently a rate of return of 4.8% was expected (plus further incentives) and suddenly they modified to 3.9% with no incentive or little incentive. This proposal is also going against the government intentions, given that it discourages investments in infrastructure when the government said it wants to increase new jobs and achieve a net zero target.

Q: At what level will debt be at end of 2020?

Iberdrola: We are expecting to be around EUR 39bn, depends on the Infigen acquisition that will add another EUR 800 mn to debt.

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Q: Capex for next years?
JIG: We do not see reason for altering our plans and intend to continue to invest around EUR 10 bn. We see opportunities, have a huge pipeline and have the people to do it.

Q: Regulatory risk in Mexico?
JIG: Energy policy is decided by governments. And despite all the noise, the only measure confirmed with impact to Iberdrola is the increase in transmission costs for renewables which will have a minor financial impact. As the rest of the sector, we have already asked the court for an injunction, and some people of the sector confirmed me they received a positive signal from the court. Regarding future projects the only one we had was Tuxpan but we are still waiting for securing the gas contract for the next 20 years. Until then we will decide what to do.

Q: Details on the pipeline?
JIG: We have 7GW in construction, and other 14GW with permits which should start construction soon, so will be completed prior to 2023 and 2024. The rest with permits in process will be mature mostly after 2024.

Q: Regarding your bid for Infigen will it be earnings accretive in the near term if successful?
JIG: We had been in talks with the company for last 12 months and suddenly there was another bid to which we replied. Infigen will allow us to grow more in renewables in Australia. However it is a growth opportunity for the future so in the near term it won't have a significant impact.

Q: What is your expectation regarding bad debt for the rest of the year?
Iberdrola: We are expecting growth especially in 3Q and that in the end of the year we should have roughly double of bad debt we have currently.

Q: Spanish National Energy Plan and possible capex upside for you?
JIG: Coal production has been closing and the rest will close in the next 2 years, while majority of nuclear should also be closed in the next decade. We have opportunity to compensate with renewables that production but we will provide more details in next Capital Markets Day in November.

Q: What are your thoughts on the European Policy for Hydrogen and the opportunity to use renewables to power the proposed 40 GW of European electrolysers?
JIG: I have been in touch with the Commissioner of Energy, Timmermans, and there are certain things that are easy to electrify such as electric vehicles and cooling and heating of homes but others are more difficult. Currently hydrogen is used in the production of ammonia, but this hydrogen is produced with natural gas. So that can be transformed to be produced from electricity. For heavy transports the same. For this reason, I think their promises are very easy to fulfil given that these processes may be electrified. That is why we are already launching the largest project of hydrogen with electrolysis probably in Europe and certainly in Spain. This will generate hydrogen to a fertilizer company, from an electric generator of a photovoltaic power plant.

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Corporate Governance


Source: Iberdrola

José Ignacio Galán (CEO and Chairman): CEO since 2001 and he also holds the post of chairman of Iberdrola since 2006. Ignacio Galán graduated as an industrial engineer from the Engineering School (ICAI) of Universidad Pontificia Comillas. He also graduated in Business Administration and Foreign Trade from ICADE at Universidad Pontificia Comillas and in General Business Administration and Foreign Trade from the School of Industrial Organisation. After graduation started his career in Tudor holding several executive positions and helping the company to expand internationally. In 1990s was head of Turbopropulsores and between 1993 and 1995 chairman of Eurojet (European consortium to manufacture the 200 powerplants for the Eurofighter). José was also CEO at Airtel Móvil.

Main views:
-In an interview in 2018, he defended the increase in **CO2 prices** by European Commission in order to improve the use of clean energy.
-In beginning of 2019, when asked about **Trump views** on renewables and climate change, José diverted the question saying it had invested around USD 35bn in the country in renewables and that the energy policies were managed by each state and not mainly by the Trump administration.
-When asked about the **biggest risk of the industry** he mentioned the execution of projects. Given that projects are more but are smaller, is very important to execute well to not compromise profitability.
-**Regarding Mexico and new government**, in beginning of 2019 José highlighted that had worked with different governments but the compromise is with Mexican people and as such even with new government intends to maintain the investment and execute the energy policy determined.

When announcing the selection of Dennis Arriola as CEO of Avangrid in July 2020, Ignacio focused on Dennis' experience in renewables as well as in his track record of developing **strong teams** and being an **engaging leader** who is focused on delivering **shareholder returns** and building a strong **company reputation**.

In 2019 Ignacio Galán received a **total remuneration of EUR 6.2 mn**, of which EUR 2.25 mn was salary, EUR 567 thousand was fixed remuneration, EUR 92 th was attendance fee, EUR 3.25 mn was short-term variable remuneration and EUR 72 th was retribution in kind.

