

A Work Project, presented as part of the requirements for the Award of the Master Degree in Finance from the NOVA – School of Business and Economics.

A landmark for a green economy: towards a carbon-neutral world

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## Abstract

Iberdrola S.A. is a utility company based in Spain and, with its current market capitalization of 74 billion €, by revenue it is the 7th energy company in the world. The analysis of each business segment (Networks, Renewables and Generation & Supply), together with the Discounted Cash Flow Model, provide interesting point of views regarding the solidity and the possibility of future sustainable growth by the Hispanic company.

## Keywords (up to four)

Energy  
Valuation  
Sustainability  
Iberdrola

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This report is an individual part of the Iberdrola equity research by Luca Pisciarelli and Francesco Marchetti and should be read as an integral part of it.

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### 3. Valuation

In order to value Iberdrola and to achieve a target price, we have developed a Discounted Cash Flow Model. We have used as terminal value  $g$  (2%) in order to account for future growth of the company, considering long-term inflation of Spain and of the EU area more in general. We believe that, after the massive investment plan carried out by Iberdrola, cash flows will be able to stabilize and, being the utility sector rather stable, a 2% growth may be consistent with our analysis. Finally, the resulting share price from the DCF model is 11.99 € per share. This price leads us to recommend a HOLD position on the stock, that is also confirmed by the Peers Valuation presented in the 3.7 Paragraph.

The Discounted Cash Flow Model forecasted period lasts 6 years and goes from 2021 to 2026. After the completion of the investment plan in 2025, we believe that by 2026 the company cash flows will be stabilized and able to sustain a constant perpetual growth in the following years. We have decided to estimate Revenues and Gross Margins at each business unit level, calculated in Euro, which is the currency used in the location of Iberdrola headquarter (Spain). Afterwards, we have estimated other operating costs and CAPEX at corporate level. Subtracting the sum of Net Personal Expenses, Net External Services and Taxes (other than Income Tax) to the overall Gross Margin, we have calculated the future EBITDA to which we have deducted the depreciation and amortization, calculated on future estimates of PPE and Intangible Assets, in order to retrieve the corporate EBIT. From EBIT we have derived the NOPLAT (using an assumed tax rate of 25%) which is the starting line of free cash flow computations, used in the model. In the following paragraphs we have deepened the analysis of the calculations of the most important captions.

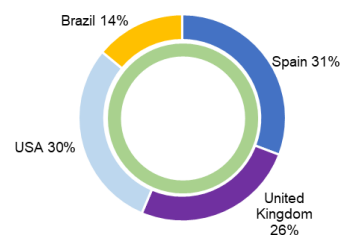
#### 3.1 Networks

Network is the most important business of the company because it accounts for almost 50% of the Total Gross Margin and for the 48% of the Total EBITDA. In 2020 Iberdrola distributed 224,998 GWh of electricity and 59,134 GWh of Natural Gas across Spain, United Kingdom, United States and Brazil. Across these countries, Iberdrola can count on 1,206,783 km of power lines that can use in order to provide the best service to its own customers. EDP in 2020 realized an EBITDA of 0.9 billion € from its networks segment (and a total EBITDA of 3,9 billion €), and Enel presented an EBITDA of 7.4 billion € from Networks (considering a total EBITDA of 16.8 billion € for 2020). In the first case, for EDP the EBITDA Network accounted for the 24 % of the Total EBITDA, whereas in the second case, for Enel it accounted for the 44%.

With 31.1 billion € of Regulated Asset Base in 2020, Iberdrola intends to achieve a final sum of € 47 billion by 2025 divided by geography as follows: 40% United States, 20% United Kingdom, 23% Spain, 17% Brazil. As of 2020, RAB is distributed for 31% in Spain, 26% in United Kingdom, 30% in USA and 14% in Brazil. As it is possible to notice, the biggest increase in RAB will be dedicated to the United States and to Brazil with, respectively, an increase of 95% and 84%.

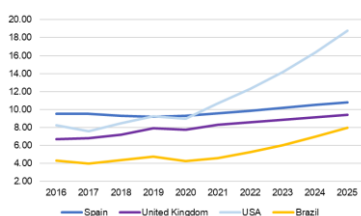
As it was said before, the network business is mainly based on regulations by government of each country that determines the remuneration that belongs to every player in the market. This remuneration can be calculated upon the sum of the investments made by a company

Figure 21: RAB per country in %, 2020 estimate



Source: Company data

Figure 22: RAB per country in billion €, from 2016 to 2025



Source: Company data and analyst estimate

and the final resulting value is a percentage. Starting from this result, we can fundamentally retrieve the EBIT for each country, which is practically determined by each legislator.

Taking into consideration Spain, the organization in charge of the regulation and supervision of the energy sector is Comisión Nacional de los Mercados y de la Competencia (CNMC). In Spain, Iberdrola manages 270,129 km of power lines and has distributed almost 88,390 GWh to its clients in 2020.

The decree that coordinates the energy market and more specifically the network segment is built on the Electricity Industry Law 24/2013 of 26 December 2013, as further developed by various royal decrees and ministry orders. As it was specified before, the regulatory model is based on recognised historical investment, remunerating capital for depreciation and certain operation and maintenance costs. In addition, every year the Regulated Asset Base is expanded to include the recognised investments made during the period. Quality incentives and losses (technical and commercial) are added to this.

On 20 November 2019, the fixed remuneration rate applicable in the upcoming six-year regulatory period 2020-2025 was set and published in the Official Spanish State Gazette (Boletín Oficial del Estado – BOE) (Pre-Tax WACC 5.58%). On 19 December 2019 the applicable methodology was established and published in the BOE. Before that date, the remuneration was linked to the 10 Year-Treasury Bond.

Since the remuneration percentage has been established by the legislator until 2025, we have calculated the return on the Regulated Asset Base (RAB) keeping that percentage fixed all over the years of forecasting period. Thus, the main value driver for revenue forecast has been the RAB throughout the years. We have started our valuation from the projections of the Regulated Asset Base made by the company and increased these estimates by the investments announced in the strategic outlook 2020-2025. Given the previously mentioned importance of the Network segment for Iberdrola, we believe that these investment estimates can be considered realistic and we have taken into consideration these data into our analysis. In order to maintain fixed the financial rate of return decided by the regulator, we have calculated the EBIT from the RAB and then retrieved the revenues and gross margins, necessary for our valuation purposes.

As it was declared in the strategic outlook 2020-2025, the company is going to expand the network business in Spain, from 9.3 billion € in 2020 to 10.81 billion € in 2025 of the Regulated Asset Base dedicated to the country in five years' time.

In the United Kingdom Iberdrola operates through its subsidiary ScottishPower Ltd, which manages the systems called SP Distribution (SPD), SP Manweb (SPM) and SP Transmission (SPT). Across the country the company owns 110,264 km of power lines and in 2020 has distributed 31,738 GWh of electricity.

The regulator of the English market is called Office of Gas and Electricity Markets (OFGEM) and the framework of remuneration for electricity transmission and distribution activities follows a model on price control, based on the recognised cost of capital, the depreciation of assets, and operating and maintenance costs. The regulators do not establish the Pre-tax WACC like in Spain, but a predetermined return on equity (ROE) that has similar feature of the previous measure.

The actual regulations for SPD and SPM are inspired by the RIIO ED1 framework and for SPT by the RIIO T1 framework. The last regulatory revision for electricity distributors is valid from April 2015 to April 2023. After those years, we believe that the financial rate of return will be maintained similar for both RIIO ED1 and RIIO T1 to the previous 8 years period. Recognised ROE after tax (in real terms) is 6% for SPD and SPM and 7% for SPT. We have used a similar approach as for Spain in order to retrieve revenue and gross margin.

Between 2020 and 2025, the company has planned in its strategy to expand the network business in UK, from 8.07 billion € in 2020 to 9.40 billion € in 2025 of the Regulated Asset Base.

The third country in which Iberdrola network's presence is strong is the United States of America, where the company operates through its listed subsidiary Avangrid. Totally the company manages 170,821 km of power lines and has distributed 38,012 GWh of electricity and 59,134 GWh of natural gas in 2020.

The network business framework in the USA is different from the one in Spain and more similar to UK approach. One big difference from the previous two countries is that the business is more dispersed, since Avangrid can count on several subsidiaries that operates in different American states. Firstly, the two companies based in New York called New York State Electric & Gas (NYSEG), with a 3-year contract starting from April 2020 (base ROE after tax of 9% for electricity distribution) and Rochester Gas and Electric (RG&E), with a 3-year contract from April 2020 (base ROE of 9%). Then another important player is Central Maine Power (CMP), in Maine, whose annual rates are in force since 1 July 2014. In February 2020, MPUC (Maine Public Utilities Commission) made public CMP's new remuneration framework, with an ROE of 9.25% and an effective period running from 1 March 2020 through to 28 February 2021. This announcement extends the same regulation that has been in force in Maine for the last six years for its electricity distribution business (base ROE of 9.25%) and transmission business (base ROE of 10.57%) and afterwards we believe that, looking at historical data from 2014, the remuneration rate will not be subjected to major revision. Similar to the CMP is the company called United Illuminating (UI), from Connecticut, with rates in force since 1 January 2017, for its electricity distribution business (base ROE of 9.1%) and transmission business (base ROE of 10.57%). The ROE calculation method for the transmission business is being revised by the regulator called FERC, but we believe that it will be maintained fixed in the following years, achieving a very similar return of Regulated Asset Base. Finally, Avangrid controls also these minor distribution companies: Maine Natural Gas Corporation (MNG), Connecticut Natural Gas (CNG), Southern Connecticut Gas (SCG) and Berkshire Gas (BG). Their ROE values range from 9.25% to 9.70%, in line with the other remuneration standards.

In addition, it is important to remark that the regulators' schemes have been designed with the objective of reducing the risk to which Iberdrola is exposed with tools for reconciliation, deferral and costs provisions. As a regulated distributor, Iberdrola passes on the gas and electricity costs to its final clients, therefore containing any influence by fluctuations in demand.

As it was declared in the strategic outlook 2020-2025, the company is going to expand the network business in USA, from € 9.26 billion in 2020 to € 18.90 billion in 2025 of the Regulated Asset Base in the country in five years.

Taking into consideration the above-mentioned data, we have followed the similar previous approach in order to calculate EBIT and then revenues and gross margins.

In Brazil, Iberdrola operates through another subsidiary called Neoenergia, which owns 655,569 km of power lines and has transmitted 66,857 GWh of electricity in 2020. Similar to the United States, Neoenergia operates through other several subsidiary network companies. The most important are Elektro Redes, S.A. (ELEKTRO), operating in the states of São Paulo and Mato Grosso do Sul, with Pre-tax WACC of 8.09%; in force until August 2023; Companhia de Eletricidade do Estado do Bahia (Coelba), operating in the state of Bahia, with Pre-tax WACC of 8.09% in force until April 2023; Companhia Energetica de Pernambuco S.A. (Celpe), operating in the state of Pernambuco, with Pre-tax WACC of 8.09% in force until April 2023; Companhia Energética do Rio Grande do Norte (Cosern), operating in the state of Rio Grande do Norte, with Pre-tax WACC of 8.09% in force until April 2023.

The Brazilian energy regulation is composed by a collection of price caps that is updated every four or five years, according to each company's concession contract, with tariffs being revised annually by the legislator based on predetermined parameters. Since the operating Pre-tax WACC have been stable over the years in different Brazilian regions, we believe that the analysis of the legislator will remain similar in the following years.

Similar to the United States, the Agência Nacional de Energia Elétrica (ANEEL) has established that electricity distribution companies can transfer the cost of electricity supply to final customers, thanks to regulated tariffs.

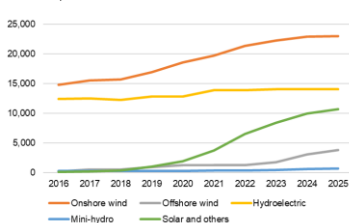
Following the outlook between 2020 and 2025, the company is going to expand the network business in Brazil, from € 3.98 billion in 2020 to € 7.99 billion in 2025 of the Regulated Asset Base in the country in five years. Again, we have used the same forecasting approach of other geographies, starting from the projection of RAB in Brazil and then retrieved the EBIT, revenues and gross margin.

On a global perspective, we can observe that the network business will remain the main source of income in the following years. To sum up our valuation on the Network segment, is possible to notice that the United States and Brazil geographies segments present higher margins of profitability, if compared respectively to United Kingdom and Spain (higher ROE and WACC on average). This vision is also confirmed by Iberdrola strategic decision, since, as it was stated before, the company has decided to invest the majority of resources allocated to the network segment in USA and Brazil.

## 3.2 Renewables

The renewables segment is the one that enjoyed the most stunning increase in the previous years, almost doubling its revenues between 2016 and 2020. This growth is also reflecting the outstanding popularity of a sector that is becoming fundamental not only for a utility company, but for the entire energy market. Regarding the before mentioned intention of becoming carbon-neutral by 2050, Iberdrola believes that this business line will be decisive for the company and has decided to dedicate more than 50% of its investment plan, focusing both on consolidating its position in the existing geographies and expanding its presence also in other favourable countries.

Figure 23: Total installed capacity in MW, from 2016 to 2025.



Source: Company data and analyst estimate



In 2020, Iberdrola had an overall installed capacity of 34,917 MW which is divided between 4 different renewables sources: 19,833 MW of electricity from wind power plants (18,575 On-shore and 1,258 Off-shore), 12,864 MW from hydroelectric plants, 303 MW from mini-hydro power plants, 1,922 from solar plants and other minor sources of solar energy. On the electricity production side, the company's electricity output was 68,064 GWh which can be divided again in 43,782 GWh from wind sources, 22,034 GWh from hydroelectric, 382 GWh from mini-hydro plants and 1,567 GWh from solar sources. As we can see, for Iberdrola the main renewable source of energy is wind.

An important measure of efficiency in renewable sector is named load factor, which can be considered as a ratio of "efficiency" and can be calculated dividing the actual kilowatt-hours used in a given period, by the total possible kilowatt-hours that could have been used in the same period. It depends on natural resources (e.g. the intensity of wind), but also on the plants' availability and on the energy transport networks.

Figure 25: Historical Load factor for renewable energy source

	Total Load Factors				
	2016	2017	2018	2019	2020
Onshore wind	24.77%	24.90%	26.66%	25.31%	24.22%
Offshore wind	42.84%	17.21%	34.46%	26.18%	39.75%
Hydroelectric	20.84%	13.98%	20.89%	15.92%	19.55%
Mini-hydro	25.93%	14.84%	25.24%	23.05%	25.69%
Solar and others	25.68%	17.44%	11.87%	12.19%	9.31%

Source: Company data and analyst estimate

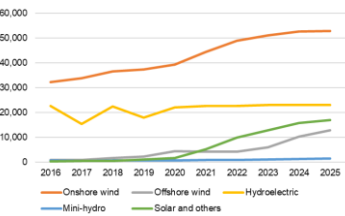
According to our valuation methodology, we have calculated individually the revenues and gross margins from the renewable segment for each geography in which Iberdrola operates. The main value drivers were the future installed capacity and load factors, which we have assumed to be equal to their historical average for each renewable source of energy. With these two values we have calculated with the inverse formula of the load factor the future electricity output for every country and renewable source. Finally, we have computed the respective future revenues multiplying the average historical selling price of each country by the electricity output.

In order to calculate the final Gross Margins for valuation purposes, we have maintained the gross profit margin average % of past years, since the renewable sector presents very low and stable variable costs.

More in detail, in Spain, Iberdrola accounts for an installed capacity of renewable energy of 6,292 MW of wind power, 9,715 MW of hydroelectric power, 303 MW of mini-hydro power and 1,100 MW of photovoltaic power.

For what concerns profitability standards and legislative framework, during the years several decrees followed in order to regulate this sector. For instance, the wind and mini-hydro capacity installed before 2013 had a specific remuneration regime in accordance with Law 24/2013 and Royal Decree 413/2014. This regime, taking into account market income and a supplement per MW, secured a certain level of reasonable profitability before taxes to the plants, equal to 7.398%. In addition, at the end of 2019, RDL 17/2019 came into force, expanding the period for the value of reasonable profitability until 2031.

Figure 24: Total electricity production in MW, from 2016 to 2025.

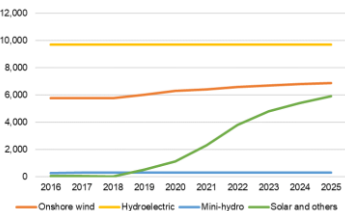


Source: Company data and analyst estimate

Figure 26: Load Factor Formula

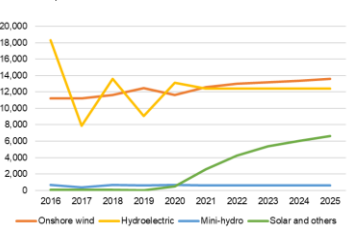
$$\frac{\text{kWh}}{\text{kW} \times \text{Days} \times 24} = \text{LF}$$

Figure 27: Spain installed capacity in MW, from 2016 to 2025.



Source: Company data and analyst estimate

Figure 28: Spain electricity production in GWh, from 2016 to 2025.



Source: Company data and analyst estimate

Furthermore, distinct remuneration parameters (such as estimates of prices and past prices, too) for future years for plants are reassessed in observance of RD 413/2014 at the end of each regulatory half-period of three years. This process of review is computed taking into account if the pre-decided limits (bands) have been passed during last three years, and the existing facilities divided according to several factors such as commissioning year and size, standard investment values, peak factor, useful regulatory life, operating and maintenances expenses and hours were attributed to those plants.

Lastly, for renewable plants commissioned after 2013, in order to have the access to the remuneration regime above mentioned, the company had to compete in bids (took place in 2016 and 2017), otherwise it only received the market income (or Power Purchase Agreements).

According to our estimates and company's strategy outlook, Spain will produce circa 33,000 GWh of electricity from renewable sources thanks to a future installed capacity of 22,810 MW.

In United Kingdom, in 2020, Iberdrola had a total of 2,858 MW from wind power installed capacity, taking into account also its participation of 50% in the wind parks of West of Duddon Sands (389 MW) and the East Anglia (714 MW). Even if it is almost negligible, Iberdrola can also dispose of 6 MW from installed solar capacity in the country.

For what concerns regulatory framework in UK, regulators establish minimum Renewable Obligation Certificate (ROC) requirements per MWh sold to electricity suppliers and ultimately fix the price at which the remaining part must be acquired. This process finally results to a price threshold which is the final price of the ROCs.

