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# Equity Valuation: Iberdrola, S.A.

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Master in Finance

Supervisor:
PhD Luís Miguel da Silva Laureano, Assistant Professor,
ISCTE-IUL

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BUSINESS
SCHOOL

Department of Finance

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# Resumo

Esta dissertação apresenta uma análise abrangente e posterior estimativa do valor intrínseco das ações da Iberdrola, S.A. em 31 de dezembro de 2023.

A indústria energética está atualmente a sofrer transformações rápidas e profundas, enquanto trabalha no sentido de uma transição energética para um modelo sustentável. Esta transição é de grande importância para as gerações presentes e futuras e a Iberdrola é uma das empresas de vanguarda desta revolução em curso. A Iberdrola é uma empresa multinacional espanhola de energia e é uma das maiores empresas de energia renovável do mundo e um proeminente líder global em energia.

Após uma revisão da literatura sobre vários métodos de avaliação de empresas, uma análise das perspetivas macroeconómicas, das tendências do setor e do negócio e desempenho financeiro da Iberdrola, a avaliação foi realizada com foco no método do Fluxo de Caixa Descontado (DCF). Além disso, a Avaliação Relativa foi realizada como abordagem complementar para fornecer maiores percepções sobre o valor da empresa.

A avaliação através do método DCF revelou um valor intrínseco das ações da Iberdrola de 13.93€ no final de 2023, significativamente superior ao preço real de mercado de 11.87€ na mesma altura, sugerindo que as ações da Iberdrola estavam subavaliadas. A Avaliação Relativa indicou também preços das ações acima do preço de mercado, reforçando a visão de que as ações da Iberdrola estavam a ser negociadas abaixo do seu valor real. Esta discrepância realça uma oportunidade de investimento, uma vez que a subvalorização sinaliza um potencial de valorização dos preços.

**Palavras-chave:** Iberdrola; Energia; Avaliação de Empresas; Fluxo de Caixa Descontado; Avaliação Relativa

**Sistema de Classificação JEL:** G30; G32

# Abstract

This dissertation presents a comprehensive analysis and subsequent estimation of the intrinsic value of Iberdrola, S.A.'s shares as of December 31st 2023.

The energy industry is currently suffering fast and deep transformations while working towards an energy transition to a sustainable model. This transition is of major importance for present and future generations and Iberdrola is one of the forefront companies of this ongoing revolution. Iberdrola is a Spanish multinational energy utility company and is one of the world's biggest renewable energy companies and a prominent global energy leader.

Following a review of the key literature on various company valuation methods, an analysis of the macroeconomic outlook, industry trends, and Iberdrola's business and financial performance, the valuation was conducted, with a primary focus on the Discounted Cash Flow (DCF) method. Additionally, Relative Valuation was performed as a complementary approach to provide further insights into the company's value.

The valuation analysis through the DCF method revealed an intrinsic value of Iberdrola's shares of €13.93 as of the end of 2023, significantly higher than the actual market price of €11.87 at the same time, suggesting that Iberdrola's stock was undervalued. Relative valuation methods also indicated share prices above the market price, reinforcing the view that Iberdrola's shares were trading below their true value. This discrepancy highlights a compelling investment opportunity, as the undervaluation signals potential for price appreciation.



**Keywords:** Iberdrola; Energy; Company Valuation; Discounted Cash Flow; Relative Valuation
**JEL Classification System:** G30; G32