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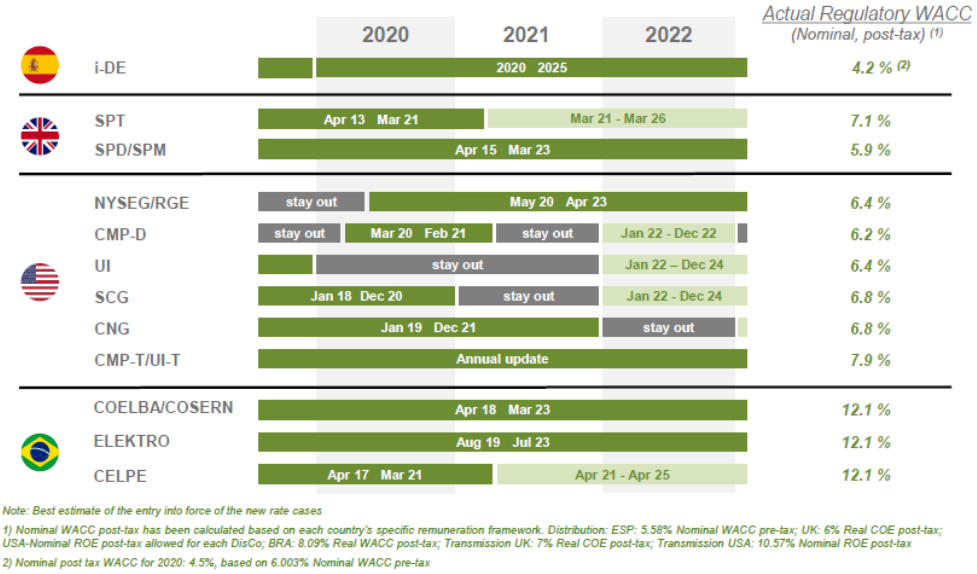
Businesses Overview (2019)

Distribution:

Distribution	EBITDA EUR bn	RAB EUR bn	Electricity Distribution GWh	Gas Distribution GWh
Spain	1.7	9.2	93,516	0
UK	1.0	7.9	33,670	0
US	1.3	9.3	38,441	64,234
Brazil	1.2	4.8	67,875	0
Total	**5.2**	**31.2**	**233,502**	**64,234**

Source: Company data



Note: Best estimate of the entry into force of the new rate cases

1) Nominal WACC post-tax has been calculated based on each country's specific remuneration framework. Distribution: ESP: 5.58% Nominal WACC pre-tax; UK: 6% Real COE post-tax; USA-Nominal ROE post-tax allowed for each DisCo; BRA: 8.09% Real WACC post-tax; Transmission UK: 7% Real COE post-tax; Transmission USA: 10.57% Nominal ROE post-tax

2) Nominal post tax WACC for 2020: 4.5%, based on 6.003% Nominal WACC pre-tax

Source: Company data

Generation & Supply:

Generation & Supply	EBITDA EUR bn	Installed Capacity MW	Production GWh	Load factor
Renewables	2.4	32,042	59,301	21%
Onshore		16,890	37,443	25%
Offshore		964	2,211	26%
Hydro		12,864	17,941	16%
Minihydro		306	618	23%
Solar and others		1,018	1,088	12%
Nuclear	2.5	3,177	23,737	85%
Gas Combined Cycle		14,654	59,430	46%
Cogeneration		1,335	8,897	76%
Coal		874	349	5%
Total	**4.9**	**52,082**	**151,714**	**33%**

Source: Company data

Renewables	Spain (60% hydro, 40% wind)	UK (wind)	USA (wind)	Brazil (85% hydro, 15% wind)	Mexico (wind & solar)	RoW (wind & solar)
GWh (Year)	22,191	4,640	17,480	10,674	1,424	2,665
MW	16,526	2,520	7,521	3,546	860	965
Load factor	15%	21%	27%	34%	19%	32%
EBITDA (€ mn)	736	525	591	125	86	323
EBITDA(€)/MW	44,544	208,325	78,619	35,239	99,580	334,713
EBITDA(€)/MWh	33	113	34	12	60	121

Source: Company data

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Offshore wind main projects

Source: Company data

Wikinger (Germany): This project which began operations in end of 2017, in Germany near Rugen island, has a total capacity of 350 MW with 70 turbines of 5 MW manufactured by Siemens Gamesa, with a total investment of EUR 1.4 bn (**EUR 4 mn per MW**).

Baltic Eagle (Germany): This complex will have the capacity for 476 MW and will be located 30 km from the island of Rugen in Germany. Vestas will supply 52 turbines of 9.5 MW for delivery in 2022 and 2023. The Baltic Eagle combined with the Wikinger (350 MW) and Wikinger Sud (10 MW) projects will have a combined investment of EUR 2.5 bn for a total installed capacity of 836 MW (**EUR 3 mn per MW**).

East Anglia One (UK): This project is already operational with an offshore wind capacity of 714 MW, using 102 Siemens Gamesa turbines of 7 MW. The project had an investment of GBP 2.5 bn (GBP 3.5 mn per MW) and started production in 2020. It is owned 60% by Iberdrola as the other 40% were sold to Macquarie Group for GBP 1.63 bn, valuing the project at GBP 4.1 bn (or **GBP 5.74 mn per MW**).

East Anglia Hub (UK): Located in the North Sea (UK), this project will have the installed capacity of 3.1 GW of offshore wind with a total investment of around EUR 7 bn (around **EUR 2.25 mn per MW**). It will start construction in 2022. This project comprises the East Anglia One North (800 MW), East Anglia Two (800 MW) and East Anglia Three (1.2 GW).

Saint-Brieuc Bay (France): This project is set to start in 2023 with a capacity of 496 MW and a total investment of USD 2.4 bn (**USD 4.8 mn per MW**). It will have 62 Siemens Gamesa 8 MW each.