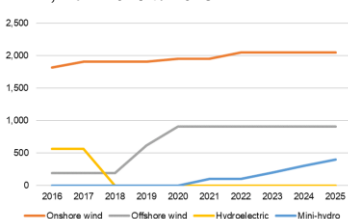
Moreover, it is important to underline that renewable plants established after 1 April 2017 may take advantage of the "Contract for Difference" (CfD) remuneration scheme, which basically cancels market risk for 15 years. The fixed prices for these projects under the CfD scheme are decided singularly according to the nature of the specific project through public tenders. The counterparty, called "The Low Carbon Contracts Company", basically acts as guarantor of these prices and it is responsible for funding its potential payments by imposing a levy on suppliers according to their market share, therefore credit risk in relation to this counterparty is basically zero.

Following our estimates and company's strategy outlook, the firm will reach circa 7,490 GWh of electricity produced from renewable sources, thanks to a future installed capacity of 3,364 MW in 2025.

Same as the network business, in the USA, Iberdrola operates through Avangrid, which manages an installed capacity of 7,721 MW in wind farms and 143 MW in solar plants and lastly 118 MW of hydroelectric plants.

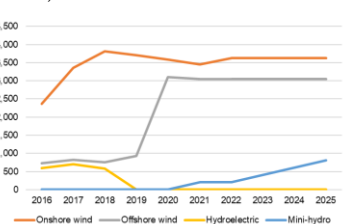
It is important to highlight that almost 68% of the energy produced is sold through fixed-price long-term contracts. Moreover, if the hedges are taken into account, the share of energy sold at fixed price rises to 82%. Therefore, only the remaining 18% of the energy produced is sold at market conditions quite rapidly. This framework guarantees a high degree of predictability and stability in revenues.

Figure 29: UK installed capacity in MW, from 2016 to 2025.



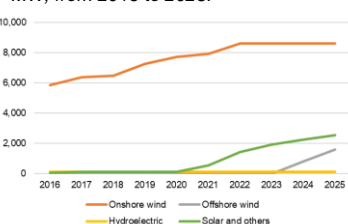
Source: Company data and analyst estimate

Figure 30: UK electricity production in GWh, from 2016 to 2025.



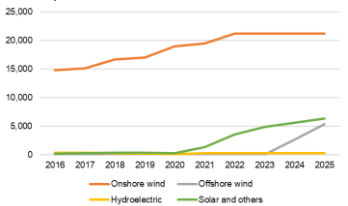
Source: Company data and analyst estimate

Figure 31: USA installed capacity in MW, from 2016 to 2025.



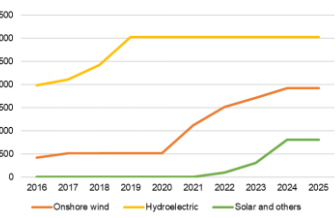
Source: Company data and analyst estimate

Figure 32: USA electricity production in GWh, from 2016 to 2025.



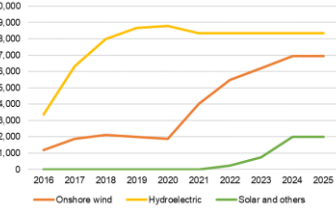
Source: Company data and analyst estimate

Figure 33: Brazil installed capacity in MW, from 2016 to 2025.



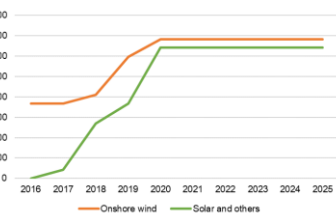
Source: Company data and analyst estimate

Figure 34: Brazil electricity production in GWh, from 2016 to 2025.



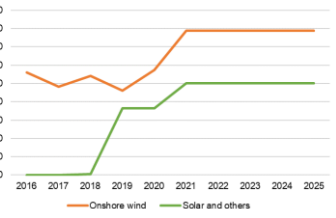
Source: Company data and analyst estimate

Figure 35: Mexico installed capacity in MW, from 2016 to 2025.



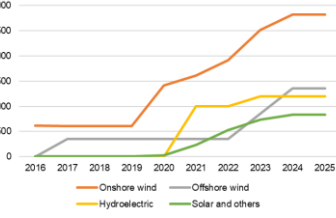
Source: Company data and analyst estimate

Figure 36: Mexico electricity production in GWh, from 2016 to 2025.



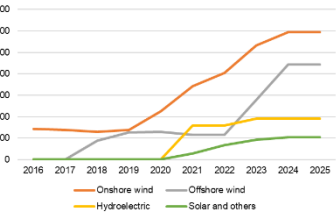
Source: Company data and analyst estimate

Figure 37: Other countries installed capacity in MW, from 2016 to 2025.



Source: Company data and analyst estimate

Figure 38: Other countries electricity production in GWh, from 2016 to 2025.



Source: Company data and analyst estimate

According to our estimates and company's strategy outlook, USA's produced electricity from renewable sources will amount to circa 33,000 GWh, thanks to a future installed capacity of 12,880 MW in 2025.

As the network business, in Brazil Iberdrola operates through Neoenergia, which manages an installed capacity of 516 MW in wind farms and 3,031 MW from hydroelectric plants.

Similar to USA, it is important to outline that the majority of electricity produced by wind power plants is sold under long-term contracts (PPAs) at a fixed price with the country's main distributors. On the contrary, market prices are used for shortages (that must be acquired) and/or surpluses (which must be offered), which may arise in the production contracted with distributors over fixed periods of four years. Regarding hydroelectric facilities, the mechanism is really similar and circa 60% of produced electricity is sold to distribution firms under long-term contracts.

According to our estimates and company's strategy outlook, Brazil electricity production will reach approximately 17,250 GWh through future installed capacity of 5,747 MW in 2025.

In Mexico, Iberdrola manages an installed capacity of 682 MW in wind farms and 642 MW from solar plants. The framework is slightly different from other countries and it is divided in three different type of sales contracts: (i) sale of power to Comisión Federal de Electricidad (CFE) under long-term contracts at fixed prices (La venta III, 103 MW); (ii) sale of energy to third parties, usually adopting a discount with respect to official price announced by CFE under the self-supply regime; (iii) sale to the free market. In addition, Mexican regulators oblige electricity retailers in the free market to show Certificates of Clean Energy at the end of year for a share of their energy sales.

According to the company's strategy outlook, Iberdrola has not planned any additional installed capacity expansion, so we have kept fixed the installed capacity at 1,324 MW as of 2020, in order to project the production by Mexican facilities of 2,577 GWh in 2025.

In the rest of the word, the capacity is highly fragmented through many different countries. More specific, we would like to highlight the facility in Germany, where Iberdrola owns and operates the Wikinger wind farm with a capacity of 350 MW. In accordance with German laws, the plant, for the first twelve operating years, will take advantage of fixed price for the energy produced. In the remaining countries, Iberdrola currently has an installed capacity of 1,414 MW in wind farms and 31 MW in solar plants. Applicable regulations present a difference between two main frameworks: sales at the regulated tariff (Portugal, Greece, Cyprus, France and Hungary), and sales at market price (Australia, part of the power in Greece and Romania).

According to Iberdrola expansion plan, at the end of the forecasting period, the estimated installed capacity will be 6,195 MW and will produce circa 13,337 GWh of electricity from renewable sources.

### 3.3 Generation & Supply

As it was said before, in the next decades this business segment is going to be less important for the company in terms of assets owned. In fact, in the company's investment plan, it is clear that Iberdrola will not invest many resources on this business unit in the following years, as a matter of fact Iberdrola will dedicate only the 9% (6 billion €) of the allocated resources to Generation & Supply. In particular, this amount will be mostly

reserved to boost the retail contracts of energy supply in liberalised market and to enhance the Smart Solutions offer and the technological advancements. However, this general reduction in number of assets will not include Mexico facilities, since Iberdrola has planned a full exploitation of the area until 2050.

Currently, in the end of 2020, Iberdrola can count on an overall production from non-renewable sources of 94,777 GWh, which are divided in 24,316 GWh from nuclear plants, 63,673 GWh from CCGT, 6,551 GWh from cogeneration plant and 237 GWh from coal-based plant (last year of production).

In order to forecast the business results, we have focused our analysis on the retail part, since, as we have stated before, it is going to be the dominant aspect, since the non-renewable generation part will be penalized by Iberdrola's green mission and strategic plan. We have selected as the main value driver the number of energy retail contracts that the company has stipulated with its customers in each market geography. We have started our analysis from the projected number of contracts by geography by the company until 2025. Iberdrola has planned a total number of contract in 2025 divided between 20 million in Spain, 10 million in the United Kingdom and 9 million in other countries. In 2020, the number of contracts in Spain was 17.4 million, in UK 6.8 million and 1.8 million in other countries. We believe that this contract expansion plan is actually too optimistic regarding the strong increase in numbers, so we have assumed a more conservative estimate, especially for the data from IEI (Other countries), which we have projected to final value of 6 million in 2025, given the difficulty to penetrate new foreign markets where threat of competitors may be stronger.

Regarding the Brazilian and the Mexican retail markets, the context is quite different from the other geographies. In fact, in both countries Iberdrola has stipulated mainly long-term agreements with CFE in Mexico and long-term purchase and sale agreements with the electricity distributors Coelba and Celpe in Brazil.

More specifically, in 2020, approximately 69% of the electricity generated in Mexico was sold under PPA to the CFE and to other large industrial clients, and since the facilities in Mexico are mainly gas-intensive, this kind of agreements transfer the risk associated with the purchase price of gas to the acquirer. The remaining electricity is sold to clients (either under self-supply or in the free market) at a price which takes into account the official basic supply tariffs established by the CFE.

The functioning is similar in Brazil, where Iberdrola has stipulated long term power purchase agreements for more than 71% of the total electricity sales in the country. The remaining percentage is sold in the free market.

Regarding Spain, Iberdrola manages an overall 9,225 MW of installed capacity from traditional sources that are nuclear (3,177 MW), combined cycle (5,695 MW) and cogeneration (353 MW). Since it is the only geography that exploits the nuclear power, the energy derived from uranium is considerable for Iberdrola, impacting for more than 34% of the overall installed capacity. In 2019, the Government and nuclear generators agreed on a scheduled closure plan up to 2050 for Spanish nuclear plants. Iberdrola foresees the closure of its nuclear plants between 2027 and 2035.

In the United Kingdom's retail business, it is important to highlight that Iberdrola has dismissed during the past five years the energy generation plants based in the country, so

Figure 39: Closing schedule of nuclear plants

	Closing schedule	
Almaraz I	nov-27	44.2 years
Almaraz II	oct-28	44.3 years
Ascó I	oct-30	45.8 years
Cofrentes	nov-30	45.6 years
Ascó II	sep-32	46.4 years
Vandellós II	feb-35	46.9 years
Trillo	may-35	46.7 years
	<b>Average life</b>	<b>45.7 years</b>

Source: Company data

the installed capacity is equal to zero. The revenues that stem from this segment come from the sale and purchase of electricity from and to the liberalised market. After the entry into force of the Domestic Gas and Electricity Act 2018, OFGEM sets on a half-yearly basis the maximum prices that suppliers may charge to final customers in observance of “Standard Variable Tariff”. This system of price caps was reviewed in 2020 and expanded until the end of 2021. It is highly probable that will be extended again up to the end of 2023.

Following our valuation methodology, direct costs from the Generation & Supply business were estimated thanks to the energy future prices estimates published in the *Annual Energy Outlook 2021* by EIA. We have selected the forecasted energy prices of uranium, natural gas and electricity up until 2026. For the countries (Spain, Mexico and Brazil) we have weighted the respective direct costs proportionally to the energy production for every non-renewable energy source. So, we have used as benchmark for nuclear plants the future prices of uranium and for cogeneration and combined-cycle the future prices of natural gas. For the countries that in 2020 do not manage any conventional generation plant, we have used the forecasted electricity prices as benchmarks for direct costs. In addition, the marginal increase in revenues has been taken into account in the calculation of the final direct cost output. Therefore, the total direct costs assigned to each country of the Generation & Supply segment are directly linked not only to future energy prices, but also to future revenue increases.

After having estimated the direct costs for each geography, we have computed the gross margin for the entire Generation & Supply segment and aggregated to the other gross margin's segments in order to carry on our company valuation.

### **3.4 CAPEX and other operating costs**

CAPEX is a decisive measure in the valuation of a company and it is based on funds used to acquire and keep functioning physical assets, like for example facilities, power plants, wind farms and green technology. These assets are contained in the caption Property, Plant and Equipment (PPE) which, given the nature of the utility sector, is fundamental to carry out the ordinary company activities and cover a major part of the total assets. Another fundamental caption that plays a key role in future organic growth is Other Intangible Assets which includes concessions, licences, computer softwares and research & development expenditures.

In order to carry out our company valuation, we have projected up to 2026 the future value of PPE and Other Intangible Assets which respectively resulted to 45 billion € of CAPEX and 12 billion € of investment in Other Int. Assets. The sum of these two values has been specifically designed on the projected investment in organic growth declared by Iberdrola. In fact, in the strategy outlook 2020-2025, the company has forecasted almost 68 billion of Gross Investment to consolidate its current market share and to enhance primarily the networks and renewables segments. From this estimate, we have decided to exclude the Gross Investment (almost 10 billion) already finalised during 2020. In addition, we have extended the investment period up to 2026 since we have reckoned that an additional year is more conservative and financially sustainable for the company.

Finally, we have computed the other operating costs starting from the Net Personal Expenses: first we have calculated the future number of employees per year, starting from the number of 2020 linking upcoming values to revenue growth, and then the average cost



per employee together with the projected inflation of the Euro area. Both Net External Services and Taxes (other than Income Tax) have shown stable historical patterns through the previous years, so we have decided to project them as historical percentages of the total revenues.

### 3.5 WACC

The Weighted Average Cost of Capital has been computed according to the traditional approach, therefore by estimating the cost of debt, cost of equity, a target level of D/E ratio and assuming a fixed tax rate.

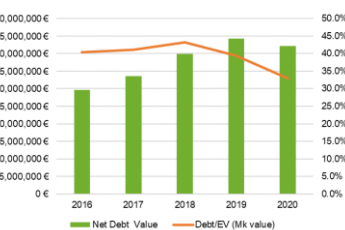
Firstly, we have calculated the cost of debt, using the Yield to Maturity of one of the largest and Euro denominated bonds issued by Iberdrola and then we have adjusted it according to the following formula  $YTM - Probability\ of\ Default \times Loss\ Given\ Default$ . PD and LGD correspond, respectively to 1.69% (8 years cumulative probability, then annualized to retrieve the adjusted Rd) and 46.1%, according to Moody's criteria for the rating attributed to Iberdrola, namely Baa1. Furthermore, the bond used is Iberdrola Finanz 1,621% 29/11/2029 (ISIN: XS1726152108), with a remaining maturity of 8 years, total amount issued 735 million € and Yield to Maturity equal to 0.205%<sup>7</sup>. After adjusting for PD and LGD, the adjusted Rd was 0.11%.

Figure 40: YTM Iberdrola Finanz 1,621% 29/11/2029



Source: Bloomberg Terminal

Figure 41: Net Debt/EV in '000 €, from 2016 to 2020



Source: Company data and analyst estimate

Figure 42: Regression of Beta Iberdrola against Eurostoxx 50



Source: Bloomberg and analyst estimate

Cost of equity has been calculated using CAPM model. As risk free rate, it has been taken the yield 30-Year German Government Bond (0.26%<sup>8</sup>), being a European company and having used Eurostoxx to estimate Beta Levered. As Market Risk Premium (MRP), we have assumed a 5.50% return. This value has been established on the basis of two different researches, published by Credit Suisse<sup>9</sup> and KPMG<sup>10</sup>, respectively of 5.30% and 5.75%.

In order to estimate Beta of Equity, we have regressed the last three years of Iberdrola stock performance, against the last three years of Eurostoxx 50 index performance, considered as more reasonable than IBEX 35. Finally, we have found the Beta of Equity (Beta E) equal to 0.74, which led to a total cost of equity equal to 4.34%.

The target Debt-to-Equity ratio has been assumed from historical financial leverage of the company and decreasing trend presented in the past years. The D/E has been 49.02%, resulting from an assumed D/EV ratio equal to 32.90% (ratio of December 2020). This value has been used as a proxy in the WACC computation.

Finally, given the very complex and fragmented tax framework, we have inserted the 25% Spanish marginal tax rate as assumed tax rate for WACC calculation.

On the basis of the above-mentioned assumptions, the final WACC used in the Discounted Cash Flow model resulted to 2.94%.

### 3.6 Exchange rates

As we have said before, Iberdrola is a multinational that operates in different countries, that can use distinct currencies from one to another. For forecasting purposes, we have expressed our valuation in Euro, since it is the local currency of Iberdrola's headquarters,

<sup>7</sup> Bloomberg Terminal, April 2021.

<sup>8</sup> Bloomberg Terminal, April 2021.

<sup>9</sup> Credit Suisse Research Institute, 2021, "Credit Suisse Global Investment Returns Yearbook 2021 Summary Edition".

<sup>10</sup> KPMG, 2021, "Equity Market Risk Premium research, 31 March 2021"

but we understand that is important for a future possible shareholder to know the % of revenues that is influenced by movements of different exchange rates between Euro and other currencies. So, we have calculated that between 2020 and 2026, on average the revenues of Iberdrola will be generated for the 46% in Euro, 25% in Dollar, 17% in British Pound and for the remaining 19% in Brazilian Real.

Figure 43: Estimate of future exchange rates.

FX rates	Q2 2021	Q3 2021	Q4 2021	Q1 2022	2022	2023	2024
Rate USD/EURO	0.833	0.826	0.820	0.820	0.813	0.826	0.820
Rate BRL/EURO	0.152	0.153	0.153	0.157	0.156	0.153	
Rate GBP/EURO	1.176	1.176	1.176	1.176	1.176	1.205	1.190

Source: Bloomberg Forecast Exchange

According to Bloomberg FX Forecast, the future exchange rates to Euro of these currencies will be generally stable without any major change, as long as macroeconomic events do not transform the major framework. The operating currency in Mexico is the US Dollar. Deepening our analysis, we can notice that the Dollar slightly decreases its value over time, whereas the British Pound increases. If we assume these values as assured and definitive, we can notice that the revenues generated in Dollar could increase in 2024 (last year of forex analysis) by almost 3.5% whereas the revenues generated in British Pound could decrease by almost 2%.