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# Glossary

APV – Adjusted Present Value

CAGR – Compound Annual Growth Rate

CapEx – Capital Expenditures

CAPM – Capital Asset Pricing Model

CCC – Cash Conversion Cycle

CCGT – Combined Cycle Gas Turbine

CF – Cash Flow

CRP – Country Risk Premium

D – Debt

D/E – Debt-to-Equity Ratio

D&A – Depreciation and Amortization

DCF – Discounted Cash Flow

DIO – Days Inventory Outstanding

DPO – Days Payable Outstanding

DSO – Days Sales Outstanding

E – Equity

EBIT – Earnings Before Interest and Taxes

EBITDA – Earnings Before Interest, Taxes, Depreciation and Amortization

EQV – Equity Value

EV – Enterprise Value

EV/EBITDA – Enterprise Value-to-EBITDA

EVA – Economic Value Added

FCFE – Free Cash Flow to Equity

FCFF – Free Cash Flow to the Firm

g – Growth rate

GDP – Gross Domestic Product

GGM – Gordon Growth Model

GW – Gigawatt

IC – Invested Capital

IEI – Iberdrola Energía Internacional

IMF – International Monetary Fund

MRP – Market Risk Premium

MVA – Market Value Added

MW – Megawatt

NOA – Non-operating assets

NOPLAT – Net Operating Profit Less Adjusted Taxes

OPEX – Operating Expenses

P/BV – Price-to-Book Value

PER – Price-to-Earnings Ratio

PPA – Power Purchase Agreement

PV – Present Value

r – Discount rate

Rd – Cost of debt

Re – Cost of equity

rf – Risk-free rate

ROA – Return on Assets

ROE – Return on Equity

ROIC – Return on Invested Capital

t – Corporate tax rate

TV – Terminal Value

TWh – Terawatt hour

WACC – Weighted Average Cost of Capital

WC – Working Capital

YTM – Yield to Maturity

# Introduction

Valuation is the analytical process of estimating the current (or projected) value of an asset or a company and is crucial in a business's life.

Performing an equity valuation is crucial for investors and shareholders since it offers a thorough insight into a company's financial situation and prospects for future growth. By having a clear understanding of the company's true underlying value, investors are able to identify investment opportunities, make well-informed investment decisions, manage risks, and align their investment strategies with their financial goals. Investors can determine if a stock is fairly priced, overvalued, or undervalued by comparing its intrinsic value to the stock's current market price. Furthermore, based on the company's financial prospects, shareholders can use equity valuation to evaluate the success of their current investments and make strategic decisions about holding, buying, or selling shares.

This dissertation's main purpose is to estimate the intrinsic value of Iberdrola, S.A.'s shares.

Iberdrola is a Spanish multinational energy utility company headquartered in Bilbao, Spain. Iberdrola is one of the world's leading energy companies, a leader in renewable energy, and one of the three largest companies in the industry by market capitalisation. The Iberdrola Group supplies energy and conducts its renewable energy, networks, and energy commercialisation operations in Europe, the United States, Brazil, Mexico, and Australia (Iberdrola, n.d.).

Evaluating a company operating in the energy sector is important, particularly in today's environmentally conscious climate, as the global focus intensifies on sustainable practices and clean energy sources. Especially, when focused on a company that has been leading the energy transition to a sustainable model through its considerable investments in renewables, smart grids, large-scale energy storage, and digital transformation to deliver the most advanced products and services to its customers.

In order to perform a well-founded valuation of Iberdrola, this project began with a literature review, introducing the most relevant corporate valuation methods and defining the most applicable ones to value this company.

Afterwards, the research began with a macroeconomic analysis to assess the broader economic landscape, including geopolitical and economic factors influencing the energy industry, and was followed by a comprehensive market overview, exploring key industry trends and developments. A detailed examination of Iberdrola's business organisation, performance and strategy outlook was then conducted to provide a thorough understanding of the company's

position, followed by an analysis of its financial situation to assess the company's financial health.

The final step is the Valuation. In this chapter, the best-fitted methods exploited in the Review of Literature were conducted, more specifically the Discounted Cash Flow Valuation, through the Free Cash Flow to the Firm, and the Relative Valuation. Furthermore, all assumptions required to perform the valuation and the forecasts of future performance were detailed and a sensitivity analysis was performed.

Finally, a comparison between the actual value at which Iberdrola's shares were trading at the end of 2023 and the values obtained from the valuation models was made, and a final recommendation to investors was presented on whether to buy, hold or sell the shares.

# 1 Review of literature

In this section, the applicable existing literature for the valuation process is briefly presented, introducing fundamental definitions and concepts.

The determination of a company's fair value lacks an absolute method for market convergence, leading researchers to develop diverse valuation approaches. Therefore, there is not a certain applicable method, but instead, a spectrum of different methods, that combined with quantitative and qualitative aspects can provide an accurate estimate of fair value.

Despite the extensive amount of literature, Damodaran (2012) defined three valuation methodologies: the Discounted Cash Flow (DCF) Valuation, which relates the value of an asset to the present value (PV) of expected future cash flows on that asset; second, the Relative Valuation (or multiples valuation), that estimates the value of an asset by comparing it to the price of similar assets relative to common indicators such as earnings, cash flows, book value, or sales; lastly, the Contingent Claim Valuation (or real options), which uses option pricing models to value assets that have common option characteristics.