Vineyard Wind 1 (US): Located off the coast of Massachusetts this project will have an offshore wind capacity of 800 MW and comprised an investment of EUR 2.5 bn (**EUR 3.12 mn per MW**). It is scheduled to start operations in 2023. Iberdrola has a 50% stake in this project through Avangrid. The project will have at completion 84 turbines of 9.5 MW each manufactured by Vestas Wind. The company signed already 70% of the PPAs with Massachusetts electricity retailers.

Vineyard Wind 2 (US): Vineyard Wind has presented a proposal to Massachusetts electricity retail companies to develop a second wind farm to be installed to the south of the 1. Proposals include 400 MW project and options to develop further 800 MW.

Park City Wind (US): Project off the coast of Connecticut will start contract negotiations for an 804 MW offshore wind project.

Kitty Hawk (US): Avangrid has the rights to develop an offshore wind farm project in the Kitty Hawk area off the coast of North Carolina with a capacity of up to 1.5 GW.

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Onshore Wind major projects

Source: Company data

Oitis (Brazil): Iberdrola's largest onshore wind project in Latin America is in northeast of Brazil consisting of 12 wind farms with total capacity of 567 MW. Oitis 1 and 8 have already guaranteed the sale of 30% of clean energy generated while Otis 2-7, 9, 10, 21 and 22 will negotiate the sale of electricity production on the market. The commissioning date is mid 2022. According to international press the investment was around EUR 480 mn (**EUR 0.84 mn per MW**).

Paraíba (Brazil): This Brazilian onshore wind complex will be located in northeast of the country with 18 wind farms for a total capacity of 565 MW to be commissioned between 2022 and 2023. The project will have 136 turbines of 3.4 MW and 45 turbines of 2.1 MW. 3 wind farms are already operating (Canoas, Lagoa I and Lagoa II) and the other 15 are at different stages of development. Of these, 12 will comprise an investment of BRL 1.6 bn (around EUR 266 mn) for a capacity of 371 MW (**EUR 0.72 mn per MW**).

Cavar (Spain): Production started in 2020 in this 111 MW wind power complex, with 32 Siemens Gamesa turbines of 3.4 MW.

El Cabo and Amazon US East (US): These 2 projects have a total capacity for 298 MW produced by 149 Gamesa turbines of 2 MW. They started in 2017 with an investment of USD 500 mn (**USD 1.7 mn per MW**).

Other projects in US: Tule in California for 131 MW with 57 GE wind turbines (2.3 MW), Deerfield in Vermont for 30 MW and Twin Butter II for 75 MW.

Port Augusta (Australia): This project is located in Australia and it is hybrid, so will include both wind and solar PV energy generation. The investment reached EUR 310 mn (around **EUR 1 mn per MW**) and it will be commissioned in 2021. The wind farm will have a capacity of 210 MW and solar PV 107 MW.

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Solar Photovoltaic

Source: Company data

Francisco Pizarro (Spain): Project in Spain with capacity for 590 MWp with an investment of more than EUR 300 mn (**EUR 0.5 mn per MWp**). Should start in 2021 in an area of 1300 hectares (0.45 MWp per hectare).

Ceclavín (Spain): In Spain Iberdrola is investing EUR 250 mn to create 328 MW of solar PV installed capacity (**EUR 0.76 mn per MW**). There is already a Power Purchase Agreement (PPA) with telecom operator Orange for 12 years.

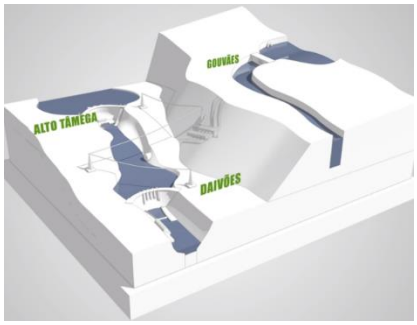
Ciudade Rodrigo and Villarino (Spain): Ciudade Rodrigo will have a capacity for 300 MW with 826,200 solar panels (363 W per solar panel). Villarino will have 50 MW of installed capacity.

Núñez de Balboa (Spain): This project started in 2020 with a maximum grid capacity of 391 MW (500 MWp) and required an investment of EUR 290 mn (**EUR 0.74 mn per MW**). The area of the project is 1000 hectares (0.39 MW per hectare) with 1.4 mn solar panels installed (279 W per solar panel). Iberdrola already signed PPAs with Kutxabank, Euskaltel and Uvesco (supermarkets) to supply them with clean energy form this project.

Santiago (México): With an area of 750 hectares (0.22 MW per hectare), this project has a capacity for 170 MW and its cost was over USD 250 mn (**USD 1.47 mn per MW**). It started in 2018. It generates around 460 GWh per year (load factor 30%).

Lund Hill (US): In US, Iberdrola is investing more than USD 100 mn in a solar PV project with an installed capacity of 150 MW (**EUR 0.66 mn per MW**). The area of the project is around 728 hectares (0.2 MW per hectare). The project should begin generating electricity in 2020.