### 3.7 Peers valuation

The selection of comparables may be challenging for unique companies like Iberdrola with operations in many different geographies and business segments. However, we have selected a short list of peers taking into account different countries and three business segments: Renewable, Generation & Supply and Networks. In addition, the multiples adopted have been current values of P/E and EV/EBITDA<sup>11</sup> taken from Bloomberg for our selected peers. We have decided to use these metrics as more suitable for utility (more in general for energy) sector and used the mean resulting from our multiples panel. As it is possible to observe from the table below, Iberdrola values are in line with the ones from its list of competitors. Among the highest multiples for P/E and EV/EBITDA, we can notice the companies Verbund and NextEra energy, which trade above the mean of other peers. This can be explained being companies that are mainly focused on renewable energy, which is typically a sector that trades at higher values than the non-renewable one. The other companies like EDP, Enel, Endesa and E.on rely more on the Generation & Supply business and so they are more sensitive to changes in the electricity demand. The disruption caused by the COVID-19 pandemic can be a possible explanation for trading values below their renewable focused peers. Iberdrola can be considered a company in between the two categories.

Implied share price from current EV/EBITDA is 11.68 € and from current P/E 2021 11.62 €. These two prices corroborate our final HOLD recommendation resulted from the Discounted Cash Flow Model.

<sup>11</sup> Bloomberg Terminal, May 2021

Peers Valuation				
	In million €		As of 7/05/2021	
Selected Peers	EV	Market Capitalization	P/E	EV/EBITDA
Verbund	26,093	24,111	38.24	20.06
National Grid PLC	71,739	38,115	22.01	13.93
EDP	36,149	18,321	20.55	9.43
NextEra Energy Inc	170,848	120,308	32.10	25.65
ENEL	145,651	84,058	32.54	9.74
Fortum OYJ	30,812	20,430	11.17	11.46
Endesa	30,191	23,663	22.82	9.08
E.ON	58,696	27,792	26.03	9.44
Iberdrola	130,921	73,937	20.40	13.60
Median	47,423	25,952	24.43	10.60
Mean	71,272	44,600	25.68	13.60
Max	170,848	120,308	38.24	25.65
Min	26,093	18,321	11.17	9.08
Our Estimation Iberdrola EPS 2021	0.45			
Our Estimation Iberdrola EBITDA 2021	9,555,652			



## 4. Appendix

### 4.1 Financial Statements

#### Restated Income Statement<sup>12</sup>

Iberdrola S.A. And Subsidiaries		Forecast Reformulated Income Statement							
In million €	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E
Revenues	35,076	36,438	33,145	38,504	41,728	45,267	49,077	53,062	55,807
Supplies	(19,641)	(20,175)	(17,000)	(21,608)	(23,485)	(24,820)	(26,319)	(28,725)	(30,388)
<b>Gross Margin</b>	<b>15,435</b>	<b>16,263</b>	<b>16,145</b>	<b>16,896</b>	<b>18,244</b>	<b>20,446</b>	<b>22,759</b>	<b>24,336</b>	<b>25,419</b>
Net Personnel expenses	(2,020)	(2,146)	(2,149)	(2,864)	(3,231)	(3,647)	(4,104)	(4,598)	(4,987)
Net external services	(2,135)	(2,184)	(2,165)	(2,369)	(2,568)	(2,785)	(3,020)	(3,265)	(3,434)
Net operating expenses	(4,155)	(4,330)	(4,314)	(5,234)	(5,799)	(6,432)	(7,124)	(7,863)	(8,421)
Taxes	(1,931)	(1,829)	(1,821)	(2,107)	(2,283)	(2,476)	(2,685)	(2,903)	(3,053)
<b>EBITDA (Core)</b>	<b>9,349</b>	<b>10,104</b>	<b>10,010</b>	<b>9,556</b>	<b>10,162</b>	<b>11,538</b>	<b>12,950</b>	<b>13,571</b>	<b>13,944</b>
Depreciation	2,945	2,823	3,063	3,291	3,492	3,653	3,815	3,977	4,145
Amortisation	684	892	825	773	904	931	958	984	1,012
Valuation adjustments, trade and contract ass	(254)	(297)	(381)	(311)	(311)	(311)	(311)	(311)	(311)
<b>EBIT (Core)</b>	<b>5,466</b>	<b>6,091</b>	<b>5,741</b>	<b>5,180</b>	<b>5,456</b>	<b>6,643</b>	<b>7,866</b>	<b>8,299</b>	<b>8,477</b>
Taxes on EBIT (Core)	(1,253)	(1,242)	(1,254)	(1,295)	(1,364)	(1,661)	(1,967)	(2,075)	(2,119)
<b>Net Core Result</b>	<b>4,213</b>	<b>4,849</b>	<b>4,487</b>	<b>3,885</b>	<b>4,092</b>	<b>4,982</b>	<b>5,900</b>	<b>6,224</b>	<b>6,358</b>
Non-Core Result (net of taxes)	(442)	(68)	(3,787)	(204)	(213)	(224)	(236)	(249)	(259)
Financial expense (net of taxes)	(758)	(852)	(649)	(785)	(821)	(884)	(930)	(970)	(1,001)
<b>Net Profit</b>	<b>3,014</b>	<b>3,930</b>	<b>52</b>	<b>2,896</b>	<b>3,058</b>	<b>3,874</b>	<b>4,734</b>	<b>5,006</b>	<b>5,098</b>

#### Free Cash Flow Map

Iberdrola S.A. And Subsidiaries		Free Cash Flow							
In million €	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E
NOPLAT	4,213	4,849	4,487	3,885	4,092	4,982	5,900	6,224	6,358
Depreciation	2,945	2,823	3,063	3,291	3,492	3,653	3,815	3,977	4,145
Amortisation	684	892	825	773	904	931	958	984	1,012
<b>Gross Cash Flow</b>	<b>7,842</b>	<b>8,565</b>	<b>8,375</b>	<b>7,950</b>	<b>8,487</b>	<b>9,566</b>	<b>10,672</b>	<b>11,185</b>	<b>11,514</b>
Capex	4,976	7,916	3,512	7,676	7,031	7,196	7,361	7,650	7,828
Change in NWC	611	1,165	(447)	(277)	613	594	498	289	392
Change in intangible assets	537	260	(1,321)	3,849	1,534	1,561	1,588	1,637	1,669
Change in Other Core Assets & Liabs	6,811	3,990	956	(1,179)	46	51	54	57	39
<b>Unlevered Core FCF</b>	<b>(5,093)</b>	<b>(4,767)</b>	<b>5,676</b>	<b>(2,119)</b>	<b>(736)</b>	<b>165</b>	<b>1,171</b>	<b>1,552</b>	<b>1,586</b>
Non-Op.plat	(442)	(68)	(3,787)	(204)	(213)	(224)	(236)	(249)	(259)
Change in Non Op.Asset	(1,693)	(1,978)	(886)	247	-	-	-	-	-
<b>Unlevered Non-Core FCF</b>	<b>1,251</b>	<b>1,911</b>	<b>(2,900)</b>	<b>(451)</b>	<b>(213)</b>	<b>(224)</b>	<b>(236)</b>	<b>(249)</b>	<b>(259)</b>
<b>Free Cash Flow to Firm</b>	<b>(3,841)</b>	<b>(2,856)</b>	<b>2,776</b>	<b>(2,570)</b>	<b>(949)</b>	<b>(60)</b>	<b>936</b>	<b>1,304</b>	<b>1,327</b>

Iberdrola S.A. And Subsidiaries		Cash flow from Financing							
In million €	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E
Financing Costs	(1,010)	(1,136)	(865)	(1,047)	(1,094)	(1,178)	(1,240)	(1,293)	(1,335)
Tax Shield	253	284	216	262	274	295	310	323	334
After Tax Financing Costs	(758)	(852)	(649)	(785)	(821)	(884)	(930)	(970)	(1,001)
Change in Net Debt	1,546	2,489	(2,445)	2,068	2,108	1,715	1,470	1,181	1,091
Change in other financial assets	4,823	1,931	346	(875)	-	-	-	-	-
Change in Equity	(1,770)	(712)	(29)	2,163	(338)	(772)	(1,475)	(1,516)	(1,417)
<b>Cash flow from financing</b>	<b>3,841</b>	<b>2,856</b>	<b>(2,776)</b>	<b>2,570</b>	<b>949</b>	<b>60</b>	<b>(936)</b>	<b>(1,304)</b>	<b>(1,327)</b>

<sup>12</sup> The Financial statements of foreign companies have been translated applying the year-end exchange rate method. This method consists of translating to euros all the assets, rights and obligations at the exchange rates prevailing at the date of the consolidated Financial statements and the average exchange rate for the year for the consolidated income statement items. The resulting translation differences are taken directly to equity. These differences arise when the value of the assets of the company changes simply because of exchange rate fluctuations. For this reason, in 2020, the Non-Core Result are heavily influenced by a loss of 4,191 million € of translation differences.

## Restated Balance Sheet

Iberdrola S.A. And Subsidiaries		Forecast Reformulated Balance Sheet							
In million €	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E
<b>Current Assets</b>									
Inventories and Nuclear fuel	2,447	2,847	2,703	2,901	3,153	3,333	3,534	3,857	4,080
Current tax assets	666	666	666	666	666	666	666	666	666
Public entities and other tax assets	253	318	564	437	437	437	437	437	437
Other tax receivables	230	193	338	207	207	207	207	207	207
Trade and other receivables current	6,098	6,674	6,477	7,093	7,687	8,339	9,041	9,775	10,281
Cash and cash equivalents	3,373	2,806	4,005	3,439	3,890	4,069	4,237	4,392	4,515
<b>Total Current Assets (Core)</b>	<b>13,066</b>	<b>13,503</b>	<b>14,753</b>	<b>14,743</b>	<b>16,040</b>	<b>17,050</b>	<b>18,122</b>	<b>19,333</b>	<b>20,186</b>
<b>Non Current Assets</b>									
Intangible assets	21,000	20,368	18,222	21,297	21,928	22,558	23,188	23,841	24,498
Investment property	429	342	301	465	504	546	592	640	673
Property, plant and equipment	66,109	71,289	71,779	76,000	79,500	83,000	86,500	90,125	93,775
Right-of-use asset	-	1,782	1,974	1,974	1,974	1,974	1,974	1,974	1,974
Equity-accounted investees	1,710	1,957	1,145	1,768	1,768	1,768	1,768	1,768	1,768
Other non-current investments	2,685	3,019	2,909	2,909	2,909	2,909	2,909	2,909	2,909
Derivative instruments (core)	1,188	951	1,206	1,376	1,491	1,617	1,754	1,896	1,994
Trade and other non-current assets	815	2,851	3,161	1,710	1,710	1,710	1,710	1,710	1,710
<b>Total Non Current Assets (Core)</b>	<b>93,936</b>	<b>102,559</b>	<b>100,697</b>	<b>107,500</b>	<b>111,784</b>	<b>116,083</b>	<b>120,396</b>	<b>124,864</b>	<b>129,302</b>
<b>Total Assets (Core)</b>	<b>107,002</b>	<b>116,063</b>	<b>115,450</b>	<b>122,243</b>	<b>127,824</b>	<b>133,133</b>	<b>138,517</b>	<b>144,197</b>	<b>149,488</b>
<b>Total Assets (Non Core)</b>	<b>6,036</b>	<b>6,306</b>	<b>7,068</b>	<b>7,131</b>	<b>7,131</b>	<b>7,131</b>	<b>7,131</b>	<b>7,131</b>	<b>7,131</b>
<b>Total Assets</b>	<b>113,038</b>	<b>122,369</b>	<b>122,518</b>	<b>129,374</b>	<b>134,955</b>	<b>140,264</b>	<b>145,649</b>	<b>151,328</b>	<b>156,620</b>
<b>Current Liabilities</b>									
Public entities and other tax liabilities	349	243	178	253	253	253	253	253	253
Other tax payables	106	141	235	154	154	154	154	154	154
Trade payables	5,259	5,098	5,138	6,336	6,634	6,942	7,424	8,271	8,663
Current tax liabilities	180	261	285	285	285	285	285	285	285
Other current liabilities	508	674	478	478	478	478	478	478	478
Loan and Borrowings short term	6,816	9,347	7,971	7,591	8,066	8,413	8,711	8,950	9,171
<b>Total Current Liabilities (Core)</b>	<b>13,218</b>	<b>15,764</b>	<b>14,285</b>	<b>15,097</b>	<b>15,870</b>	<b>16,525</b>	<b>17,305</b>	<b>18,392</b>	<b>19,005</b>
<b>Non Current Liabilities</b>									
Capital grants	1,478	1,399	1,240	1,240	1,240	1,240	1,240	1,240	1,240
Derivative instruments (core) non current	768	838	556	825	895	970	1,052	1,138	1,196
Other non-current liabilities	375	407	262	262	262	262	262	262	262
Facilities assigned and financed by third parti	4,823	4,987	5,043	4,951	4,951	4,951	4,951	4,951	4,951
Loan and Borrowings long term	30,918	30,283	30,479	32,253	34,273	35,749	37,013	38,030	38,969
Other financial liabilities	-	1,767	2,058	1,275	1,275	1,275	1,275	1,275	1,275
<b>Total Non Current Liabilities (Core)</b>	<b>38,363</b>	<b>39,681</b>	<b>39,638</b>	<b>40,807</b>	<b>42,896</b>	<b>44,448</b>	<b>45,794</b>	<b>46,896</b>	<b>47,894</b>
<b>Total Liabilities (Core)</b>	<b>51,581</b>	<b>55,445</b>	<b>53,923</b>	<b>55,904</b>	<b>58,766</b>	<b>60,973</b>	<b>63,098</b>	<b>65,288</b>	<b>66,898</b>
<b>Total Liabilities (Non Core)</b>	<b>17,481</b>	<b>19,729</b>	<b>21,377</b>	<b>21,193</b>	<b>21,193</b>	<b>21,193</b>	<b>21,193</b>	<b>21,193</b>	<b>21,193</b>
<b>Total Liabilities</b>	<b>69,061</b>	<b>75,174</b>	<b>75,300</b>	<b>77,097</b>	<b>79,959</b>	<b>82,166</b>	<b>84,291</b>	<b>86,481</b>	<b>88,091</b>
<b>Equity of the Parent</b>	<b>36,582</b>	<b>37,678</b>	<b>35,412</b>	<b>40,471</b>	<b>43,190</b>	<b>46,293</b>	<b>49,551</b>	<b>53,042</b>	<b>56,722</b>
Non-controlling interests	7,394	9,516	11,806	11,806	11,806	11,806	11,806	11,806	11,806
<b>Total Equity</b>	<b>43,977</b>	<b>47,195</b>	<b>47,218</b>	<b>52,277</b>	<b>54,996</b>	<b>58,099</b>	<b>61,357</b>	<b>64,848</b>	<b>68,528</b>
<b>Total Liabilities and Equity</b>	<b>113,038</b>	<b>122,369</b>	<b>122,518</b>	<b>129,374</b>	<b>134,955</b>	<b>140,264</b>	<b>145,649</b>	<b>151,328</b>	<b>156,620</b>

## Enterprise value and sensitivity analysis (in million €)

<b>EV from Core Operations</b>	145,999					
<b>Net Financial assets</b>	(43,402)					
<b>Non core invested capital</b>	(14,062)					
<b>Non controlling interests</b>	(11,806)					
<b>Equity Value</b>	76,729					
<b>Number of Shares</b>	6,400					
<b>EV</b>		<b>WACC</b>				
		2.74%	2.84%	2.94%	3.04%	3.14%
<b>Growth</b>	1.80%	147,443	132,571	120,313	110,037	101,298
	1.90%	165,051	146,719	131,919	119,722	109,496
	2.00%	187,427	164,241	145,999	131,272	119,134
	2.10%	216,813	186,509	163,436	145,283	130,628
	2.20%	257,113	215,752	185,596	162,636	144,571

**IBERDROLA**

UTILITIES

STUDENTS: LUCA PISCIARELLI & FRANCESCO MARCHETTI

**COMPANY REPORT**

18 MAY 2021

41567@novasbe.pt/41379@novasbe.pt

**A landmark for a green economy**

*Towards a carbon-neutral world*

▪ **Coverage** is initiated on Iberdrola, with a **HOLD** recommendation, a price target of **11.99 €** and an expected shareholder annualized return of **9.51%**, considering **0.25 €** of dividend per share for the remaining **2021**.

▪ **Network Consolidation.** As the major source of revenue, Network segment accounts for 48% of Total EBITDA and for 51% of Total EBIT in 2020. In the future, networks will cover a crucial role to the electrification of the economy and Iberdrola intends to consolidate the current position with an increase in the Regulated Asset Base from 30.4 billion € in 2019 to 47 billion € in 2025.

▪ **Investments.** With an unprecedented investment plan of 75 billion € from 2020 to 2025, Iberdrola is investing heavily to lead the ongoing energy transition. In this period the renewable installed capacity will grow by 56% from 34 GW in 2020 to a final value of 53 GW in 2025.

▪ **Sustainability.** Iberdrola will remain a trend setting leader in the sustainability sector. The company has the lowest emission values among its peers, and it has promised to reduce its global CO<sub>2</sub> emission by 86% to 50 g/kWh by 2030, becoming globally carbon neutral in 2050.

**Company description**

Iberdrola S.A. generates, distributes, trades, and markets electricity mainly in the Spain, United States, Mexico, United Kingdom and Brazil. The company specializes in clean energy and more specifically wind power. The group supplies energy to circa 100 million people in several of countries. Its main operations include supply of retail electricity, generation from non- and renewable sources of energy and the construction, operation and maintenance of power lines.

**Recommendation: HOLD**

*Vs Previous Recommendation* -

**Price Target FY21: 11.99 €**

*Vs Previous Price Target* -

**Price (as of 7 May 21) 11.52 €**

Reuters: IBE.MC

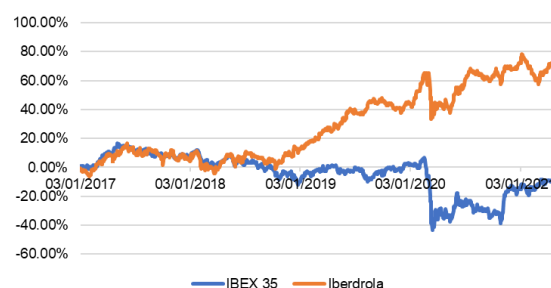
52-week range (€) 8.40-12.57

Market Cap (€m) 74,354

Outstanding Shares (m) 6,400

Source: Reuters

Cumulative Returns Iberdrola vs. Ibex 35



Source: Bloomberg

(Values in € millions)	2020	2021F	2022F
Revenues	33,145	38,503	41,728
Gross Margin	16,145	16,896	18,244
EBITDA	10,010	9,556	10,162
EBIT	5,741	5,180	5,456
Net Profit	3,611	2,896	3,058
EPS	0.55	0.45	0.45
D/EV	33%	33%	33%
EV/EBITDA	13.20	15.28	15.00

Source: Company data and Nova SBE equity research

**THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY FRANCESCO MARCHETTI, MASTER IN FINANCE STUDENT OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)**

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# 1. Company overview

Iberdrola S.A. is a utility company based in Spain, founded in 1992 from the merger of Hidroeléctrica Española and Iberduero. With current market capitalization of 74 billion €, by revenue Iberdrola is the 7th energy company and the 2nd renewable energy company in the world. Thanks to its 35 GW of installed capacity, Iberdrola is the 17th company in the ranking of world installed energy capacity. It is part of the Spanish Stock Index IBEX 35 and it is one of the major components of the Eurostoxx 50 index. Its main activities consist in the energy production from conventional and renewable sources, sale and purchase of electricity and gas in wholesale markets, transmission and distribution of energy. Finally, it is also involved in retail supply of electricity, gas and energy related services to residential, industrial and commercial customers.