In this project, only the first two approaches will be carried out, dedicating a deeper focus to the DCF assessment method.

## 1.1 Discounted Cash Flow Valuation

The DCF methodologies are based on detailed and careful forecasts, for each period, of all the financial components linked to the generation of the cash flows stemming from the company's operations.

These models are widely favoured because of their dynamic and forward-looking approach. Instead of relying solely on historical results, DCF models are valued for their emphasis on future expectations, making them highly trusted by analysts and equity researchers. Fernández (2013) elected DCF as the best valuation model, as it evaluates the company based on its ability to generate cash flows for shareholders.

This approach has its foundation in the present value rule (Damodaran, 2012) and seeks to determine the company's value by estimating the cash flows it will generate in the future and then discounting them at a discount rate that reflects the riskiness of the estimated cash flows:

$$EQV = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^t} \tag{1}$$

where n is the life of the asset, $CF_t$ the cash flow in period t, and $r$ the implied discount rate.

There are two main variants of this methodology, depending on the nature of the cash flows being discounted: Free Cash Flows to the Firm (FCFF) and Free Cash Flows to Equity (FCFE).

### 1.1.1 Free Cash Flow to the Firm

The FCFF is the aggregation of the after-tax cash flows generated by the company's assets, that are available to investors after covering all expenses – operational expenses, capital expenditures and working capital needs – but prior to any payments to either debt or equity holders (i.e., independent of how the assets are financed) (Damodaran, 2012). The formula for the FCFF can be expressed as:

$$FCFF = EBIT(1-t) + D\&A - CapEx - \Delta W \quad (2)$$

where D&A is the depreciation and amortization, CapEx the capital expenditures and $\Delta WC$ the changes in working capital.

Given that the FCFF are the sum of the cash flows available to all investors (bondholders and stockholders), their discount rate should consider the risk of all claim holders in the company. Hence, the discount rate should be the weighted average of the cost of debt ($r_D$) and the required return on equity ($r_E$) (Fernández, 2013).

#### 1.1.1.1 Weighted Average Cost of Capital

The Weighted Average Cost of Capital (WACC) represents the minimum return required by investors in a company (equity and debt holders) for investing their funds in one particular business instead of others with similar risk. The WACC has three primary components: the cost of equity, the cost of debt, and the company's target capital structure (Koller et al., 2020). The cost of debt should account for the interest tax shields generated by the interest payments on the outstanding debt, so the component used is the after-tax cost of debt (Koller et al., 2020).

Then, the WACC is calculated by weighting the after-tax cost of the debt and the cost of the equity in the proportion to which they finance the company (Fernández, 2013):

$$WACC = \frac{D}{D+E} r_D(1-t) + \frac{E}{D+E} r_E \quad (3)$$

where D is the market value (MV) of debt, E the market value (MV) of equity, $r_D$ the cost of debt, $r_E$ the cost of equity and t the tax rate.

#### 1.1.1.2 Cost of debt

The cost of debt represents the cost to the firm of borrowing funds to finance projects (Damodaran, 2012).

For investment-grade firms and firms whose debt is frequently traded, it is recommended to use the company's yield to maturity (YTM) on its long-term debt (Koller et al., 2020). For companies whose debt trades infrequently, the cost of debt can be estimated by using its debt rating and respective default spread (Damodaran, 2012), as follows:

$$r_D = r_f + Default\ Spread \tag{4}$$

For nontraded debt, the cost of debt can be obtained by using recent borrowing history or by estimating a synthetic rating (Damodaran, 2012).

#### 1.1.1.3 Cost of equity

The cost of equity is the rate of return investors require on an equity investment in a firm.

The preferred and most widely accepted model to estimate the required return on equity is the Capital Asset Pricing Model (CAPM), developed in the early 1960s by Sharpe, Lintner and Mossin, which establishes a linear relationship between the required return on an investment and risk. The cost of equity is then determined by estimating the expected return on the market portfolio, including compensation for the market risk in the investment (Damodaran, 2012) and its formula is as follows:

$$r_E = r_f + \beta(R_M - R_F) \tag{5}$$

where $r_e$ is the required return on equity, $r_f$ the risk-free rate, β the beta, $R_M$ the expected market return, and $R_M - R_F$ the market risk premium (or equity premium).