Hydroelectric Power major projects



Source: Company data

Tâmega Giga Battery (Portugal): This project in Portugal includes 3 dams and 3 power plants (Gouvães, Daivões and Alto Tâmega) with a total capacity of 1,158 MW. The investment surpassed the EUR 1.5 bn (**EUR 1.3 mn per MW**) and should start until 2023. The Alto Tâmega central will have 160 MW of capacity, while Daivões will have 118 MW and Gouvães 880 MW. Gouvães will be a reversible plant, so will be able to pump water to the top when there is excess electricity production in the grid and prices are lower, and later when demand and prices of electricity rise generate hydro energy like a normal dam.

Baixo Iguaçu (Brazil): This project was commissioned in 2018 and has a total capacity of 350 MW. Iberdrola invested USD 575 mn (**USD 1.64 mn per MW**).

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Hydrogen major projects

Puertollano: This hydrogen project will comprise a 100 MW solar photovoltaic plant, a lithium-ion battery with storage capacity of 20 MWh and one electrolytic hydrogen production system of 20 MW, with an investment of EUR 150 mn. The green hydrogen produced will be used by Fertiberia's local ammonia plant.

Source: Company data

Combined Cycle major projects

Nuevo León and Sinaloa (Mexico): These facilities will have the capacity to produce 3,434 MW of electricity from natural gas. The investment was USD 1.65 bn (USD 0.48 mn per MW) and full production should be reached in 2020. Its 4 plants are **Escobedo** (878 MW with a USD 400 mn investment or **USD 0.46 mn per MW**), **El Carmen** (866 MW with a USD 450 mn investment, or **USD 0.52 mn per MW**), **Topoblanco II** (911 MW with investment of USD 400 mn or **USD 0.44 mn per MW**) and **Topoblanco III** (779 MW with investment of USD 400 mn or **USD 0.51 mn per MW**). The energy generated in Escobedo, Topoblanco II and Topoblanco III will be sold through a 25 year contract with Mexican Federal Electricity Commission. El Carmen will sell 150 MW of energy capacity to CFE marketing company, 264 MW to industrial customers and the rest to the wholesale market

Baja California III (Mexico): This combined cycle power station uses natural gas to produce electricity (saving 35% of emissions vs fuel oil plants). It has the capacity to produce 324 MW and required an investment of USD 270 mn (**USD 0.83 mn per MW**). The sale of all energy produced will be for Federal Electricity Commission over the next 25 years.

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Smart Grids

Home; €490; 7.2 kW

Pulsar; €595; 22 kW

Commander; €895; 22 kW

Spain: Iberdrola is developing and implementing a series of tools to enable the consumer to improve its energy use efficiency. In 2018 completed an investment of EUR 2 bn by installing more than 10.8 mn digital meters and provide remote management and automation to 90 thousand transformation centres.

- **Smart Mobility:** Iberdrola installs a charging station for their customers' electric vehicles at their homes, and makes a contract of energy supply of EUR 0.03 kWh (EUR 30 MWh) from 1 am to 7 am with electricity with 0 emissions of CO2. Iberdrola estimates that electric vehicles use on average 0.16 kWh/km so to charge their car for 100 km consumers will spend around EUR 0.50. Iberdrola also offers an app to control the energy use. There are 3 charging stations that customers can choose, and to the cost of the device is added the cost of installation: Home (EUR 490, up to 7.2 kW), Pulsar (EUR 595, up to 22 kW) and Commander (EUR 895, up to 22kW and touch screen). For comparison, Tesla Wall Connector costs USD 500 with 11.5 kW. A Tesla Supercharge station in US charges up to 150 kW for USD 0.29 kWh.

- **Smart Thermostat:** This service allows customers to control their house temperature through an app connected to a thermostat. Iberdrola offers the thermostat (around EUR 150) if the customer signs up for a gas plan of 30 months.

- **Energy Wallet:** Iberdrola is offering consumers the possibility to set the price of energy for up to 2 years, so that they know how much they will pay, independently of how the price moves in the liberalised market. It also enables the customers to use the energy in that wallet for EV charging stations throughout the country. The price is around EUR 48 per kW contracted in a year and EUR 01081 to charge at home from 1 am to 7 am, with a discount sround 15% if the 2 year plan is subscribed.

UK: Iberdrola, through its subsidiary ScottishPower provides also similar services such as:

- **Smart Green EV:** Power stations similar to Spain's Smart Mobility Service.

- **Smart Meters:** Devices that enable customers to know in real time their consumption and spending, giving also the possibility to adjust this consumption in order to save in their energy bill.

- **Power Up:** An application that allows customers to buy electricity upfront on a daily basis or for one, three or six months.

Other regions: In US Iberdrola also has Smart Meters.

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Latest project updates

North Sea wind: East Anglia is an offshore wind project in North Sea. The East Anglia 1 is already generating electricity and will start receiving payments under a Contract for Difference in UK. 60 of the total 102 turbines have been erected and will be fully operational in 2020. The East Anglia 3 project was increased to 1400 MW.

US wind: Montague (201 MW) and Karankwa (307 MW) were completed in 2019. Otter Creek (158 MW) is still in construction. On offshore wind, a final decision on the Vineyard project in Massachusetts is expected in December 2020. Park City Wind project (804 MW) was awarded in the Connecticut auction and expected to become operational in 2025. Kitty Hawk project in coast of North Carolina is expected to be approved in spring of 2020.

Brazil wind: Complex Chafariz will aggregate 15 wind projects onshore for a capacity of 472 MW and expected production in 2022. A further 12 wind projects will be built with a capacity of 566.5 MW in Piauí to be completed in 2H2022.