The company carries out its operations in five main geographies across the world, which are Spain, USA, Mexico, Brazil and United Kingdom. In addition, Iberdrola is also active in other parts of the world such as Italy, Portugal, Australia and France, where it foresees further investments in order to carry on its expansion plan. As well as providing essential utility services to more than 100 million people, its position in the top ten of the energy market has been corroborated by the capacity of the group of carrying out a significant metamorphosis over the past 15 years, staying ahead of the energy transition to face the challenges brought by climate change and the necessity of a clean and reliable smart business model. These propositions were translated in the increase of renewable capacity from 10 GW in 2000 to 35 GW in 2020, and the reduction of emissions from 350 gCO<sub>2</sub>/kWh to 98 gCO<sub>2</sub>/kWh in 2020.

Figure 1: Revenues by segment in % 2020

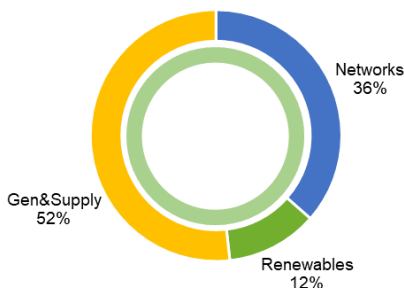
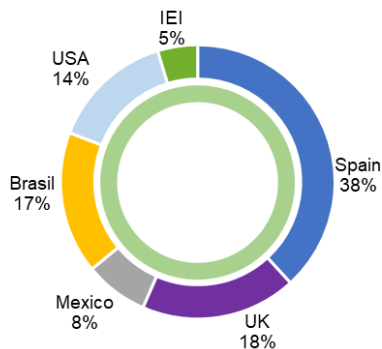


Figure 2: Revenues by country in % 2020



Source: Company data

## 1.1 Business Model

The recent trends such as the decarbonisation and electrification of the economy, technological advances and customers' increased connectivity in the energy sector pave the way for an enhancement of leadership position for Iberdrola. In the following analysis, we have selected as main competitors the Italian company Enel, the Portuguese EDP and the American NextEra because they present a similar business model and operate in common geographies. Iberdrola's business model is based on three consolidated segments:

- **Networks segment:** based on enormous initial investments, it is the segment that is responsible of the building, functioning and maintenance of power lines, substations, and other facilities for bringing power from the production hubs to the end user. During 2020, Iberdrola distributed almost 225,000 GWh of electricity and 60,000 GWh of gas through its 1.2 million of km of power lines.

Among its main competitors, Iberdrola is surpassed only by the Italian company Enel, which manages 2.2 million of km.

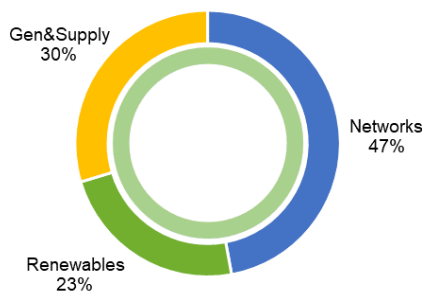
- **Renewable segment:** after having attained more importance over the past couple of years, it is the segment responsible for the generation and the marketing of electricity from renewable sources such as hydroelectric, wind (both offshore and onshore), solar thermal, photovoltaic and others. In 2020, the company managed almost 35,000 MW of installed capacity from renewable sources, which contributed to circa 68,000 GWh of electricity produced. Of the total world renewable installed capacity (2,537 GW)<sup>1</sup>, the plants managed by Iberdrola accounted for almost the 2% of the total capacity.

- **Generation & Supply segment:** it is focused on the production of electricity, under conventional sources such as nuclear plants, combined cycle plants (CCGT) and cogeneration plants, via the operation and maintenance of generation facilities (as well as construction) and the sale and purchase of energy in wholesale markets. In addition, it supplies energy and additional products and services to end customers, which amounted to 12.8 million for electricity and 3 million for gas in 2020, too. In Europe, Iberdrola is the third utility company per number of electricity customers, overtaken only by EDF (28.7 million) and Enel (63.7 million). Whereas considering the other two main competitors EDP and NextEra, they present lower numbers with respectively 4 million and 5.6 million of electricity customers. It is paramount to underline that in 2020 Iberdrola closed its last two coal plants (Lada and Velilla, Spain), in line with its sustainability strategy.

From a financial point of view, these three businesses contributed in very different ways to the company consolidated Gross Margin, EBITDA and EBIT. More specifically, it can be observed that for the FY2020, Networks contributed to 47% of Gross Margin, (7,615 million €), 48% of EBITDA (4,777 million €), 52% of EBIT (2,874 million €); whereas Renewables contributed to 23% of Gross Margin (3,758 million €), 26% of EBITDA (2,586 million €) and 21% of EBIT (1,185 million €); and finally, Generation & Supply contributed to 30% of Gross Margin (4,794 million €), 26% of EBITDA (2,564 million €), and 27% of EBIT (1,520 million €).

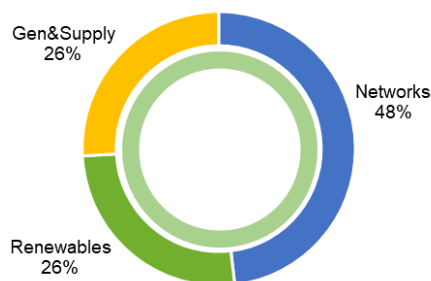
The simplified scheme in Figure 6 of the company structure of the group helps understanding the involvement of the company in different businesses in several countries (e.g. Scottish Power in UK, Neoenergia in Brazil and Avangrid Inc. in USA) within the energy industry.

Figure 3: Gross Margin by segment in % 2020



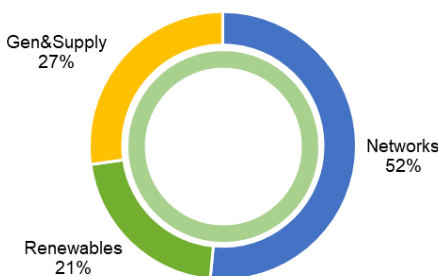
Source: Company data

Figure 4: EBITDA by segment in %, 2020



Source: Company data

Figure 5: EBIT by segment in %, 2020

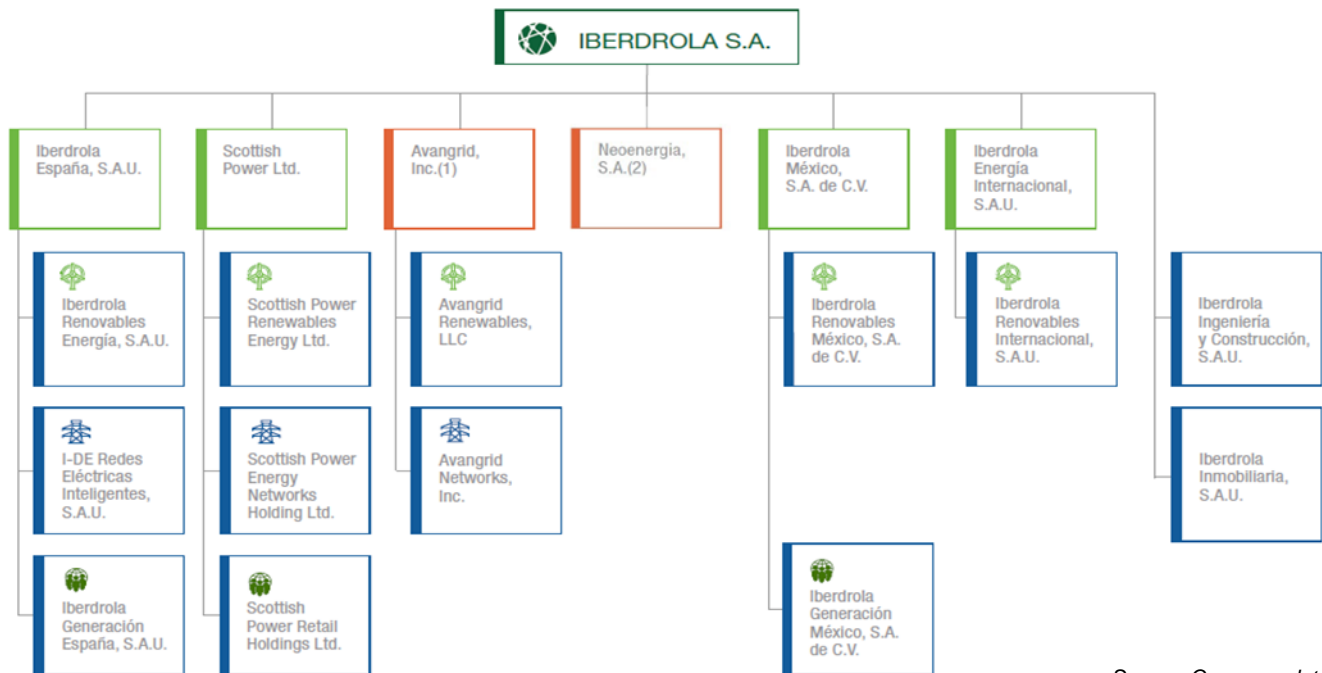


Source: Company data

<sup>1</sup> International Renewable Energy Agency (IRENA), 2020, "Renewable capacity highlights 31 March 2020"



Figure 6: Corporate Structure of Iberdrola, 2020



Source: Company data

## 1.2 Strategic Outlook

The company’s purpose is focused on the safeguarding of the planet and welfare of people in line with the Sustainable and Development goals. Iberdrola is dedicated to the fight to climate change through a real global energy transition, increasing the use of renewables as source of energy, efficient storage systems and smart grids. Iberdrola will base its investment decisions on its main three strategic pillars: (i) need to further decarbonise the company, (ii) technological advances, increasing efficiencies of renewable sources production and functioning of electricity grids, (iii) new demands from consumers that will be addressed through digitalisation. Supported by its unprecedented investment plan of 75 billion € of gross investments during the period between 2020 and 2025, Iberdrola will try to consolidate its position both in the renewable market, aiming to a final value of 60 GW of renewable installed capacity globally, and in the networks segment, aiming to a value of 47 billion € of Regulated Asset Base (RAB). Looking at past developments, regulated asset base increased from 4 billion € in 2000 to 31 billion € in 2020, and renewable capacity from 10 GW to 35 GW. Additionally, it is important to point out that the firm is also investing in new projects such as a Green Hydrogen, in alliance with Fertiberia<sup>2</sup>, plant in Puertollano (the first one in Spain), comprehending 100 MW of solar capacity, a

<sup>2</sup> Iberdrola website, 2021, “Iberdrola will construct the largest green hydrogen plant for industrial use in Europe”, at link: <https://www.iberdrola.com/about-us/lines-business/flagship-projects/puertollano-green-hydrogen-plant>

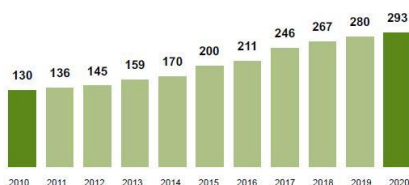
lithium-ion battery system with a storage capacity of 20 MWh and an electrolytic hydrogen production system of 20 MWh, backed by 150 million € investment. Green Hydrogen is a technology based on the generation of hydrogen through the chemical process of electrolysis, and, according to EIA, the implementation of this method would save 830 million tonnes of CO<sub>2</sub>, emitted annually during the normal production procedure through fossil fuels. This example and many other projects are in line with EU recovery plans and can be helpful to better understand the commitment of the company towards the energy transition and carbon neutrality by 2050.

Furthermore, Iberdrola intends to enhance its presence globally through Iberdrola Energia Internacional (IEI), by investing in very different markets, such as Italy, France, Germany, Japan and Australia.

### 1.3 SWOT analysis

Company's global footprint is, without a doubt, one major strength, which reduces the dependence of the company on a single geography and diversifies the sources of income. For example, for FY 2020, 38% of revenues comes from Spain, 18% from UK, 8% from Mexico, 17% from Brazil, 14% from USA and the rest from Other Countries. Another strength is the R&D commitment with strong investments by Iberdrola, indeed it has a history of increasing R&D expenditure during the past 10 years, up to 293 million € invested in 2020. This number is almost three times the amount invested by Iberdrola direct competitor Enel with a value of 111 million € of R&D expenditure in 2020. The value for EDP and NextEra is even lower, also due to smaller companies' dimension.

Figure 7: Investments by Iberdrola in R&D (million €), in 2020



Source: Company data

A weakness of the company may be its scarce cash reserves and low cash ratio (between 0.10 and 0.20 in the last five years), which may affect the ability to meet short term obligations. Taking into consideration once again the cash ratio of its two main competitors, it has been 0.28 and 0.29 for Enel in 2019 and 2020, while 0,19 and 0.39 for EDP in 2019 and 2020. However, the investors are not concerned since Moody's rating for Iberdrola has been P-2 (indicating a strong ability to repay short-term obligations) and Baa1 for long term debt obligations. In addition, another weakness can be considered the influence on the short term of the different weather conditions regarding the renewable segment. However, it has been estimated that in the medium-long term, years with lower-than-average water and wind resources are balanced by years with above-average total resources.

Among the opportunities, the partnerships through new strategic initiatives such as the agreement signed in December 2020 to acquire 50% of offshore wind plants projects in Poland, in cooperation with the company SEAWIND. This



collaboration will not only increase Iberdrola wind installed capacity, but it will also provide access to the Polish energy market. In addition, the increasing global demand for electricity is, without a doubt, an opportunity for growth for utility companies such as Iberdrola, that can already count on a consolidated market leadership. According to the International Energy Agency<sup>3</sup>, the electricity production will have grown by 69% in 2040, starting from 25.8 trillion kWh in 2020.

Among the threats, it is important to mention increasing competition in the utilities sector driven by M&A operations that help large utilities such as EDP, Enel and NextEra to consolidate their position in new segments and new geographies by acquiring other companies. For instance, Enel showed continuous interests in acquiring larger stakes of Enel Americas (last deal announced in March 2021 offering 1.2 billion € for 10% stake) to increase its presence in Latin America; EDP completed the acquisition of 75.1% stake in Spanish utility firm Viesgo Infraestructuras Energeticas SL in December 2020, to develop its business in Spain adding 31,411 kilometres of regulated electricity distribution networks and 500 MW of renewable generation capacity. Furthermore, the global presence may be seen also as a threat for what concerns the risk in geopolitical framework and regulation in different countries, which may have an incisive impact on financial performances. For example, variations in remuneration from regulated activities, in environmental regulations, in the legal framework applicable in each jurisdiction and in the early termination of government contracts.

Additionally, since Iberdrola is a worldwide company that operates in countries which have different currencies, the exposure to changes in the exchange rates is particularly significant and can be considered as threat. The company has reduced the risk by completing all its economic operation in the operating currency of each country and financially hedging through the use of financial derivatives the risk of transfer of profits expected for the year. We have deepened our analysis on future exchange rates in the 3.6 Paragraph.

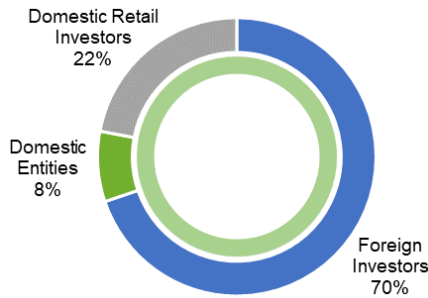
## 1.4 Shareholder Structure

Iberdrola presents a very fragmented shareholders structure with no shareholder that own large stakes of company's shares. According to the Annual Report 2020 published by the company, the significant shareholders are the following: Blackrock Inc. with 5.16%, Norges Bank with 3.60% and Qatar Investment Authority with 8.71% of total voting rights. Another breakdown presented in the financial statements is the ownership stake coming from foreign investors of

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<sup>3</sup> International Energy Agency, 2020, "World Energy Outlook 2020"

Figure 8: Iberdrola ownership in %, 2020



Source: Company data

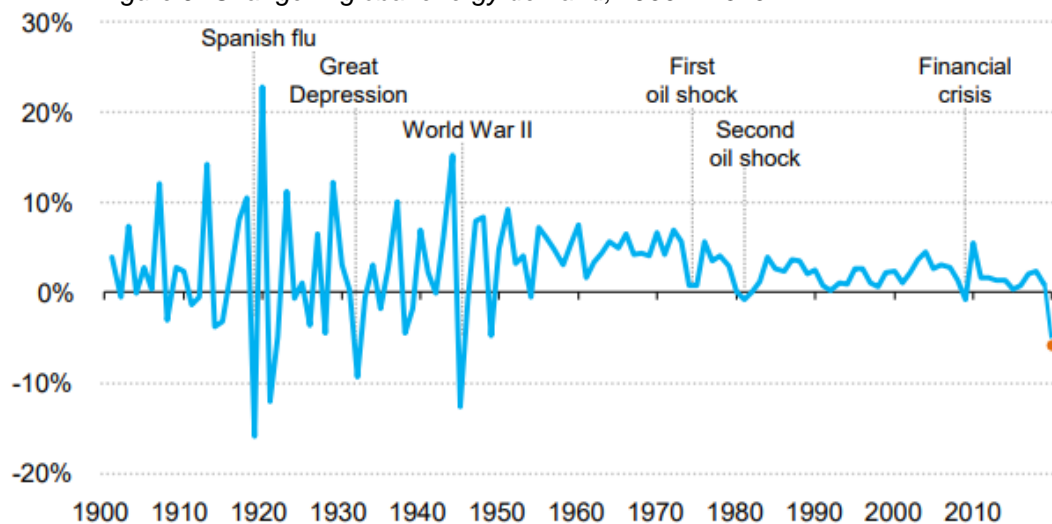
69.79%, from domestic entities of 8.17% and from domestic retail investors of 22.04%. Finally, only 0.22% of voting rights is detained by the members of the Board of Directors.