Risk-free rate

An asset is risk-free if its expected returns are known with certainty, so the actual returns always equal the expected returns. Thus, according to Damodaran (2012), for an investment to be considered risk-free, two basic conditions must be met: there can be no default risk and no reinvestment risk.

The only securities that could satisfy the first condition are government securities because they usually control the printing of currency (Damodaran, 2012). For the second condition, it is recommended to use a duration matching strategy, i.e., use the YTM of the default-free security used as the risk-free asset (long-term government bonds) that matches the duration of the cash flows in the analysis.

Koller et al. (2020) recommend using ten-year German government bonds when valuing European companies because they trade more frequently and have lower credit risk than bonds of other European countries.

Beta

Beta (β) is a measure of the systematic risk of a security or portfolio compared to the market as a whole, i.e., reflects how a company's stock price responds to movements in the overall market.

According to Damodaran (2012), the most commonly used approach to estimate the beta value is by using historical data to perform a regression of the investment returns against returns on a market index. However, this might not be accurate because regression betas will almost always be either too noisy (high standard error) or skewed by estimation choices to be useful measures.

Since estimating beta is an imprecise process, fundamental characteristics of the investment could be used to improve the regression betas. Damodaran (2012) considers "bottom-up betas" the best among several approaches to improve them. In this approach, it is crucial to first recognise the industry and the scale of the company before computing the unlevered beta, also known as the operating beta. Since companies in the same industry face similar operating risks, they should have similar operating betas, so the unlevered beta can be calculated using an average beta of the peer group of companies in the industry as a benchmark (Koller et al., 2020). Then, a "re-leveraging" of the unlevered beta is made to account for the firm's capital structure.

Therefore, the levered beta is estimated through the following formula:

$$\beta_L = \beta_U + (\beta_U - \beta_D) * \frac{D}{E} * (1 - t) \quad (6)$$

where $\beta_L$ is the levered (equity) beta, $\beta_U$ the unlevered beta and $\beta_D$ the debt beta.

The $\beta_D$ can be obtained through the CAPM using $r_D$:

$$r_D = r_f + \beta_D * (R_M - R_F) \quad (7)$$

Market risk premium

The market risk premium corresponds to the additional return demanded by investors for undertaking non-risk-free investments and is calculated as the difference between the expected return on the market portfolio and the risk-free rate: $(R_M - R_F)$.

Estimating the market risk premium lacks a precise model, however, Damodaran (2012) proposes three methodologies to accurately determine this value: historical risk premium, modified historical risk premium, and implied equity premium. The most commonly used is the historical risk premium approach, which consists of the comparison between the actual market returns over an extensive period and the actual returns on a default-free security (ten-year government bond, as presented in the Risk-free rate).

#### 1.1.1.4 Terminal value

At some point, the projection of future cash flows becomes impractical, but they still represent a considerable part of the company's present value. Therefore, after the explicit forecast period, there will be a perpetuity-based continuing value (terminal value) to reflect the value of the firm at that point (Damodaran, 2012).

Damodaran (2012) presents two ways of bringing closure to a valuation: a liquidation or a going-concern assumption. The first assumes the cessation of the firm's operations at the end of the explicit forecasting period and the sale of its assets in the market (liquidation value). The second assumes the company will continue its business activities into the foreseeable future and so, holds a continuous delivery of cash flows in perpetuity. It contains two different approaches: a multiple approach, which estimates the value of the company through the use of multiple to earnings, revenues, or book value; and a stable growth approach, the most used approach, which assumes that after the explicit forecasting period, the cash-flows will grow at a stable rate (g) for perpetuity. However, using this last approach, it is important to ensure that the constant growth rate is lower than the expected growth rate of the economy in which the company operates, or in the case of a multinational company, of the global economy or the specific regions where it operates.

Following the stable growth approach, the terminal value is estimated as follows:

$$Terminal\ value_t = \frac{FCFF_{t+1}}{WACC - g} \tag{8}$$

where $FCFF_{t+1}$ is the cash flow at the first year of the perpetuity and $g$ the stable growth rate.