Overview of industry and regions in 2019

Spain: The total production of energy of the Spanish market increased in combined cycle (+93%), nuclear (+5%), solar (+19%) and wind (+8%) vs 2018, while there were declines in coal (-69%) and hydroelectric (-27%). Electricity demand dropped by 1.7%.

United Kingdom: The electricity demand in 2019 decreased by -1.8% while customer gas demand fell by -3.3%.

US: In the region where Avangrid operates, on East Coast, electricity demand declined by -2.9% while gas demand declined by -1.4%.

Brazil: In the region where Neoenergia operates, demand grew by 4%.

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Historic Performance

EBITDA EUR bn	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Distribution	5.2	4.9	4.2	4.1	3.6	3.5	3.3	3.8	3.8	3.5	2.7
Spain	1.7	1.7	1.5	1.6	1.5	1.4	1.5	1.3	1.6	1.4	1.1
UK	1.0	0.9	0.9	1.0	1.1	1.0	0.9	0.9	0.8	0.8	0.7
US	1.3	1.3	1.3	1.3	0.8	0.8	0.7	0.7	0.5	0.7	0.5
Brazil	1.2	1.0	0.5	0.2	0.3	0.3	0.2	0.8	0.9	0.6	0.5
Renewables	2.4	2.4	1.8	1.5	1.6	1.3	1.5	1.6	1.4	1.5	1.3
Generation & Supply	2.5	2.0	1.5	2.3	2.3	2.3	2.0	2.4	2.3	2.4	2.5
Total EBITDA	**10.1**	**9.4**	**7.4**	**7.8**	**7.6**	**7.2**	**6.8**	**7.7**	**7.5**	**7.4**	**6.5**
Net income	3.4	3.0	2.8	2.7	2.4	2.3	2.6	2.8	2.8	2.9	2.8
Net Debt	37.8	34.2	32.9	29.4	28.1	25.6	26.8	30.3	31.7	29.5	28.5
Funds from operations	8.1	7.3	6.5	6.3	5.9	5.5	5.6	6.2	6.0	5.5	4.9
Capex	8.2	6.2	6.6	5.0	3.8	2.8	3.1	3.3	4.0	5.1	4.1
Installed Capacity (MW)	52,082	46,694	48,447	47,049	46,361	45,089	44,992	46,950	46,918	45,454	45,030
Net Output (GWh)	151,714	145,605	137,549	142,466	134,374	138,892	136,435	139,932	151,050	158,858	146,250
Net Debt / EBITDA	3.8	3.6	4.4	3.8	3.7	3.6	3.9	3.9	4.2	4.0	4.4
EBITDA Generation & renewables (€) / MWh	32	31	23	26	30	26	26	28	24	25	26

2010 improvement in Spain Distribution: Adjustment in remuneration for distribution in Spain.

2012 decrease in Spain Distribution: impact from new regulation that reduced profits in this segment by EUR 233 mn.

2013-2016 decrease in Brazil Distribution: Depreciation of BRL -14%, drought which increased the energy costs and tariff revisions.

2013 decrease in Generation & Supply: Hydro production increased due to higher rainfall but gas, coal and nuclear production fell in Spain. No free allocation of CO2 allowances. Levies doubled in Spain in 2013 due to 7% tax on energy produced (EUR 177mn), 22% levy on hydroelectric production (EUR 128 mn) and tax on nuclear production (EUR 108 mn).

2013 decrease in net debt: due to divestments (EUR 745 mn) and funds received from securitisations of tariff deficits (EUR 2.8 bn).

2013 decrease in Installed Capacity: UK -1GW of coal capacity and entry of IFRS11 in 2014 which led Iberdrola to restate 2013 accounts (-1 GW): IFRS 11 where JV are not accounted for the proportionate consolidation method but by equity method, resulting in the deconsolidation of Neoenergia.

2014 decrease in Spain Generation and Renewables: Application of new regulations in Spain with cut on Distribution remuneration (EUR -112 mn), reduction of incentive to invest on liberalised business (EUR -70 mn), financing of the rates subsidy by companies (EUR -66 mn) and negative impact in renewables (EUR -339 mn) and cogeneration (EUR -30 mn).

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2014 increase in Brazil: In Brazil an addendum was signed to the concession contracts guaranteeing that at the end of the concession period the remaining balance of tariff assets/liabilities will be regularised, so accounting allows the records of these tariff assets/liabilities to be posted into the accounts, so no impact was recorded in 2014 due to droughts.

2015 increase in net debt: Merger of Iberdrola USA and US company UIL and subsequently creation of Avangrid which added the incremental debt of UIL of EUR 2.4 bn.

2016 increase in US Distribution: Consolidation of UIL business into Avangrid.

2017 decrease in Generation & Supply: Fall in Spain due to production mix (higher thermal and lower hydro), fall in UK due to depreciation of Pound, closure of Longannet, higher provision costs, higher renewable certificates costs and lower gas sales.

2017 increase in Renewables: Higher wind output in UK and consolidation of Neoenergia in Latin America.

2017 increase in Net Debt: Consolidation of Neoenergia (EUR 2.8 bn of net debt).

2018 increase in Renewables: Better wind globally and full capacity operations in Wikinger project and higher hydroelectric production in Spain.

2018 increase in Net Debt: due to higher investments.