We do not believe that this structure will be affected by great changes in the future, and the absence of owners with incredibly large stakes will avoid conflict of interest among parties. Therefore, the company’s fundamental decisions will be taken accordingly to a large number of diversified shareholders and Iberdrola’s value will not be affected by company’s structure.

### 1.5 Iberdrola and COVID-19 pandemic

Global economic activity was temporarily disrupted by the healthcare crisis associated with the COVID-19 pandemic and the containment measures applied by the various countries, affecting normal business operations during the 2020. During the pandemic crisis, the firm took a series of actions in order to ensure the safeguarding of employees, customers and suppliers, as well as ensuring the supply. Finally, Iberdrola was awarded the AENOR certification for excellence in anti-COVID procedures and it was noticed by Merco’s as one of the five companies in Spain with the strongest social commitment against COVID-19.

Figure 9: Change in global energy demand, 1900 – 2020



Source: IEA

One of the main effects of the pandemic on Iberdrola has been contracted energy demand, which we believe that will be offset in the following years, thanks to its significant investment plan. Additionally, during 2020, it has been registered a remarkable fall in the commodity prices, but this effect has not been considered material, thanks to the presence of fixed price sales contracts (PPAs) and to the use of commodity derivatives, which influence the Iberdrola profitability. In addition, higher expenses in employees’ health and transport, together with donations of health supplies and other similar social actions, have been partially

balanced by cost savings stemming from lower levels of business activity, absence of travel and other savings in terms of operating costs. To sum up, we estimated that these effects can be considered a partial explanation of the decrease in EBITDA by almost 94 million € between 2019 and 2020. Enel has estimated that the pandemic has decreased its 2020 EBITDA by 727 million €. If we compare the two companies, weighting the respective EBITDAs for the different sizes, it is possible to notice that Iberdrola has been less influenced by the pandemic and this can be explained by the lower dependency of the Spanish company to variations in the electricity demand.

However, Iberdrola estimates that this situation appears to be temporary, and the pandemic will not exert a material detrimental effect on business plans and on the assets' values, thanks to a future strong recovery sustained by the vaccination campaign.

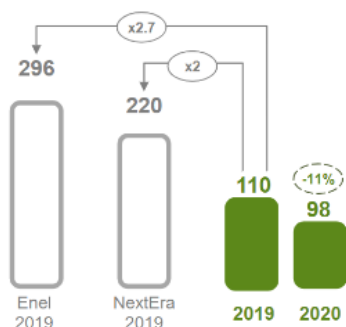
### 1.6 ESG overview

Over the past few years, the importance of ESG themes has grown substantially and we believe that at least a quick overview on these aspects is fundamental, in order to provide a detailed overall analysis, especially for a company that generates and supplies energy from non- and renewable sources.

From an ESG perspective, Iberdrola has proven to be one of the most virtuous utility company in Europe, establishing a role of leader among its peers, confirmed by its highest rating of AAA and "Low Risk" provided respectively by MSCI and Sustainalytics. The activities that the company carries out provide direct and indirect contribution toward the achievement of the 17 Sustainable Development Goals (SDGs), set by the United Nations. In particular, Iberdrola's efforts are directed to the supply of affordable and sustainable energy (SDG number 7) and to climate change action (SDG number 13). This commitment is especially clear when we analyse the environmental data from the company: between 2018 and 2020, Iberdrola has reduced its direct CO<sub>2</sub> emissions (Scope 1) by 1 million tonnes of its production facilities, collocating its emissions per MWh produced among the lowest, compared to other international and domestic energy firms. If we compare the emission intensity of Iberdrola in 2019 with the ones from its direct competitors Enel and NextEra, it is evident from the *Figure 10* that the values of Iberdrola are almost a third in the first case and a half in the second case. The value in 2020 is even lower by 12 gCO<sub>2</sub>/kWh. This environmental pattern can be confirmed also by looking at the numerous installed facilities that generate renewable energy: more than 41% of the energy produced comes from renewable sources and in 2020 it has avoided the consumption of more than 250 million of GJ of energy that would have been generated from

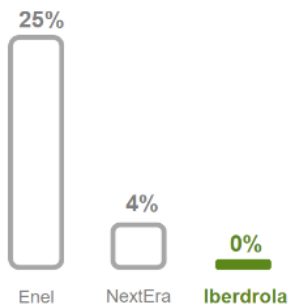


Figure 10: CO<sub>2</sub> emissions in gCO<sub>2</sub>/kWh.



Source: Company data

Figure 11: Coal and Fuel-oil of the tot. installed capacity in %, 2020.



Source: Company data

fossil fuels. Looking again at its competitors, Iberdrola does not manage any coal or fuel-oil plants (Figure 11). According to its investment plan, Iberdrola has set a goal of reaching global carbon neutrality by 2050 and reducing its emissions intensity to 50 gCO2/kWh globally by 2030. It is an ambitious plan, but we believe that Iberdrola has the right energy mix to achieve the target, following the investment plan 2020-2025.

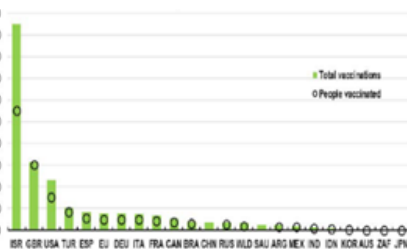
Regarding the Social and the Governance aspects, Iberdrola confirms its leading role among its peer with several social projects launched by its foundation Fundación Iberdrola (e.g. the Corporate Volunteering Programme and Electricity for All) and with a strong diversified Board of Administration (43% of women) that is responsible of over 37 thousand of employees across the world.

## 2. Macroeconomic environment

In the last year COVID-19 has changed our lives, our habits and global economies. Fortunately, the recovery is going faster than expected thanks to the development of vaccines and the vaccination campaigns. These strong expectations are also easily recognizable in financial and commodity markets, such US government long term bond yields and oil prices pulling back to pre-pandemic level. However, uncertainty remains, and the situation may change as vaccine may be ineffective with new virus mutations or implementation of vaccination campaigns slows down in some countries. Despite the foreseen global GDP growth of 5.5% in 2021 and 4% in 2022, it is probable that the divergencies will arise in recovery pace level across economies and sectors. Another determinant factor for divergences in recovery is differentiated fiscal support, in fact the European Union, through Next Generation EU funds and together with other developed economies such as Japan and USA (e.g. Biden 1.9\$ trillion dollar stimulus), have showed impressive fiscal support for 2021, while, in emerging and developing economies, fiscal support plans have been more limited and unable to guarantee the same accommodative fiscal policies as advanced economies.

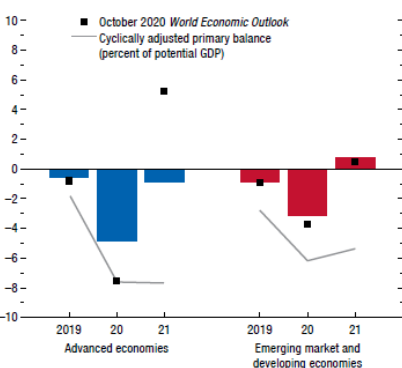
It is fundamental to note that another economical risk associated with slower vaccination campaigns, is the need for further lockdown periods that will ultimately hamper the recovery of the economy. In general, GDP are expected to remain below the pre-pandemic trend up until 2024 for many countries, assuming an annual global GDP growth of 3.3% after 2022. According to the estimates of OECD, Spain Real GDP will grow by 5.7% in 2021 and by 4.8% in 2022, in Brazil by 3.7% and by 2.7%, in Mexico 4.5% and 3%, in UK 5.1% and 4.7% and USA

Figure 12: Vaccinations per hundred people, March 2021



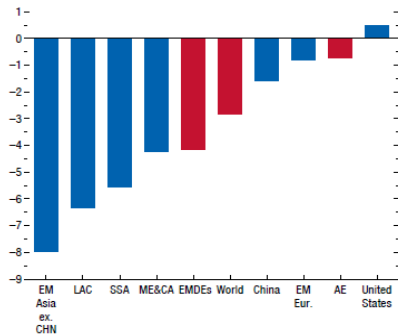
Source: OECD

Figure 13: Change in structural primary fiscal balance, % of potential GDP 2019-2021



Source: IMF

Figure 14: Medium term GDP losses relative to pre- COVID19, by region



Source: IMF

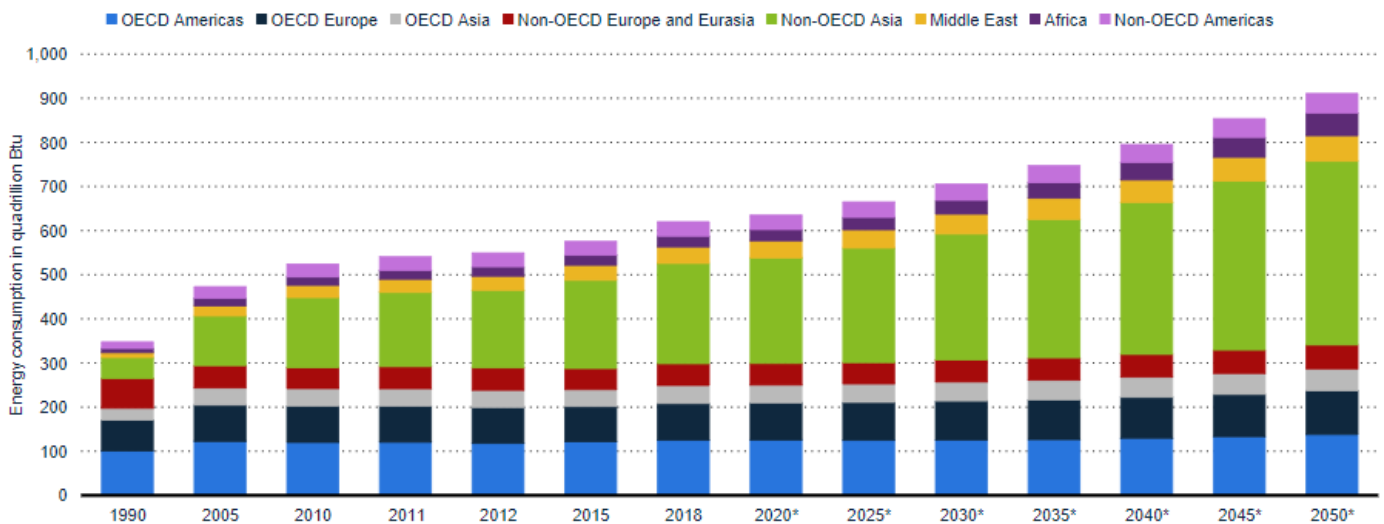
(with the highest increase if compared to 2020 loss) 6.5% in 2021 and 4.0% in 2022<sup>4</sup>.

Once again, it is important to state that Iberdrola, operating in different geographies will enjoy the diversification in terms of recovery of economies across the world.

## 2.1 Energy outlook

The energy sector has been highly impacted by COVID-19 pandemic and has recorded impressive drops on various fields. According to IEA<sup>5</sup>, investments on energy decreased by 18%, total energy demand by 5.3% and oil demand by 8.5%, which was one of the main drivers for a decrease in CO<sub>2</sub> emissions (energy related) by 6.6%. According to Bloomberg New Energy Outlook 2020, despite a general downturn in the energy sector in 2020, renewables energy contribution rose by 0.9%. Energy demand is expected to recover pre pandemic levels only in 2023 (growing at 9% over this period), driven mainly by an increase in emerging markets (in particular India), while advanced economies will show a descending trend. However, at YoY growth of 0.7%, energy demand is estimated to increase from 419 EJ in 2019 to 516 EJ in 2050, considering the sharp decrease in 2020 due to COVID-19 pandemic.

Figure 15: Global energy consumption worldwide from 1990 to 2018, with a forecast until 2050, by region (in quadrillion British thermal units)\*



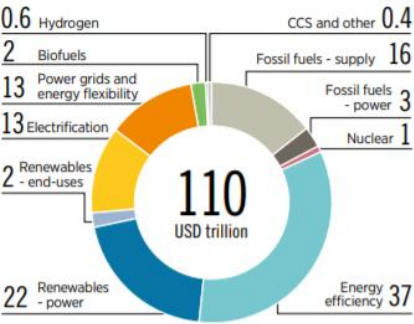
Source: EIA

It is important to underline that, in line with closures carried out by Iberdrola, coal demand is foreseen to decrease by 24% in 2050 with respect to 2019 levels.

<sup>4</sup> International Monetary Fund, 2021, "World economic outlook".

<sup>5</sup> International Energy Agency, 2020, "World Energy Outlook 2020".

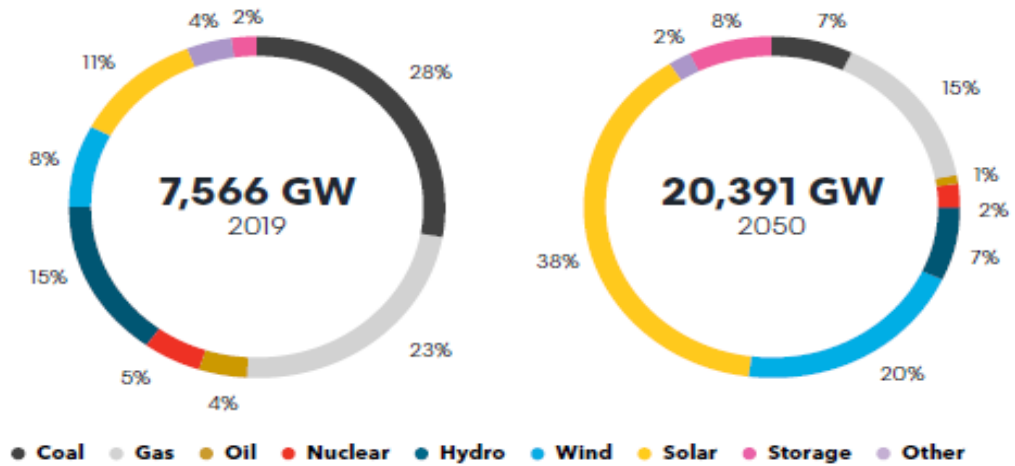
Figure 16: Energy investments in billion €, between 2016 and 2050.



Source: IRENA

Shifting the focus on the sources of production and installed capacity, by 2050 we will assist to an increasing importance of solar and wind sectors as sources of energy, contributing to the 36% and 22%, respectively, of the total energy production (Figure 17), covering more than half share of renewables sources, reaching 85% of total energy production against 15% from non-renewables sources such as oil, coal, nuclear and natural gas. The forecasted growth is outstanding if we consider that, only five years ago, in 2015 the renewables sources accounted only for 24% of total energy production. In order to sustain this incredible change in energy production, total installed capacity will be almost threefold in 2050 (from 7,566 GW in 2019 to 20,391 GW in 2050), with renewables capacity increasing from 35% to 68% in 2050, mainly thanks to the rising importance of wind and photovoltaic. According to IRENA's Global Renewable Outlook: Energy Transformation 2050 (Figure 16), renewables investments will occupy a significant share together with electrification, and electricity efficiency in cumulative energy sector investments over the period to 2050. As it emerges from these projections, it is clear that renewables will gain more and more importance, and will not have a marginal position within the global energy sector. This transition will be also helped by governments and regulators through the enactment of agreements such as Paris Agreement on climate change, European Green deal, the Green New Deal in United States.

Figure 17: Global Installed Capacity by mix in GW, from 2019 to 2050.



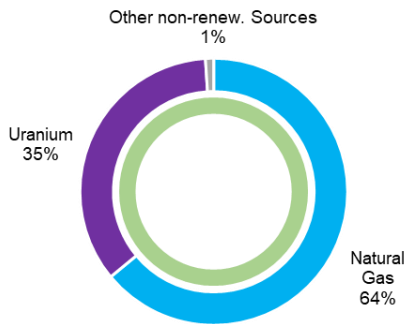
Source: Bloomberg NEF

## 2.2 Energy prices

As a utility company that has built its profit also thanks to the generation and supply of energy from non-renewable sources, Iberdrola's profitability is partially influenced by the movements of commodity prices that the company utilises. According to the Sustainability Report in 2020, Iberdrola has consumed more

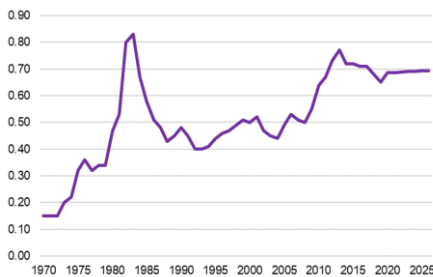


Figure 18: Energy consumption from non-renewable sources in %, 2020



Source: Company data

Figure 19: Uranium prices in \$/MMBtu, between 1970 and 2026



Source: EIA

Figure 20: Natural gas prices in \$/MMBtu, between 1970 and 2026



Source: EIA

than 750 million GJ of fuel, which 64% comes from natural gas, 35% from uranium and the remaining 1% from other non-renewable sources (diesel, fuel-oil, etc.). Looking at these data, it is evident that the consumption of uranium and natural gas is predominant, and the respective future prices can influence the profitability of the company, if unmonitored. In order to reduce uncertainty, Iberdrola makes use of financial derivatives and long-term energy sales agreements. These two measures allow to pass the energy prices risk to the final customers.

Starting from the uranium, it is mainly used by Iberdrola’s nuclear power plants located in Spain and it can be mined from several different minerals like pitchblende, uraninite and carnotite. The top three countries that extract uranium are Kazakhstan, Canada and Australia, and provide more than 60% of the annual supply, creating a unified common market throughout the world. The price of uranium is influenced especially by four factors: nuclear power demand, global supply sources, global inventories and macroeconomic variables. The nuclear energy is a technology that is perceived greener than fossil fuels and, as long as other disasters like Chernobyl or Fukushima do not happen, the demand of uranium is predicted to be steady over the following years. Together with a stable political situation in the producing countries and already build-up inventories, the uranium price is predicted to moderate increase up to 2026, according to the *Annual Energy Outlook 2021* by EIA<sup>6</sup>, from 0.686 \$/MMBtu in 2020 to 0.694 \$/MMBtu. Even if it is a slight increase, we have taken this value into consideration in the calculation of direct cost connected to nuclear plants.