The enterprise value (EV) is, then, obtained by discounting the expected FCFF at the WACC, which is the cost of the different components of financing used by the firm, weighted by their market value proportions (Damodaran, 2012), as follows:

$$EV = \sum_{t=1}^{t=n} \frac{FCFF_t}{(1 + WACC)^t} \tag{9}$$

Assuming that for perpetuity the firm will grow at a constant growth rate "g", the EV is adjusted to:

$$EV = \sum_{t=1}^{t=n} \frac{FCFF_t}{(1 + r)^t} + \frac{Terminal\ value}{(1 + WACC)^n} \tag{10}$$

For the computation of the Equity Value (EQV), the EV is adjusted by adding the market value of non-operating assets (NOA) and subtracting debt:

$$EQV = EV + NOA - Debt \tag{11}$$

The NOA are associated with all types of assets – current or non-current – owned by the company and that are not essential to the core operations of the business.

Debt concerns all liabilities of the company except working capital items. It includes the financial debt (interest-bearing liabilities) and other non-operating liabilities.

### 1.1.2 Free Cash Flow to Equity

The FCFE is the cash flow distributed to the shareholders after all working capital and fixed assets investments have been made and all operating expenses, interest, and debt principal payments have been covered. Therefore, the FCFE is the cash flow from operations minus capital expenditures minus payments to (and plus receipts from) debt holders (Pinto et al., 2007), hence its formula is expressed as:

$$FCFE = Net\ Income + D\&A - \Delta WC - CAPEX + Debt\ variation \tag{12}$$

Unlike FCFF, the FCFE is a direct measure. Since the cash flows discounted are the ones that remain for the shareholders, the EQV is obtained immediately, and the appropriate discounted rate is the expected return on equity ($r_E$).

Assuming perpetuity-growth after the explicit forecasting period, the EQV includes the Terminal Value as presented in Equation (8) but, in this case, using the FCFE and discounted at the $r_e$. The EQV is, then, achieved by discounting the expected FCFE at the cost of equity, i.e., the rate of return required by the shareholders (Damodaran, 2012), and including the terminal value component, also discounted at the $r_E$, as follows:

$$EQV = \sum_{t=1}^{t=n} \frac{FCFE_t}{(1 + r_E)^t} + \frac{Terminal\ value}{(1 + r_E)^n} \tag{13}$$

### 1.1.3 Adjusted Present Value

WACC-based models are most effective when a company maintains a consistent debt-to-value ratio. However, when the company's capital structure is expected to change, these models present more implementation challenges, so it is suggested to consider an alternative approach – Adjusted Present Value (APV).

In the APV, the valuation involves discounting the same free cash flows as the DCF model but with the unlevered cost of equity as the discount rate, excluding any effects associated with debt (Koller et al., 2020). This model separates the value of operations into two components: the value of operations as if the company were all-equity financed and the value of costs that arise from debt financing (such as any tax benefits of using debt and any costs of financial distress):

$$\begin{aligned} APV = {} & EV\ as\ if\ the\ company\ were\ all\ equity\ financed \\ & + PV\ of\ interest\ tax\ shields \\ & - PV\ of\ financial\ distress\ costs \end{aligned} \tag{14}$$

The APV valuation model follows directly from the teachings of economists Franco Modigliani and Merton Miller, who proposed that in a market with no taxes (among other things), a company's choice of financial structure will not affect the value of its economic assets. Only market imperfections, such as taxes and distress costs, affect enterprise value (Koller et al., 2020).

## 1.2 Economic Value Added

The Economic Value Added (EVA) method revolves around the idea of value creation. It quantifies the dollar amount of added value resulting from an investment or a group of investments and is computed by multiplying the excess return earned on an investment by the invested capital (IC) in that investment (Damodaran, 2012):

$$EVA = IC * (ROIC - WACC) = NOPLAT - (WACC * IC) \tag{15}$$

where NOPLAT is the Net Operating Profit Less Adjusted Taxes.

A company producing earnings surpassing its capital acquisition costs, i.e. with positive residual income (EVA), is contributing to value creation, while a company failing to generate sufficient income to offset its capital costs, i.e. has a negative EVA, is destroying value (Pinto et al., 2007).

In the long run, for a company's market value to grow, it must consistently generate economic profit. An associated concept to EVA, known as Market Value Added (MVA), assesses a business's ability to create profitability over time, rather than within a specific time frame. MVA considers all the value created by the company in the past and its potential for generating value in the future and is computed as the present value of all economic value generated, discounted at the WACC, as follows:

$$MVA = \sum_{t=1}^{\infty} \frac{EVA_t}{(1 + WACC)^t} \quad (16)$$

Then, the equity value is the sum of the invested capital by the shareholders, given by the book value of equity, the MVA and the NOA:

$$EQV = Equity\ Book\ Value + MVA + NOA \quad (17)$$

## 1.3 Relative Valuation (Multiples)

Relative valuation models represent the second category of going-concern valuation models. The underlying principle of relative valuation is that similar assets should have similar prices, so the value of an asset is estimated relative to the pricing of comparable assets, using price multiples (earnings, cash flows, book value, or revenues) or enterprise value multiples (Pinto et al., 2007).