2019 increase in Installed Capacity: Onshore wind +1.2 GW, offshore wind +0.4 GW, hydro +0.6 GW and solar and others +0.5 GW. Gas combined cycle +1 GW.

2019 increase in Net Debt: IFRS 16 (+1.6 bn) and higher investments.

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Investments and disposals

Purchase of Infigen: Infigen is an Australian renewables company with 670 MW of owned renewables and 1GW in pipeline, combined with 268 MW of highly value firming assets and 256 MW of contracted renewables capacity. More than 75% of the sales from operational assets are under long term contracts. The value of around USD 500 mn offer, values the company at a ratio of USD 0.74 mn per MW of owned renewables. Iberdrola had invested earlier in a renewable hybrid project in Australia of 320 MW capacity (210 MW wind and 110 MW solar PV) for EUR 310 mn. In June of 2020 Iberdrola announced an agreement with the largest shareholders of Infigen to acquire this company for AUD 0,86 per share or AUD 840 mn (USD 518 mn) of equity value, in cash. Later increased the offer to AUD 0,92 per share in order to counter a competing offer by UAC. Iberdrola managed to get a controlling stake and will consolidate the company. UAC then affirmed that their offer was not to secure control but to secure a material stake, and that now the objective was accomplished after securing a 20% stake. UAC later sold the 20% stake to Iberdrola.

Acquisition majority stake in offshore wind in Sweden: In mid 2020 Iberdrola announced the acquisition of up to 8 projects in various stages of development with expecting start from 2029 onwards. In the area of Gavle there are 6 projects with an expected capacity of 5.1 GW and in Oxelosund 2 projects with exp. Capacity of 3.9 GW.

Acquisition of French Saint Brieuc offshore wind farm: On March 2020, Iberdola acquired Saint Brieuc for EUR 2.5 bn (EUR 5 mn per MW), which has a wind farm with a capacity of 496 MW with construction to begin in 2021 and operation to start in 2023. This project will have 63 Siemens Gamesa turbines with 8MW of unit power and total height of 207 meters.

Acquisition of Aalto Power: This acquisition with a price around EUR 100 mn bought to Iberdrola a wind farm capacity in France of 118 MW (around EUR 1 mn per MW), and further 636 MW of projects in different stages of development. Announced in May 2020.

Acquisition 2 wind projects in Scotland: On May 2020 Iberdrola announced the acquisition of 2 onshore wind projects with a total capacity of 165 MW with an investment of EUR 190 mn (EUR 1.15 mn per MW).

Failed acquisition of Eletropaulo: In 2017/18, Iberdrola and Enel were disputing the purchase of Eletropaulo, a distribution company in Brazil. Enel ended up paying the highest price and acquired Eletropaulo for USD 1.5 bn. Eletropaulo had sold in 2017 43 TWh of energy and had 7.2 mn customers with an EBITDA of USD 400 mn (7% margin). EBITDA/ MWh was USD 6.86 and Enel and Iberdrola wanted to increase efficiency of the network in order to gain more EBITDA per MWh in Eletropaulo's business.

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Disposals:

- **Siemens Gamesa stake:** Iberdrola sold in January of 2020 the stake in Siemens Gamesa for EUR 1 bn with a gain of EUR 485 mn.
- **Lyntia agreement for fibre optics:** a contract was signed in 2019 for the right to use the surplus capacity of the fibre-optic network of Iberdrola in Spain by Lyntia for EUR 260 mn.
- **LNG sold to Pavilion:** Pavilion Energy Trading & Supply agreed in 2019 to pay EUR 115 mn for LNG supply, sea freight and gas infrastructure usage contracts.
- **Wind farm sale to Macquarie:** Iberdrola sold a 40% stake in East Anglia One offshore wind farm that the company is building in North Sea. When the wind farm begins production in 2020 Iberdrola will have received GBP 1.6 bn for the stake sold.

Risks

Electricity prices: Preferably, Iberdrola sells the generated electricity through a regulated tariff or fixed price PPAs. The remaining is sold to the wholesale and retail market at variable prices, that depend on demand and supply.

Renewables production: A decrease of production in hydro (due to droughts), wind or solar due to lack of favourable climate conditions will have a direct impact in EBITDA.

Regulatory Changes: Regulated activities are subject to sudden changes by the government or regulatory entities which may be detrimental for the return of Iberdrola's investments. For example in 2013, Spain unveiled an energy reform which changed the way renewable producers were compensated for their investments to limit the government's growing debt to this sector. At that time the Spanish tariff deficit reached EUR 28 bn and these new rules aimed to save around EUR 600 to 800 mn per year in regulated charges. To incentivise investments in renewables the government conceded higher premiums to energy produced from these sources which in 2007 reached USD 556 per MWh for electricity that rooftop solar panels supplied to electric grid vs average of USD 52/MWh paid to competing coal or gas fired power plants.

Lower remuneration schemes in renewable energies: Wind energy has greatly improved in the past years and is currently almost as an efficient energy source as conventional sources. This has led to a high increase of wind installed capacity and incentives (fixed or floor priced contracts) for its development have begun decreasing and in some cases, countries have gone forward with auctions where there are no incentives and the wind farm is subject to market prices.