Another determinant resource is natural gas, which is the major fuel of cogeneration and combined cycle plants managed by Iberdrola. We can distinguish from two major types of natural gas, shale gas and coal-bed methane, and the major three producers are USA, Russia and Iran. Since there is a limited number of natural gas extracting points and many consumers have restricted consumption alternatives in the short term, small variations in the supply of or demand for natural gas can cause significant deviations from the mean. Usually, the demand for energy sources follows the economic growth and this trend can be noticed also in the forecast provided by EIA in the *Annual Energy Outlook 2021*. The price incorporates a rise in future economic activity and increases from 2.448 \$/MMBtu of 2020 to 3.327 \$/MMBtu of 2026. Since natural gas will still be largely used by Iberdrola in 2026, this upswing has been incorporated in our calculations, in order to predict possible higher direct cost arising from the procurement of gas.

<sup>6</sup> Energy Information Administration, 2021, “Annual Energy Outlook 2021”.

### 3. Valuation

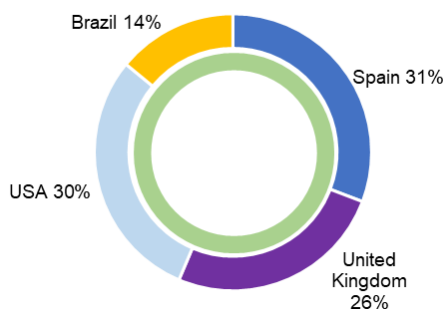
In order to value Iberdrola and to achieve a target price, we have developed a Discounted Cash Flow Model. We have used as terminal value  $g$  (2%) in order to account for future growth of the company, considering long-term inflation of Spain and of the EU area more in general. We believe that, after the massive investment plan carried out by Iberdrola, cash flows will be able to stabilize and, being the utility sector rather stable, a 2% growth may be consistent with our analysis. Finally, the resulting share price from the DCF model is 11.99 € per share. This price leads us to recommend a HOLD position on the stock, that is also confirmed by the Peers Valuation presented in the 3.7 Paragraph.

The Discounted Cash Flow Model forecasted period lasts 6 years and goes from 2021 to 2026. After the completion of the investment plan in 2025, we believe that by 2026 the company cash flows will be stabilized and able to sustain a constant perpetual growth in the following years. We have decided to estimate Revenues and Gross Margins at each business unit level, calculated in Euro, which is the currency used in the location of Iberdrola headquarter (Spain). Afterwards, we have estimated other operating costs and CAPEX at corporate level. Subtracting the sum of Net Personal Expenses, Net External Services and Taxes (other than Income Tax) to the overall Gross Margin, we have calculated the future EBITDA to which we have deducted the depreciation and amortization, calculated on future estimates of PPE and Intangible Assets, in order to retrieve the corporate EBIT. From EBIT we have derived the NOPLAT (using an assumed tax rate of 25%) which is the starting line of free cash flow computations, used in the model. In the following paragraphs we have deepened the analysis of the calculations of the most important captions.

#### 3.1 Networks

Network is the most important business of the company because it accounts for almost 50% of the Total Gross Margin and for the 48% of the Total EBITDA. In 2020 Iberdrola distributed 224,998 GWh of electricity and 59,134 GWh of Natural Gas across Spain, United Kingdom, United States and Brazil. Across these countries, Iberdrola can count on 1,206,783 km of power lines that can use in order to provide the best service to its own customers. EDP in 2020 realized an EBITDA of 0.9 billion € from its networks segment (and a total EBITDA of 3,9 billion €), and Enel presented an EBITDA of 7.4 billion € from Networks (considering a total EBITDA of 16.8 billion € for 2020). In the first case, for EDP the EBITDA Network accounted for the 24 % of the Total EBITDA, whereas in the second case, for Enel it accounted for the 44%.

Figure 21: RAB per country in %, 2020 estimate



Source: Company data



With 31.1 billion € of Regulated Asset Base in 2020, Iberdrola intends to achieve a final sum of € 47 billion by 2025 divided by geography as follows: 40% United States, 20% United Kingdom, 23% Spain, 17% Brazil. As of 2020, RAB is distributed for 31% in Spain, 26% in United Kingdom, 30% in USA and 14% in Brazil. As it is possible to notice, the biggest increase in RAB will be dedicated to the United States and to Brazil with, respectively, an increase of 95% and 84%.

As it was said before, the network business is mainly based on regulations by government of each country that determines the remuneration that belongs to every player in the market. This remuneration can be calculated upon the sum of the investments made by a company and the final resulting value is a percentage. Starting from this result, we can fundamentally retrieve the EBIT for each country, which is practically determined by each legislator.

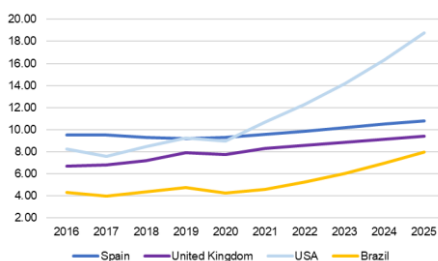
Taking into consideration Spain, the organization in charge of the regulation and supervision of the energy sector is Comisión Nacional de los Mercados y de la Competencia (CNMC). In Spain, Iberdrola manages 270,129 km of power lines and has distributed almost 88,390 GWh to its clients in 2020.

The decree that coordinates the energy market and more specifically the network segment is built on the Electricity Industry Law 24/2013 of 26 December 2013, as further developed by various royal decrees and ministry orders. As it was specified before, the regulatory model is based on recognised historical investment, remunerating capital for depreciation and certain operation and maintenance costs. In addition, every year the Regulated Asset Base is expanded to include the recognised investments made during the period. Quality incentives and losses (technical and commercial) are added to this.

On 20 November 2019, the fixed remuneration rate applicable in the upcoming six-year regulatory period 2020-2025 was set and published in the Official Spanish State Gazette (Boletín Oficial del Estado – BOE) (Pre-Tax WACC 5.58%). On 19 December 2019 the applicable methodology was established and published in the BOE. Before that date, the remuneration was linked to the 10 Year-Treasury Bond.

Since the remuneration percentage has been established by the legislator until 2025, we have calculated the return on the Regulated Asset Base (RAB) keeping that percentage fixed all over the years of forecasting period. Thus, the main value driver for revenue forecast has been the RAB throughout the years. We have started our valuation from the projections of the Regulated Asset Base made by the company and increased these estimates by the investments announced in the strategic outlook 2020-2025. Given the previously mentioned importance of the Network segment for Iberdrola, we believe that these

Figure 22: RAB per country in billion €, from 2016 to 2025



Source: Company data and analyst estimate

investment estimates can be considered realistic and we have taken into consideration these data into our analysis. In order to maintain fixed the financial rate of return decided by the regulator, we have calculated the EBIT from the RAB and then retrieved the revenues and gross margins, necessary for our valuation purposes.

As it was declared in the strategic outlook 2020-2025, the company is going to expand the network business in Spain, from 9.3 billion € in 2020 to 10.81 billion € in 2025 of the Regulated Asset Base dedicated to the country in five years' time.

In the United Kingdom Iberdrola operates through its subsidiary ScottishPower Ltd, which manages the systems called SP Distribution (SPD), SP Manweb (SPM) and SP Transmission (SPT). Across the country the company owns 110,264 km of power lines and in 2020 has distributed 31,738 GWh of electricity.

The regulator of the English market is called Office of Gas and Electricity Markets (OFGEM) and the framework of remuneration for electricity transmission and distribution activities follows a model on price control, based on the recognised cost of capital, the depreciation of assets, and operating and maintenance costs. The regulators do not establish the Pre-tax WACC like in Spain, but a predetermined return on equity (ROE) that has similar feature of the previous measure.

The actual regulations for SPD and SPM are inspired by the RIIO ED1 framework and for SPT by the RIIO T1 framework. The last regulatory revision for electricity distributors is valid from April 2015 to April 2023. After those years, we believe that the financial rate of return will be maintained similar for both RIIO ED1 and RIIO T1 to the previous 8 years period. Recognised ROE after tax (in real terms) is 6% for SPD and SPM and 7% for SPT. We have used a similar approach as for Spain in order to retrieve revenue and gross margin.

Between 2020 and 2025, the company has planned in its strategy to expand the network business in UK, from 8.07 billion € in 2020 to 9.40 billion € in 2025 of the Regulated Asset Base.

The third country in which Iberdrola network's presence is strong is the United States of America, where the company operates through its listed subsidiary Avangrid. Totally the company manages 170,821 km of power lines and has distributed 38,012 GWh of electricity and 59,134 GWh of natural gas in 2020.

The network business framework in the USA is different from the one in Spain and more similar to UK approach. One big difference from the previous two countries is that the business is more dispersed, since Avangrid can count on several subsidiaries that operates in different American states. Firstly, the two

companies based in New York called New York State Electric & Gas (NYSEG), with a 3-year contract starting from April 2020 (base ROE after tax of 9% for electricity distribution) and Rochester Gas and Electric (RG&E), with a 3-year contract from April 2020 (base ROE of 9%). Then another important player is Central Maine Power (CMP), in Maine, whose annual rates are in force since 1 July 2014. In February 2020, MPUC (Maine Public Utilities Commission) made public CMP's new remuneration framework, with an ROE of 9.25% and an effective period running from 1 March 2020 through to 28 February 2021. This announcement extends the same regulation that has been in force in Maine for the last six years for its electricity distribution business (base ROE of 9.25%) and transmission business (base ROE of 10.57%) and afterwards we believe that, looking at historical data from 2014, the remuneration rate will not be subjected to major revision. Similar to the CMP is the company called United Illuminating (UI), from Connecticut, with rates in force since 1 January 2017, for its electricity distribution business (base ROE of 9.1%) and transmission business (base ROE of 10.57%). The ROE calculation method for the transmission business is being revised by the regulator called FERC, but we believe that it will be maintained fixed in the following years, achieving a very similar return of Regulated Asset Base. Finally, Avangrid controls also these minor distribution companies: Maine Natural Gas Corporation (MNG), Connecticut Natural Gas (CNG), Southern Connecticut Gas (SCG) and Berkshire Gas (BG). Their ROE values range from 9.25% to 9.70%, in line with the other remuneration standards.

In addition, it is important to remark that the regulators' schemes have been designed with the objective of reducing the risk to which Iberdrola is exposed with tools for reconciliation, deferral and costs provisions. As a regulated distributor, Iberdrola passes on the gas and electricity costs to its final clients, therefore containing any influence by fluctuations in demand.

As it was declared in the strategic outlook 2020-2025, the company is going to expand the network business in USA, from € 9.26 billion in 2020 to € 18.90 billion in 2025 of the Regulated Asset Base in the country in five years.

Taking into consideration the above-mentioned data, we have followed the similar previous approach in order to calculate EBIT and then revenues and gross margins.

In Brazil, Iberdrola operates through another subsidiary called Neoenergia, which owns 655,569 km of power lines and has transmitted 66,857 GWh of electricity in 2020. Similar to the United States, Neoenergia operates through other several subsidiary network companies. The most important are Elektro Redes, S.A. (ELEKTRO), operating in the states of São Paulo and Mato Grosso do Sul, with

Pre-tax WACC of 8.09%; in force until August 2023; Companhia de Eletricidade do Estado do Bahia (Coelba), operating in the state of Bahia, with Pre-tax WACC of 8.09% in force until April 2023; Companhia Energetica de Pernambuco S.A. (Celpe), operating in the state of Pernambuco, with Pre-tax WACC of 8.09% in force until April 2023; Companhia Energética do Rio Grande do Norte (Cosern), operating in the state of Rio Grande do Norte, with Pre-tax WACC of 8.09% in force until April 2023.

The Brazilian energy regulation is composed by a collection of price caps that is updated every four or five years, according to each company's concession contract, with tariffs being revised annually by the legislator based on predetermined parameters. Since the operating Pre-tax WACC have been stable over the years in different Brazilian regions, we believe that the analysis of the legislator will remain similar in the following years.

Similar to the United States, the Agência Nacional de Energia Elétrica (ANEEL) has established that electricity distribution companies can transfer the cost of electricity supply to final customers, thanks to regulated tariffs.

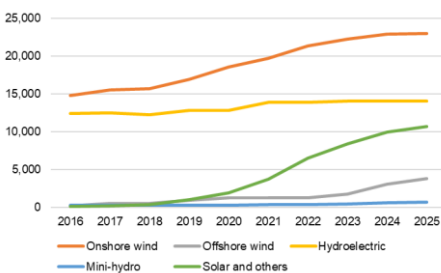
Following the outlook between 2020 and 2025, the company is going to expand the network business in Brazil, from € 3.98 billion in 2020 to € 7.99 billion in 2025 of the Regulated Asset Base in the country in five years. Again, we have used the same forecasting approach of other geographies, starting from the projection of RAB in Brazil and then retrieved the EBIT, revenues and gross margin.

On a global perspective, we can observe that the network business will remain the main source of income in the following years. To sum up our valuation on the Network segment, is possible to notice that the United States and Brazil geographies segments present higher margins of profitability, if compared respectively to United Kingdom and Spain (higher ROE and WACC on average). This vision is also confirmed by Iberdrola strategic decision, since, as it was stated before, the company has decided to invest the majority of resources allocated to the network segment in USA and Brazil.

### **3.2 Renewables**

The renewables segment is the one that enjoyed the most stunning increase in the previous years, almost doubling its revenues between 2016 and 2020. This growth is also reflecting the outstanding popularity of a sector that is becoming fundamental not only for a utility company but for the entire energy market. Regarding the before mentioned intention of becoming carbon-neutral by 2050, Iberdrola believes that this business line will be decisive for the company and has decided to dedicate more than 50% of its investment plan, focusing both on

Figure 23: Total installed capacity in MW, from 2016 to 2025.



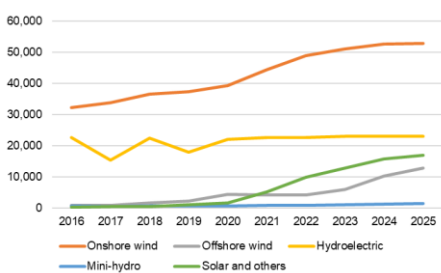
Source: Company data and analyst estimate

consolidating its position in the existing geographies and expanding its presence also in other favourable countries.

In 2020, Iberdrola had an overall installed capacity of 34,917 MW which is divided between 4 different renewables sources: 19,833 MW of electricity from wind power plants (18,575 On-shore and 1,258 Off-shore), 12,864 MW from hydroelectric plants, 303 MW from mini-hydro power plants, 1,922 from solar plants and other minor sources of solar energy. On the electricity production side, the company’s electricity output was 68,064 GWh which can be divided again in 43,782 GWh from wind sources, 22,034 GWh from hydroelectric, 382 GWh from mini-hydro plants and 1,567 GWh from solar sources. As we can see, for Iberdrola the main renewable source of energy is wind.

An important measure of efficiency in renewable sector is named load factor, which can be considered as a ratio of “efficiency” and can be calculated dividing the actual kilowatt-hours used in a given period, by the total possible kilowatt-hours that could have been used in the same period. It depends on natural resources (e.g. the intensity of wind), but also on the plants’ availability and on the energy transport networks.

Figure 24: Total electricity production in MW, from 2016 to 2025.



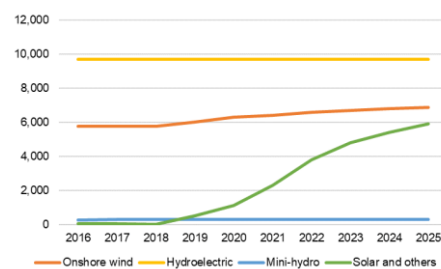
Source: Company data and analyst estimate

Figure 25: Historical Load factor for renewable energy source

	Total Load Factors				
	2016	2017	2018	2019	2020
Onshore wind	24.77%	24.90%	26.66%	25.31%	24.22%
Offshore wind	42.84%	17.21%	34.46%	26.18%	39.75%
Hydroelectric	20.84%	13.98%	20.89%	15.92%	19.55%
Mini-hydro	25.93%	14.84%	25.24%	23.05%	25.69%
Solar and others	25.68%	17.44%	11.87%	12.19%	9.31%

Source: Company data and analyst estimate

Figure 27: Spain installed capacity in MW, from 2016 to 2025.



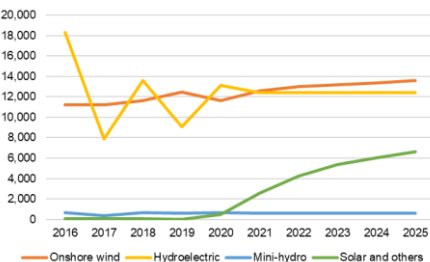
Source: Company data and analyst estimate

According to our valuation methodology, we have calculated individually the revenues and gross margins from the renewable segment for each geography in which Iberdrola operates. The main value drivers were the future installed capacity and load factors, which we have assumed to be equal to their historical average for each renewable source of energy. With these two values we have calculated with the inverse formula of the load factor the future electricity output for every country and renewable source. Finally, we have computed the respective future revenues multiplying the average historical selling price of each country by the electricity output.

In order to calculate the final Gross Margins for valuation purposes, we have maintained the gross profit margin average % of past years, since the renewable sector presents very low and stable variable costs.

More in detail, in Spain, Iberdrola accounts for an installed capacity of renewable energy of 6,292 MW of wind power, 9,715 MW of hydroelectric power, 303 MW of mini-hydro power and 1,100 MW of photovoltaic power.

Figure 28: Spain electricity production in GWh, from 2016 to 2025.

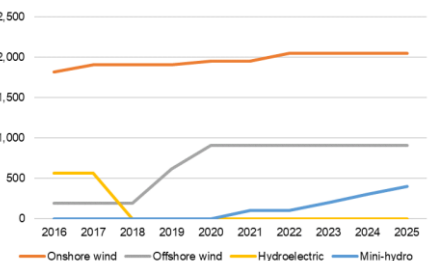


Source: Company data and analyst estimate

For what concerns profitability standards and legislative framework, during the years several decrees followed in order to regulate this sector. For instance, the wind and mini-hydro capacity installed before 2013 had a specific remuneration regime in accordance with Law 24/2013 and Royal Decree 413/2014. This regime, taking into account market income and a supplement per MW, secured a certain level of reasonable profitability before taxes to the plants, equal to 7.398%. In addition, at the end of 2019, RDL 17/2019 came into force, expanding the period for the value of reasonable profitability until 2031.

Furthermore, distinct remuneration parameters (such as estimates of prices and past prices, too) for future years for plants are reassessed in observance of RD 413/2014 at the end of each regulatory half-period of three years. This process of review is computed taking into account if the pre-decided limits (bands) have been passed during last three years, and the existing facilities divided according to several factors such as commissioning year and size, standard investment values, peak factor, useful regulatory life, operating and maintenances expenses and hours were attributed to those plants.