The multiples can be categorised into three different groups, as presented in Table 1.1., being introduced the most relevant ones for each category.

*Table 1.1. Groups of most commonly used multiples*

| | |
|---|---|
| **Based on the company's capitalization** | Price-to-earnings ratio (PER); Price-to-sales (P/S); Price-to-book value (P/BV) |
| **Based on the company's value** | Enterprise value-to-EBITDA (EV/EBITDA); Enterprise value-to-Sales (EV/Sales) |
| **Growth-referenced multiples** | Price/earnings-to-growth (P/EG); Enterprise value-to-EBITDA growth (EV/EG) |

*Source: Fernández (2001)*

The PER and the EV/EBITDA are the two most commonly used multiples by analysts and equity researchers in valuation practices (Fernández, 2001).

Damodaran (2012) presents four key steps to perform a relative valuation wisely:

1) Consistent definition and measurement of the multiple across the firms being compared.
2) Examination of the cross-sectional distribution of the multiple, not only within the specific sector being analysed but also across the broader market.
3) Analysis of multiples to understand which and how fundamental factors influence them.

4) Selection of the right peer group that is truly comparable in terms of industry, size, growth prospects, and other relevant factors, and control for differences that may distort the comparison.

By following these steps, the multiples can be used as a valuable tool in the valuation process, gaining insights into the relative value of companies and making more informed investment decisions. However, finding truly comparable companies is challenging due to differences in operations and strategies, thus for more accurate outcomes, some authors suggest the multiples to be employed as a complement to the DCF analysis, as a means of assessing the reasonability of DCF assumptions.

## 1.4 Dividend Discount Model

Another model used for equity valuation is the Dividend Discount Model (DDM). It is a direct approach, in which the intrinsic value of a stock corresponds to the present value of the expected dividends on it, discounted at the appropriate rate of return on equity (Damodaran, 2012). In the general case, in which it is expected constant dividends every year, this value can be expressed as follows:

$$Share\ value = \sum_{t=1}^{t=n} \frac{DPS_t}{(1 + r_E)^t} \tag{18}$$

where DPS is the expected dividend per share distributed by the company at period t and $r_E$ is the required return on equity.

Depending on the assumptions about future growth, there are different approaches to the dividend discount model: the Gordon Growth Model (GGM) and the Multi-Stage Dividend Discount Models (Pinto et al., 2007). The GGM, developed by Gordon and Shapiro (1956) and Gordon (1962), is used to value a firm in a steady state with dividends growing at an annual rate "g" that can be sustained forever, and then Equation (18) becomes the following (Damodaran, 2012):

$$Share\ value = \frac{DPS_1}{r_E - g} \tag{19}$$

where $DPS_1$ is the expected dividends per share for the next year.

Since it is uncommon for a company to maintain a constant growth rate perpetually, Multi-Stage DDMs provide a more realistic approach to growth expectations. The most widely used models are the two-stage and three-stage DDMs (Damodaran, 2012).

The two-stage DDM accounts for two distinct growth phases: an initial phase of extraordinary and not stable growth and a subsequent phase where the growth rate becomes stable and is projected to remain constant in the long term. The three-stage DDM adds further complexity by introducing an initial period of rapid growth, a transition phase with declining growth, and a final stable growth phase. This model is the most flexible since it places no restrictions on the payout ratio, assuming a first phase of high growth, a second phase of tapering growth, and a final phase of low, stable growth continuing indefinitely (Damodaran, 2012).

Many analysts, however, approach these models with caution due to perceived limitations, arguing that the models apply only to a limited group of stable, high-dividend-paying companies. Despite this criticism, the DDM's main appeal lies in its simplicity and intuitive logic and, therefore is often used by analysts as a complementary tool alongside other valuation approaches (Damodaran, 2006).