Foreign Exchanges: Iberdrola limits this risk through natural hedges and by using financing in local currency. Still a 5% increase in EUR has an impact of more than EUR 50 mn a year in financial costs.

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Comparative Analysis

Iberdrola trades with a EV/EBITDA multiple of 11.3x vs sector average of 9x, however it is clear the premium the market attributes to companies fully exposed to renewables (specially offshore wind, an area that Iberdrola has been developing) such as Orsted which has a EV/EBITDA of 18.8x. Comparing to the other peers, Iberdrola is one of the companies with the highest exposure to renewables and lowest exposure to coal as we can see in the pie charts below:

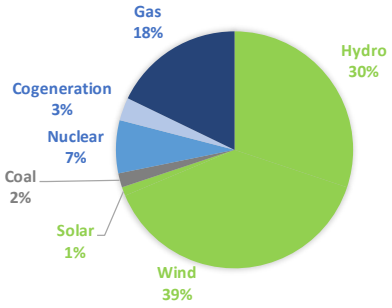
Name	Country	Cap. Bolsista	Moeda	P/E 2020E	EV/EBITDA	Div. Yield	YTD (%)	ROE	Net Debt to EBITDA	EBITDA Margin
ENDESA SA	SPAIN	24,828	EUR	14.4	6.9	6%	-1%	6%	1.4	22%
ENGIE	FRANCE	28,456	EUR	15.6	9.0	n.a.	-19%	-3%	4.0	11%
EDP-ENERGIAS DE PORTUGAL SA	PORTUGAL	17,606	EUR	19.6	8.6	4%	15%	6%	4.0	26%
RWE AG	GERMANY	22,694	EUR	20.9	5.9	2%	23%	73%	0.2	27%
EDF	FRANCE	27,939	EUR	19.3	4.6	n.a.	-9%	3%	2.5	24%
ORSTED A/S	DENMARK	374,728	DKK	54.3	18.8	1%	29%	7%	1.1	30%
ENEL SPA	ITALY	77,978	EUR	15.2	9.1	4%	8%	6%	3.4	22%
IBERDROLA SA	SPAIN	68,136	EUR	19.1	11.3	4%	17%	10%	3.9	30%
Average exc. Iberdrola				22.8	9.0	4%	7%	14%	2.4	23%

Source: BiG Research

Companies exposure to renewables (in green colour):

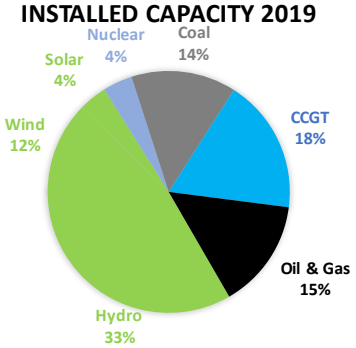
Iberdrola:

INSTALLED CAPACITY 2019



Enel:

INSTALLED CAPACITY 2019



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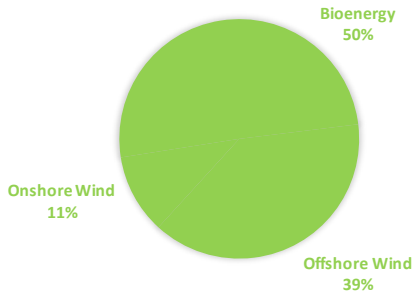
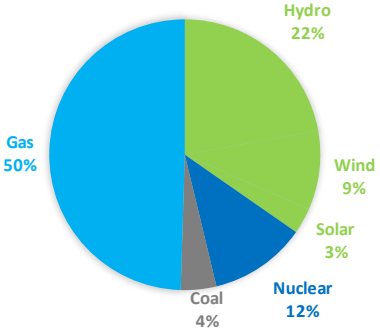


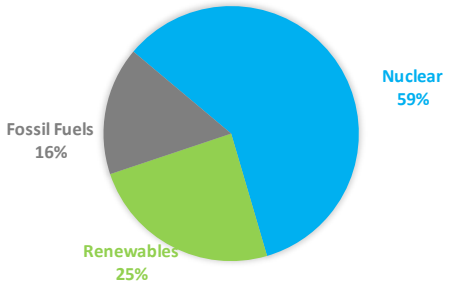
Engie:

INSTALLED CAPACITY 2019



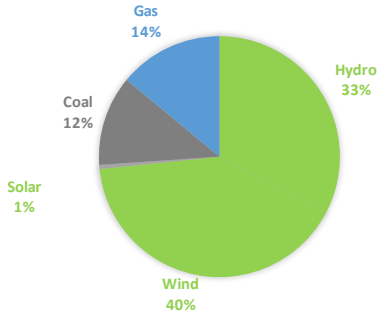
EDF:

INSTALLED CAPACITY 2019



EDP:

INSTALLED CAPACITY 2019



Source: Companies' data

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Annexes

IBERDROLA IN SPAIN

Largest electric company

Installed Capacity (MW)	26,624
Renewable Capacity (MW)	16,526
Production (GWh)	58,560
Distributed Energy (GWh)	93,516
Consumers (M)(1)	11,1
Km of lines	270,258

(1) Total number of electricity and gas customers

Wind farms · Hydroelectric plants · Photovoltaic plants · Combined cycle gas plants · Cogeneration plants · Nuclear plants · Thermal plants · Projects under construction · Principal Offices · Electricity Distribution · Area of influence