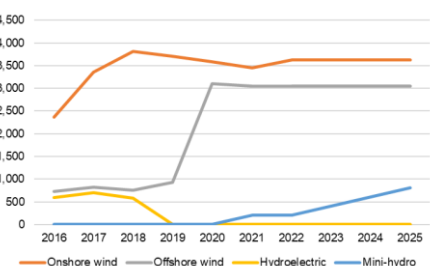
Figure 29: UK installed capacity in MW, from 2016 to 2025.



Source: Company data and analyst estimate

Lastly, for renewable plants commissioned after 2013, in order to have the access to the remuneration regime above mentioned, the company had to compete in bids (took place in 2016 and 2017), otherwise it only received the market income (or Power Purchase Agreements).

Figure 30: UK electricity production in GWh, from 2016 to 2025.



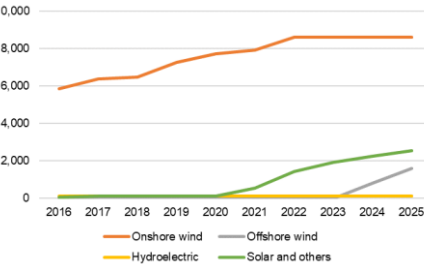
Source: Company data and analyst estimate

According to our estimates and company's strategy outlook, Spain will produce circa 33,000 GWh of electricity from renewable sources thanks to a future installed capacity of 22,810 MW.

In United Kingdom, in 2020, Iberdrola had a total of 2,858 MW from wind power installed capacity, taking into account also its participation of 50% in the wind parks of West of Duddon Sands (389 MW) and the East Anglia (714 MW). Even if it is almost negligible, Iberdrola can also dispose of 6 MW from installed solar capacity in the country.

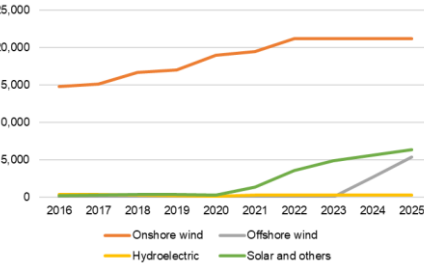
For what concerns regulatory framework in UK, regulators establish minimum Renewable Obligation Certificate (ROC) requirements per MWh sold to electricity suppliers and ultimately fix the price at which the remaining part must be acquired. This process finally results to a price threshold which is the final price of the ROCs.

Figure 31: USA installed capacity in MW, from 2016 to 2025.



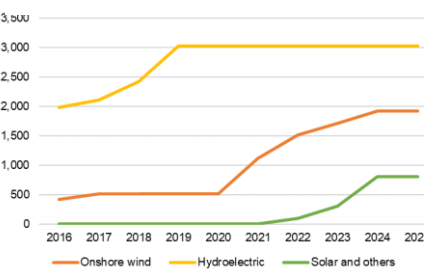
Source: Company data and analyst estimate

Figure 32: USA electricity production in GWh, from 2016 to 2025.



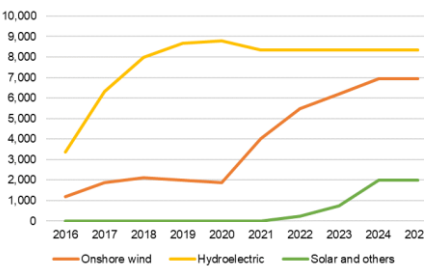
Source: Company data and analyst estimate

Figure 33: Brazil installed capacity in MW, from 2016 to 2025.



Source: Company data and analyst estimate

Figure 34: Brazil electricity production in GWh, from 2016 to 2025.



Source: Company data and analyst estimate

Moreover, it is important to underline that renewable plants established after 1 April 2017 may take advantage of the “Contract for Difference” (CfD) remuneration scheme, which basically cancels market risk for 15 years. The fixed prices for these projects under the CfD scheme are decided singularly according to the nature of the specific project through public tenders. The counterparty, called “The Low Carbon Contracts Company”, basically acts as guarantor of these prices and it is responsible for funding its potential payments by imposing a levy on suppliers according to their market share, therefore credit risk in relation to this counterparty is basically zero.

Following our estimates and company’s strategy outlook, the firm will reach circa 7,490 GWh of electricity produced from renewable sources, thanks to a future installed capacity of 3,364 MW in 2025.

Same as the network business, in the USA, Iberdrola operates through Avangrid, which manages an installed capacity of 7,721 MW in wind farms and 143 MW in solar plants and lastly 118 MW of hydroelectric plants.

It is important to highlight that almost 68% of the energy produced is sold through fixed-price long-term contracts. Moreover, if the hedges are taken into account, the share of energy sold at fixed price rises to 82%. Therefore, only the remaining 18% of the energy produced is sold at market conditions quite rapidly. This framework guarantees a high degree of predictability and stability in revenues.

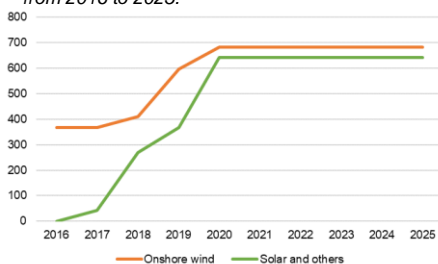
According to our estimates and company’s strategy outlook, USA’s produced electricity from renewable sources will amount to circa 33,000 GWh, thanks to a future installed capacity of 12,880 MW in 2025.

As the network business, in Brazil Iberdrola operates through Neoenergia, which manages an installed capacity of 516 MW in wind farms and 3,031 MW from hydroelectric plants.

Similar to USA, it is important to outline that the majority of electricity produced by wind power plants is sold under long-term contracts (PPAs) at a fixed price with the country’s main distributors. On the contrary, market prices are used for shortages (that must be acquired) and/or surpluses (which must be offered), which may arise in the production contracted with distributors over fixed periods of four years. Regarding hydroelectric facilities, the mechanism is really similar and circa 60% of produced electricity is sold to distribution firms under long-term contracts.

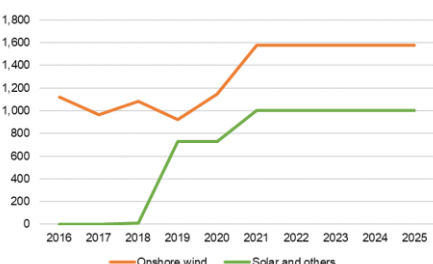


Figure 35: Mexico installed capacity in MW, from 2016 to 2025.



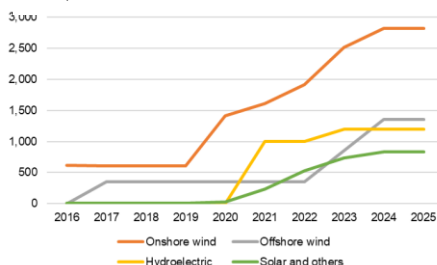
Source: Company data and analyst estimate

Figure 36: Mexico electricity production in GWh, from 2016 to 2025.



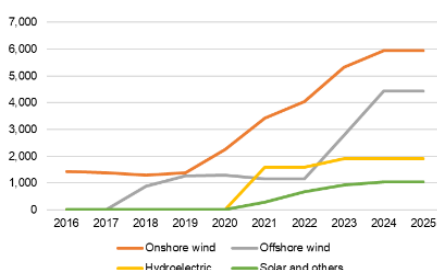
Source: Company data and analyst estimate

Figure 37: Other countries installed capacity in MW, from 2016 to 2025.



Source: Company data and analyst estimate

Figure 38: Other countries electricity production in GWh, from 2016 to 2025.



Source: Company data and analyst estimate

According to our estimates and company's strategy outlook, Brazil electricity production will reach approximately 17,250 GWh through future installed capacity of 5,747 MW in 2025.

In Mexico, Iberdrola manages an installed capacity of 682 MW in wind farms and 642 MW from solar plants. The framework is slightly different from other countries and it is divided in three different type of sales contracts: (i) sale of power to Comisión Federal de Electricidad (CFE) under long-term contracts at fixed prices (La venta III, 103 MW); (ii) sale of energy to third parties, usually adopting a discount with respect to official price announced by CFE under the self-supply regime; (iii) sale to the free market. In addition, Mexican regulators oblige electricity retailers in the free market to show Certificates of Clean Energy at the end of year for a share of their energy sales.

According to the company's strategy outlook, Iberdrola has not planned any additional installed capacity expansion, so we have kept fixed the installed capacity at 1,324 MW as of 2020, in order to project the production by Mexican facilities of 2,577 GWh in 2025.

In the rest of the world, the capacity is highly fragmented through many different countries. More specific, we would like to highlight the facility in Germany, where Iberdrola owns and operates the Wikinger wind farm with a capacity of 350 MW. In accordance with German laws, the plant, for the first twelve operating years, will take advantage of fixed price for the energy produced. In the remaining countries, Iberdrola currently has an installed capacity of 1,414 MW in wind farms and 31 MW in solar plants. Applicable regulations present a difference between two main frameworks: sales at the regulated tariff (Portugal, Greece, Cyprus, France and Hungary), and sales at market price (Australia, part of the power in Greece and Romania).

According to Iberdrola expansion plan, at the end of the forecasting period, the estimated installed capacity will be 6,195 MW and will produce circa 13,337 GWh of electricity from renewable sources.

### 3.3 Generation & Supply

As it was said before, in the next decades this business segment is going to be less important for the company in terms of assets owned. In fact, in the company's investment plan, it is clear that Iberdrola will not invest many resources on this business unit in the following years, as a matter of fact Iberdrola will dedicate only the 9% (6 billion €) of the allocated resources to Generation & Supply. In particular, this amount will be mostly reserved to boost the retail contracts of energy supply in liberalised market and to enhance the



Smart Solutions offer and the technological advancements. However, this general reduction in number of assets will not include Mexico facilities, since Iberdrola has planned a full exploitation of the area until 2050.

Currently, in the end of 2020, Iberdrola can count on an overall production from non-renewable sources of 94,777 GWh, which are divided in 24,316 GWh from nuclear plants, 63,673 GWh from CCGT, 6,551 GWh from cogeneration plant and 237 GWh from coal-based plant (last year of production).

In order to forecast the business results, we have focused our analysis on the retail part, since, as we have stated before, it is going to be the dominant aspect, since the non-renewable generation part will be penalized by Iberdrola's green mission and strategic plan. We have selected as the main value driver the number of energy retail contracts that the company has stipulated with its customers in each market geography. We have started our analysis from the projected number of contracts by geography by the company until 2025. Iberdrola has planned a total number of 39 million of contract in 2025 divided between 20 million in Spain, 10 million in the United Kingdom and 9 million in other countries. In 2020, the number of contracts in Spain was 17.4 million, in UK 6.8 million and 1.8 million in other countries. We believe that this contract expansion plan is actually too optimistic regarding the strong increase in numbers, so we have assumed a more conservative estimate, especially for the data from IEI (Other countries), which we have projected to final value of 6 million in 2025, given the difficulty to penetrate new foreign markets where threat of competitors may be stronger.

Regarding the Brazilian and the Mexican retail markets, the context is quite different from the other geographies. In fact, in both countries Iberdrola has stipulated mainly long-term agreements with CFE in Mexico and long-term purchase and sale agreements with the electricity distributors Coelba and Celpe in Brazil.

More specifically, in 2020, approximately 69% of the electricity generated in Mexico was sold under PPA to the CFE and to other large industrial clients, and since the facilities in Mexico are mainly gas-intensive, this kind of agreements transfer the risk associated with the purchase price of gas to the acquirer. The remaining electricity is sold to clients (either under self-supply or in the free market) at a price which takes into account the official basic supply tariffs established by the CFE.

The functioning is similar in Brazil, where Iberdrola has stipulated long term power purchase agreements for more than 71% of the total electricity sales in the country. The remaining percentage is sold in the free market.

Figure 39: Closing schedule of nuclear plants

	Closing schedule	
Almaraz I	nov-27	44.2 years
Almaraz II	oct-28	44.3 years
Ascó I	oct-30	45.8 years
Cofrentes	nov-30	45.6 years
Ascó II	sep-32	46.4 years
Vandellós II	feb-35	46.9 years
Trillo	may-35	46.7 years
	<b>Average life</b>	<b>45.7 years</b>

Source: Company data

Regarding Spain, Iberdrola manages an overall 9,225 MW of installed capacity from traditional sources that are nuclear (3,177 MW), combined cycle (5,695 MW) and cogeneration (353 MW). Since it is the only geography that exploits the nuclear power, the energy derived from uranium is considerable for Iberdrola, impacting for more than 34% of the overall installed capacity. In 2019, the Government and nuclear generators agreed on a scheduled closure plan up to 2050 for Spanish nuclear plants. Iberdrola foresees the closure of its nuclear plants between 2027 and 2035.

In the United Kingdom's retail business, it is important to highlight that Iberdrola has dismissed during the past five years the energy generation plants based in the country, so the installed capacity is equal to zero. The revenues that stem from this segment come from the sale and purchase of electricity from and to the liberalised market. After the entry into force of the Domestic Gas and Electricity Act 2018, OFGEM sets on a half-yearly basis the maximum prices that suppliers may charge to final customers in observance of "Standard Variable Tariff". This system of price caps was reviewed in 2020 and expanded until the end of 2021. It is highly probable that will be extended again up to the end of 2023.

Following our valuation methodology, direct costs from the Generation & Supply business were estimated thanks to the energy future prices estimates published in the *Annual Energy Outlook 2021* by EIA. We have selected the forecasted energy prices of uranium, natural gas and electricity up until 2026. For the countries (Spain, Mexico and Brazil) we have weighted the respective direct costs proportionally to the energy production for every non-renewable energy source. So, we have used as benchmark for nuclear plants the future prices of uranium and for cogeneration and combined-cycle the future prices of natural gas. For the countries that in 2020 do not manage any conventional generation plant, we have used the forecasted electricity prices as benchmarks for direct costs. In addition, the marginal increase in revenues has been taken into account in the calculation of the final direct cost output. Therefore, the total direct costs assigned to each country of the Generation & Supply segment are directly linked not only to future energy prices, but also to future revenue increases.

After having estimated the direct costs for each geography, we have computed the gross margin for the entire Generation & Supply segment and aggregated to the other gross margin's segments in order to carry on our company valuation.

### 3.4 CAPEX and other operating costs

CAPEX is a decisive measure in the valuation of a company and it is based on funds used to acquire and keep functioning physical assets, like for example facilities, power plants, wind farms and green technology. These assets are

contained in the caption Property, Plan and Equipment (PPE) which, given the nature of the utility sector, is fundamental to carry out the ordinary company activities and covers a major part of the total assets. Another fundamental caption that plays a key role in future organic growth is Other Intangible Assets which includes concessions, licences, computer softwares and research & development expenditures.

In order to carry out our company valuation, we have projected up to 2026 the future value of PPE and Other Intangible Assets which respectively resulted to 45 billion € of CAPEX and 12 billion € of investment in Other Int. Assets. The sum of these two values has been specifically designed on the projected investment in organic growth declared by Iberdrola. In fact, in the strategy outlook 2020-2025, the company has forecasted almost 68 billion of Gross Investment to consolidate its current market share and to enhance primarily the networks and renewables segments. From this estimate, we have decided to exclude the Gross Investment (almost 10 billion) already finalised during 2020. In addition, we have extended the investment period up to 2026 since we have reckoned that an additional year is more conservative and financially sustainable for the company.

Finally, we have computed the other operating costs starting from the Net Personal Expenses: first we have calculated the future number of employees per year, starting from the number of 2020 linking upcoming values to revenue growth, and then the average cost per employee together with the projected inflation of the Euro area. Both Net External Services and Taxes (other than Income Tax) have shown stable historical patterns through the previous years, so we have decided to project them as historical percentages of the total revenues.

### 3.5 WACC

The Weighted Average Cost of Capital has been computed according to the traditional approach, therefore by estimating the cost of debt, cost of equity, a target level of D/E ratio and assuming a fixed tax rate.

Firstly, we have calculated the cost of debt, using the Yield to Maturity of one of the largest and Euro denominated bonds issued by Iberdrola and then we have adjusted it according to the following formula  $YTM - Probability\ of\ Default \times Loss\ Given\ Default$ . PD and LGD correspond, respectively to 1.69% (8 years cumulative probability, then annualized to retrieve the adjusted Rd) and 46.1%, according to Moody’s criteria for the rating attributed to Iberdrola, namely Baa1. Furthermore, the bond used is Iberdrola Finanz 1,621% 29/11/2029 (ISIN: XS1726152108), with a remaining maturity of 8 years, total amount issued 735

Figure 40: YTM Iberdrola Finanz 1,621% 29/11/2029



Source: Bloomberg Terminal

million € and Yield to Maturity equal to 0.205%<sup>7</sup>. After adjusting for PD and LGD, the adjusted Rd was 0.11%.

Cost of equity has been calculated using CAPM model. As risk free rate, it has been taken the yield 30-Year German Government Bond (0.26%<sup>8</sup>), being a European company and having used Eurostoxx to estimate Beta Levered. As Market Risk Premium (MRP), we have assumed a 5.50% return. This value has been established on the basis of two different researches, published by Credit Suisse<sup>9</sup> and KPMG<sup>10</sup>, respectively of 5.30% and 5.75%.

In order to estimate Beta of Equity, we have regressed the last three years of Iberdrola stock performance, against the last three years of Eurostoxx 50 index performance, considered as more reasonable than IBEX 35. Finally, we have found the Beta of Equity (Beta E) equal to 0.74, which led to a total cost of equity equal to 4.34%.

The target Debt-to-Equity ratio has been assumed from historical financial leverage of the company and decreasing trend presented in the past years. The D/E has been 49.02%, resulting from an assumed D/EV ratio equal to 32.90% (ratio of December 2020). This value has been used as a proxy in the WACC computation.

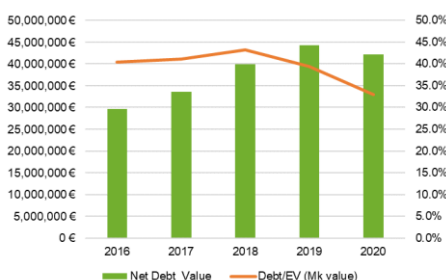
Finally, given the very complex and fragmented tax framework, we have inserted the 25% Spanish marginal tax rate as assumed tax rate for WACC calculation.

On the basis of the above-mentioned assumptions, the final WACC used in the Discounted Cash Flow model resulted to 2.94%.