# 2 Market Overview

This chapter provides an essential foundation for understanding the external factors influencing Iberdrola's performance. It includes a macroeconomic outlook, exploring the broader economic environment, and an industry overview, focusing on the current state and evolving trends within the energy sector. By examining both the macroeconomic and industry landscapes, this section aims to offer valuable insights into the market conditions in which Iberdrola operates, forming the basis for the subsequent valuation analysis.

## 2.1 Macroeconomic Outlook

This section provides a comprehensive analysis of the historical, current and forecasted global economic environment, focusing on key indicators such as Gross Domestic Product (GDP) growth and inflation. In recent years, the global economy has faced significant challenges, including fluctuating inflation rates and varying economic growth patterns across regions. Understanding these macroeconomic trends is essential for assessing the broader economic landscape and its impact on the industry.

According to the World Economic Outlook of the International Monetary Fund (April, 2024), growth in the Euro area is anticipated to rebound from an estimated low rate of 0.4% in 2023, which was heavily influenced by the region's high exposure to the war in Ukraine, to 0.8% in 2024 and further to 1.5% in 2025 (Figure 2.1). This recovery is expected to be driven by stronger household consumption, as the impact of the energy price shock diminishes and inflation eases, boosting real income growth. In the United States (U.S.), growth is forecasted to rise from 2.5% in 2023 to 2.7% in 2024, before decelerating to 1.9% in 2025, as gradual fiscal tightening and a softening in labour markets slow aggregate demand. The United Kingdom (U.K.) is projected to see growth improve from an estimated 0.1% in 2023 to 0.5% in 2024, as the delayed adverse effects of high energy prices fade, and then to 1.5% in 2025, as disinflation allows financial conditions to ease and real incomes to recover. Regarding Latin American countries, in Brazil, growth is likely to moderate from 2.9% in 2023 to 2.2% in 2024 due to fiscal consolidation, the delayed impact of tight monetary policy, and a reduced contribution from agriculture. In Mexico, growth is projected to decrease from 3.2% in 2023 to 2.4% in 2024 and to 1.4% in 2025 as the government is expected to tighten its fiscal policies (Figure 2.1).

Following the International Monetary Fund (April, 2024) World Economic Outlook, global growth, estimated at 3.2% in 2023, is projected to continue at the same pace in 2024 and 2025.

As the global economy continues to recover from longer-term effects of the pandemic and Russia's invasion of Ukraine, the future is unpredictable. However, from 2025 onwards, GDP growth forecasts across all geographies are expected to stabilize, with minimal fluctuations. During this period, a steady global growth rate of around 3.0% is anticipated, reflecting a more stable economic environment in the years that follow (Figure 2.1).

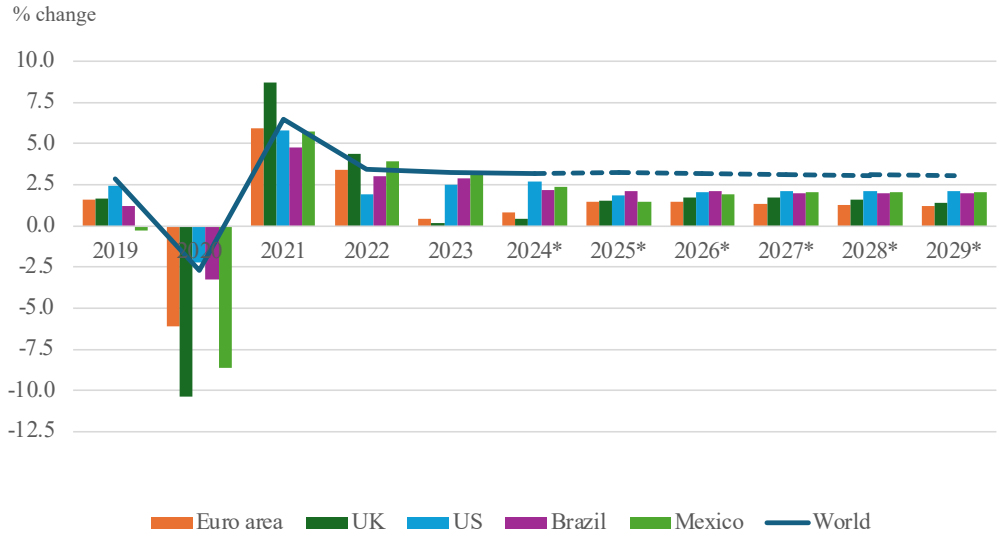


Figure 2.1. GDP Growth from 2019-2023 and forecasts until 2029

*Source: IMF World Economic Outlook, April 2024*

Over the past few years, inflation rates have experienced significant volatility across the globe. Following a period of relatively stable inflation in most major economies, the COVID-19 pandemic in 2020 led to economic disruptions that initially suppressed inflation. However, as economies recovered in 2021, inflation surged due to supply chain issues, increased demand, and fiscal and monetary stimulus.