Data as of December 2019

IBERDROLA IN UK

100% renewable electricity. Electricity and gas supply.
Transmission and distribution networks in Scotland, Wales and England

Installed Capacity (MW)	2,520
Renewable Capacity (MW)	2,520
Production (GWh)	4,640
Distributed Energy (GWh)	33,670
Consumers (M)(1)	4.7
Km of lines	110,083

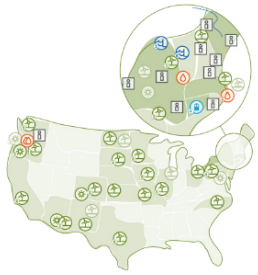
(1) Total number of electricity and gas customers

Wind farms · Offshore wind farm · Underwater power line · Projects under construction · Principal Offices · Electricity Distribution · Area of influence

Data as of December 2019

IBERDROLA IN US: AVANGRID(1)

83% of production from renewables
Electricity and gas distributor in New York, Maine, Connecticut and Massachusetts



Installed Capacity (MW)	8,361
Renewable Capacity (MW)	7,521
Production (GWh)	20,960
Distributed Electricity (GWh)	38,441
Distributed Gas (GWh)	64,234
Consumers (M)(2)	3.3
Km of lines	170,755
Presence in 24 States	

(2) Total number of electricity and gas supply points

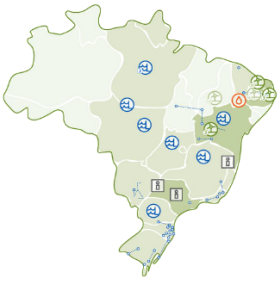
Wind farms · Hydroelectric plants · Photovoltaic plants · Combined cycle gas plants · Cogeneration plants · Batteries · Projects under construction · Principal Offices · Electricity Distribution · Area of influence

(1) Avangrid: 81.5% owned by Iberdrola

Data as of December 2019

IBERDROLA IN BRAZIL: NEOENERGIA(1)

Energy leader in Brazil and Latin America



Installed Capacity (MW)	4,079
Renewable Capacity (MW)	3,546
Production (GWh)	14,007
Distributed Energy (GWh)	67,875
Consumers (M)(2)	14.1
Km of lines	640,417
Presence in 18 States	

(2) Total number of electricity supply points

Wind farms · Hydroelectric plants · Combined cycle gas plants · Projects under construction · Principal Offices · Electricity Distribution · Area of influence

(1) Neoenergia: 51.04% owned by Iberdrola

Data as of December 2019

IBERDROLA IN MEXICO

Second-largest electricity producer

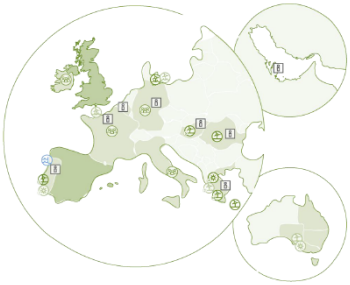
Owned Installed Capacity (MW)	3,152
Third-party Installed Capacity (MW)	6,380
Owned Renewable Capacity (MW)	860
Third-party Renewable Capacity (MW)	103
Owned Production (GWh)	13,198
Third-party Production (GWh)	37,684
Presence in 13 States	

Wind farms · Wind farms for third parties · Photovoltaic plants · Combined cycle gas plants · Combined cycle gas plants for third parties · Cogeneration plants · Principal Offices · Area of influence · Areas with projects under construction

Data as of December 2019

IBERDROLA ENERGÍA INTERNACIONAL (1)

100% Renewable Energy in the rest of the world



Renewable Capacity (MW)	965
1 Offshore wind farm (MW)	350
28 onshore wind farms (MW)	609
4 solar PV plants (MW)	6
Production (GWh)	2,665
Consumers (M)(2)	0.8

(2) Total number of electricity and gas customers

Wind farms · Offshore wind farm · Photovoltaic plants · Projects under construction · Principal Offices · Area of influence · Areas with supply business presence

(1) Formerly Rest of the World

Data as of December 2019

Source: Company data

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Graph

Source: BiGlobalTrade; BiG Research

Upcoming Events

October 21st: Earnings 3Q2020
November 5th: Capital Markets day

Glossary

GW: Gigawatts = 1 000 megawatts
Hectare = 10,000 square meters
KW: kilowatt = 1 000 watts
LNG: Liquefied Natural Gas
Load Factor: efficiency of energy produced, or ratio between energy produced to the capacity
MW: Megawatts = 1 000 kilowatts
MW to MWh: MWh = MW * hours in a year *load factor
MWp: Megawatts at peak. Measure used in solar PV, which demonstrates the highest power production possible when conditions are favourable. This peak may not translate into a real capacity power to the grid as usually solar PV generation uses a smaller inverter to convert from DC to AC, to save money and only wastes excess energy for a few hours a year (when the conditions are perfect).
PPA: Power Purchase Agreement
PV: Photovoltaic
Solar PV (solar photovoltaic): It is the generation of electricity through photovoltaic solar panels.
TW: Terawatt = 1 000 gigawatts
W: Watt

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  - Buy, expected absolute return above 15%;
  - Accumulate, expected absolute return between +5% and +15%;
  - Hold/Neutral, expected absolute return between -5% and +5%;
  - Reduce, expected absolute return between -5% and -15%;
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