### 3.6 Exchange rates

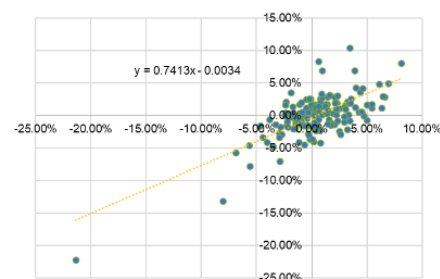
As we have said before, Iberdrola is a multinational that operates in different countries, that can use distinct currencies from one to another. For forecasting purposes, we have expressed our valuation in Euro, since it is the local currency of Iberdrola’s headquarters, but we understand that is important for a future possible shareholder to know the % of revenues that is influenced by movements of different exchange rates between Euro and other currencies. So, we have calculated that between 2020 and 2026, on average the revenues of Iberdrola will generated for the 46% in Euro, 25% in Dollar, 17% in British Pound and for the remaining 19% in Brazilian Real.

Figure 41: Net Debt/EV in '000 €, from 2016 to 2020



Source: Company data and analyst estimate

Figure 42: Regression of Beta Iberdrola against Eurostoxx 50



Source: Bloomberg and analyst estimate

<sup>7</sup> Bloomberg Terminal, April 2021.

<sup>8</sup> Bloomberg Terminal, April 2021.

<sup>9</sup> Credit Suisse Research Institute, 2021, “Credit Suisse Global Investment Returns Yearbook 2021 Summary Edition”.

<sup>10</sup> KPMG, 2021, “Equity Market Risk Premium research, 31 March 2021”

Figure 43: Estimate of future exchange rates

FX rates	Q2 2021	Q3 2021	Q4 2021	Q1 2022	2022	2023	2024
Rate USD/EURO	0.833	0.826	0.820	0.820	0.813	0.826	0.820
Rate BRL/EURO	0.152	0.153	0.153	0.157	0.156	0.153	
Rate GBP/EURO	1.176	1.176	1.176	1.176	1.176	1.205	1.190

Source: Bloomberg Forecast Exchange

According to Bloomberg FX Forecast, the future exchange rates to Euro of these currencies will be generally stable without any major change, as long as macroeconomic events do not transform the major framework. The operating currency in Mexico is the US Dollar. Deepening our analysis, we can notice that the Dollar slightly decreases its value over time, whereas the British Pound increases. If we assume these values as assured and definitive, we can notice that the revenues generated in Dollar could increase in 2024 (last year of forex analysis) by almost 3.5% whereas the revenues generated in British Pound could decrease by almost 2%.

### 3.7 Peers valuation

The selection of comparables may be challenging for unique companies like Iberdrola with operations in many different geographies and business segments. However, we have selected a short list of peers taking into account different countries and three business segments: Renewable, Generation & Supply and Networks. In addition, the multiples adopted have been current values of P/E and EV/EBITDA<sup>11</sup> taken from Bloomberg for our selected peers. We have decided to use these metrics as more suitable for utility (more in general for energy) sector and used the mean resulting from our multiples panel. As it is possible to observe from the table below, Iberdrola values are in line with the ones from its list of competitors. Among the highest multiples for P/E and EV/EBITDA, we can notice the companies Verbund and NextEra energy, which trade above the mean of other peers. This can be explained being companies that are mainly focused on renewable energy, which is typically a sector that trades at higher values than the non-renewable one. The other companies like EDP, Enel, Endesa and E.on rely more on the Generation & Supply business and so they are more sensitive to changes in the electricity demand. The disruption caused by the COVID-19 pandemic can be a possible explanation for trading values below their renewable focused peers. Iberdrola can be considered a company in between the two categories.

<sup>11</sup> Bloomberg Terminal, May 2021

Implied share price from current EV/EBITDA is 11.68 € and from current P/E 2021 11.62 €. These two prices corroborate our final HOLD recommendation resulted from the Discounted Cash Flow Model.

Peers Valuation				
	In million €		As of 7/05/2021	
Selected Peers	EV	Market Capitalization	P/E	EV/EBITDA
Verbund	26,093	24,111	38.24	20.06
National Grid PLC	71,739	38,115	22.01	13.93
EDP	36,149	18,321	20.55	9.43
NextEra Energy Inc	170,848	120,308	32.10	25.65
ENEL	145,651	84,058	32.54	9.74
Fortum OYJ	30,812	20,430	11.17	11.46
Endesa	30,191	23,663	22.82	9.08
E.ON	58,696	27,792	26.03	9.44
<b>Iberdrola</b>	<b>130,921</b>	<b>73,937</b>	<b>20.40</b>	<b>13.60</b>
Median	47,423	25,952	24.43	10.60
Mean	71,272	44,600	25.68	13.60
Max	170,848	120,308	38.24	25.65
Min	26,093	18,321	11.17	9.08
Our Estimation Iberdrola EPS 2021	0.45			
Our Estimation Iberdrola EBITDA 2021	9,555,652			



## 4. Appendix

### 4.1 Financial Statements

#### Restated Income Statement<sup>12</sup>

Iberdrola S.A. And Subsidiaries		Forecast Reformulated Income Statement								
In million €	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	
Revenues	35,076	36,438	33,145	38,504	41,728	45,267	49,077	53,062	55,807	
Supplies	(19,641)	(20,175)	(17,000)	(21,608)	(23,485)	(24,820)	(26,319)	(28,725)	(30,388)	
<b>Gross Margin</b>	<b>15,435</b>	<b>16,263</b>	<b>16,145</b>	<b>16,896</b>	<b>18,244</b>	<b>20,446</b>	<b>22,759</b>	<b>24,336</b>	<b>25,419</b>	
Net Personnel expenses	(2,020)	(2,146)	(2,149)	(2,864)	(3,231)	(3,647)	(4,104)	(4,598)	(4,987)	
Net external services	(2,135)	(2,184)	(2,165)	(2,369)	(2,568)	(2,785)	(3,020)	(3,265)	(3,434)	
Net operating expenses	(4,155)	(4,330)	(4,314)	(5,234)	(5,799)	(6,432)	(7,124)	(7,863)	(8,421)	
Taxes	(1,931)	(1,829)	(1,821)	(2,107)	(2,283)	(2,476)	(2,685)	(2,903)	(3,053)	
<b>EBITDA (Core)</b>	<b>9,349</b>	<b>10,104</b>	<b>10,010</b>	<b>9,556</b>	<b>10,162</b>	<b>11,538</b>	<b>12,950</b>	<b>13,571</b>	<b>13,944</b>	
Depreciation	2,945	2,823	3,063	3,291	3,492	3,653	3,815	3,977	4,145	
Amortisation	684	892	825	773	904	931	958	984	1,012	
Valuation adjustments, trade and contract ass	(254)	(297)	(381)	(311)	(311)	(311)	(311)	(311)	(311)	
<b>EBIT (Core)</b>	<b>5,466</b>	<b>6,091</b>	<b>5,741</b>	<b>5,180</b>	<b>5,456</b>	<b>6,643</b>	<b>7,866</b>	<b>8,299</b>	<b>8,477</b>	
Taxes on EBIT (Core)	(1,253)	(1,242)	(1,254)	(1,295)	(1,364)	(1,661)	(1,967)	(2,075)	(2,119)	
<b>Net Core Result</b>	<b>4,213</b>	<b>4,849</b>	<b>4,487</b>	<b>3,885</b>	<b>4,092</b>	<b>4,982</b>	<b>5,900</b>	<b>6,224</b>	<b>6,358</b>	
Non-Core Result (net of taxes)	(442)	(68)	(3,787)	(204)	(213)	(224)	(236)	(249)	(259)	
Financial expense (net of taxes)	(758)	(852)	(649)	(785)	(821)	(884)	(930)	(970)	(1,001)	
<b>Net Profit</b>	<b>3,014</b>	<b>3,930</b>	<b>52</b>	<b>2,896</b>	<b>3,058</b>	<b>3,874</b>	<b>4,734</b>	<b>5,006</b>	<b>5,098</b>	

#### Free Cash Flow Map

Iberdrola S.A. And Subsidiaries		Free Cash Flow								
In million €	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	
NOPLAT	4,213	4,849	4,487	3,885	4,092	4,982	5,900	6,224	6,358	
Depreciation	2,945	2,823	3,063	3,291	3,492	3,653	3,815	3,977	4,145	
Amortisation	684	892	825	773	904	931	958	984	1,012	
<b>Gross Cash Flow</b>	<b>7,842</b>	<b>8,565</b>	<b>8,375</b>	<b>7,950</b>	<b>8,487</b>	<b>9,566</b>	<b>10,672</b>	<b>11,185</b>	<b>11,514</b>	
Capex	4,976	7,916	3,512	7,676	7,031	7,196	7,361	7,650	7,828	
Change in NWC	611	1,165	(447)	(277)	613	594	498	289	392	
Change in intangible assets	537	260	(1,321)	3,849	1,534	1,561	1,588	1,637	1,669	
Change in Other Core Assets & Liabs	6,811	3,990	956	(1,179)	46	51	54	57	39	
<b>Unlevered Core FCF</b>	<b>(5,093)</b>	<b>(4,767)</b>	<b>5,676</b>	<b>(2,119)</b>	<b>(736)</b>	<b>165</b>	<b>1,171</b>	<b>1,552</b>	<b>1,586</b>	
Non-Op.plat	(442)	(68)	(3,787)	(204)	(213)	(224)	(236)	(249)	(259)	
Change in Non Op.Asset	(1,693)	(1,978)	(886)	247	-	-	-	-	-	
<b>Unlevered Non-Core FCF</b>	<b>1,251</b>	<b>1,911</b>	<b>(2,900)</b>	<b>(451)</b>	<b>(213)</b>	<b>(224)</b>	<b>(236)</b>	<b>(249)</b>	<b>(259)</b>	
<b>Free Cash Flow to Firm</b>	<b>(3,841)</b>	<b>(2,856)</b>	<b>2,776</b>	<b>(2,570)</b>	<b>(949)</b>	<b>(60)</b>	<b>936</b>	<b>1,304</b>	<b>1,327</b>	

Iberdrola S.A. And Subsidiaries		Cash flow from Financing								
In million €	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	
Financing Costs	(1,010)	(1,136)	(865)	(1,047)	(1,094)	(1,178)	(1,240)	(1,293)	(1,335)	
Tax Shield	253	284	216	262	274	295	310	323	334	
After Tax Financing Costs	(758)	(852)	(649)	(785)	(821)	(884)	(930)	(970)	(1,001)	
Change in Net Debt	1,546	2,489	(2,445)	2,068	2,108	1,715	1,470	1,181	1,091	
Change in other financial assets	4,823	1,931	346	(875)	-	-	-	-	-	
Change in Equity	(1,770)	(712)	(29)	2,163	(338)	(772)	(1,475)	(1,516)	(1,417)	
<b>Cash flow from financing</b>	<b>3,841</b>	<b>2,856</b>	<b>(2,776)</b>	<b>2,570</b>	<b>949</b>	<b>60</b>	<b>(936)</b>	<b>(1,304)</b>	<b>(1,327)</b>	

<sup>12</sup> The Financial statements of foreign companies have been translated applying the year-end exchange rate method. This method consists of translating to euros all the assets, rights and obligations at the exchange rates prevailing at the date of the consolidated Financial statements and the average exchange rate for the year for the consolidated income statement items. The resulting translation differences are taken directly to equity. These differences arise when the value of the assets of the company changes simply because of exchange rate fluctuations. For this reason, in 2020, the Non-Core Result are heavily influenced by a loss of 4,191 million € of translation differences.



## Restated Balance Sheet

Iberdrola S.A. And Subsidiaries In million €	Forecast Reformulated Balance Sheet								
	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E
<b>Current Assets</b>									
Inventories and Nuclear fuel	2,447	2,847	2,703	2,901	3,153	3,333	3,534	3,857	4,080
Current tax assets	666	666	666	666	666	666	666	666	666
Public entities and other tax assets	253	318	564	437	437	437	437	437	437
Other tax receivables	230	193	338	207	207	207	207	207	207
Trade and other receivables current	6,098	6,674	6,477	7,093	7,687	8,339	9,041	9,775	10,281
Cash and cash equivalents	3,373	2,806	4,005	3,439	3,890	4,069	4,237	4,392	4,515
<b>Total Current Assets (Core)</b>	<b>13,066</b>	<b>13,503</b>	<b>14,753</b>	<b>14,743</b>	<b>16,040</b>	<b>17,050</b>	<b>18,122</b>	<b>19,333</b>	<b>20,186</b>
<b>Non Current Assets</b>									
Intangible assets	21,000	20,368	18,222	21,297	21,928	22,558	23,188	23,841	24,498
Investment property	429	342	301	465	504	546	592	640	673
Property, plant and equipment	66,109	71,289	71,779	76,000	79,500	83,000	86,500	90,125	93,775
Right-of-use asset	-	1,782	1,974	1,974	1,974	1,974	1,974	1,974	1,974
Equity-accounted investees	1,710	1,957	1,145	1,768	1,768	1,768	1,768	1,768	1,768
Other non-current investments	2,685	3,019	2,909	2,909	2,909	2,909	2,909	2,909	2,909
Derivative instruments (core)	1,188	951	1,206	1,376	1,491	1,617	1,754	1,896	1,994
Trade and other non-current assets	815	2,851	3,161	1,710	1,710	1,710	1,710	1,710	1,710
<b>Total Non Current Assets (Core)</b>	<b>93,936</b>	<b>102,559</b>	<b>100,697</b>	<b>107,500</b>	<b>111,784</b>	<b>116,083</b>	<b>120,396</b>	<b>124,864</b>	<b>129,302</b>
<b>Total Assets (Core)</b>	<b>107,002</b>	<b>116,063</b>	<b>115,450</b>	<b>122,243</b>	<b>127,824</b>	<b>133,133</b>	<b>138,517</b>	<b>144,197</b>	<b>149,488</b>
<b>Total Assets (Non Core)</b>	<b>6,036</b>	<b>6,306</b>	<b>7,068</b>	<b>7,131</b>	<b>7,131</b>	<b>7,131</b>	<b>7,131</b>	<b>7,131</b>	<b>7,131</b>
<b>Total Assets</b>	<b>113,038</b>	<b>122,369</b>	<b>122,518</b>	<b>129,374</b>	<b>134,955</b>	<b>140,264</b>	<b>145,649</b>	<b>151,328</b>	<b>156,620</b>
<b>Current Liabilities</b>									
Public entities and other tax liabilities	349	243	178	253	253	253	253	253	253
Other tax payables	106	141	235	154	154	154	154	154	154
Trade payables	5,259	5,098	5,138	6,336	6,634	6,942	7,424	8,271	8,663
Current tax liabilities	180	261	285	285	285	285	285	285	285
Other current liabilities	508	674	478	478	478	478	478	478	478
Loan and Borrowings short term	6,816	9,347	7,971	7,591	8,066	8,413	8,711	8,950	9,171
<b>Total Current Liabilities (Core)</b>	<b>13,218</b>	<b>15,764</b>	<b>14,285</b>	<b>15,097</b>	<b>15,870</b>	<b>16,525</b>	<b>17,305</b>	<b>18,392</b>	<b>19,005</b>
<b>Non Current Liabilities</b>									
Capital grants	1,478	1,399	1,240	1,240	1,240	1,240	1,240	1,240	1,240
Derivative instruments (core) non current	768	838	556	825	895	970	1,052	1,138	1,196
Other non-current liabilities	375	407	262	262	262	262	262	262	262
Facilities assigned and financed by third parti	4,823	4,987	5,043	4,951	4,951	4,951	4,951	4,951	4,951
Loan and Borrowings long term	30,918	30,283	30,479	32,253	34,273	35,749	37,013	38,030	38,969
Other financial liabilities	-	1,767	2,058	1,275	1,275	1,275	1,275	1,275	1,275
<b>Total Non Current Liabilities (Core)</b>	<b>38,363</b>	<b>39,681</b>	<b>39,638</b>	<b>40,807</b>	<b>42,896</b>	<b>44,448</b>	<b>45,794</b>	<b>46,896</b>	<b>47,894</b>
<b>Total Liabilities (Core)</b>	<b>51,581</b>	<b>55,445</b>	<b>53,923</b>	<b>55,904</b>	<b>58,766</b>	<b>60,973</b>	<b>63,098</b>	<b>65,288</b>	<b>66,898</b>
<b>Total Liabilities (Non Core)</b>	<b>17,481</b>	<b>19,729</b>	<b>21,377</b>	<b>21,193</b>	<b>21,193</b>	<b>21,193</b>	<b>21,193</b>	<b>21,193</b>	<b>21,193</b>
<b>Total Liabilities</b>	<b>69,061</b>	<b>75,174</b>	<b>75,300</b>	<b>77,097</b>	<b>79,959</b>	<b>82,166</b>	<b>84,291</b>	<b>86,481</b>	<b>88,091</b>
<b>Equity of the Parent</b>	<b>36,582</b>	<b>37,678</b>	<b>35,412</b>	<b>40,471</b>	<b>43,190</b>	<b>46,293</b>	<b>49,551</b>	<b>53,042</b>	<b>56,722</b>
Non-controlling interests	7,394	9,516	11,806	11,806	11,806	11,806	11,806	11,806	11,806
<b>Total Equity</b>	<b>43,977</b>	<b>47,195</b>	<b>47,218</b>	<b>52,277</b>	<b>54,996</b>	<b>58,099</b>	<b>61,357</b>	<b>64,848</b>	<b>68,528</b>
<b>Total Liabilities and Equity</b>	<b>113,038</b>	<b>122,369</b>	<b>122,518</b>	<b>129,374</b>	<b>134,955</b>	<b>140,264</b>	<b>145,649</b>	<b>151,328</b>	<b>156,620</b>

## Enterprise value and sensitivity analysis (in million €)

EV from Core Operations	145,999	EV	WACC					
			2.74%	2.84%	2.94%	3.04%	3.14%	
Net Financial assets	(43,402)	Growth	1.80%	147,443	132,571	120,313	110,037	101,298
Non core invested capital	(14,062)		1.90%	165,051	146,719	131,919	119,722	109,496
Non controlling interests	(11,806)		2.00%	187,427	164,241	145,999	131,272	119,134
Equity Value	76,729		2.10%	216,813	186,509	163,436	145,283	130,628
			2.20%	257,113	215,752	185,596	162,636	144,571
Number of Shares	6,400							

## 5. Disclosures and Disclaimers

### 5.1 Report Recommendations

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<b>Buy</b>	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
<b>Hold</b>	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
<b>Sell</b>	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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