By 2022, inflation reached multi-decade highs globally, driven especially by the Russia-Ukraine conflict, soaring energy prices, and persistent supply constraints. Inflation peaked at 9.3% in Brazil, 9.1% in the U.K., 8.4% in the Euro Area, and 8.0% in the U.S. and Mexico, as observable in Figure 2.2. In 2023, inflation began to moderate as central banks raised interest rates and supply chains stabilised, although still above target levels in many economies, and is expected to fall to 5.9% in 2024 and 4.5% in 2025 (International Monetary Fund, April 2024).

Looking forward, inflation is expected to gradually decline towards pre-pandemic levels of around 3-4%, though uncertainties remain due to potential new shocks and geopolitical risks.

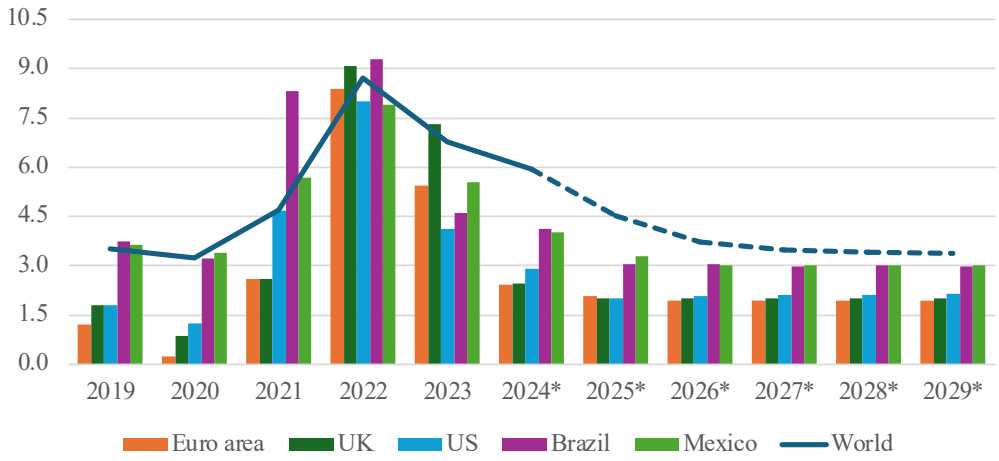


Figure 2.2. Inflation rates from 2019-2023 and forecasts until 2029

*Source: IMF World Economic Outlook, April 2024*

## 2.2 Industry Overview

The following section provides a comprehensive analysis of the energy sector in which Iberdrola operates. It delves into the current characteristics and dynamics of the industry, explores key trends, and assesses growth prospects, offering a detailed overview of the sector's evolving landscape.

### 2.2.1 Electricity Demand and Supply

Global electricity demand reached a record high of 28,510 terawatts-hour (TWh) in 2022, with major economies responsible for this bulk, such as China (31%), the U.S. (15%), the European Union (10%), etc. This electricity demand increase was covered by 92% from all renewable sources combined – including wind, solar, hydro, bioenergy, and others – with wind and solar energy accounting for 80% of the growth. An increase in coal generation of +108 TWh covered the remaining increase in demand (8%) as well as the shortfall in nuclear and gas generation. Other fossil fuels also increased, contributing +86 TWh to fill the remaining shortfall (Ember, 2023).

In 2023, electricity demand grew modestly by 2.2%, down from 2.4% in 2022, but is expected to accelerate to 3.4% annually between 2024 and 2026, driven by emerging markets. The ongoing energy crisis, marked by inflation, high interest rates, and debt burdens, kept demand growth in check. Advanced economies saw declines due to weak macroeconomic

conditions, softer industrial output, and milder weather, while emerging markets experienced strong demand growth (International Energy Agency, 2024a).

Electricity's share of final energy consumption increased to 20% in 2023 and is projected to reach 30-50% by 2050 (depending on the scenario: Stated Policies Scenario (STEPS), Announced Pledges Scenario (APS) and Net Zero Emissions (NZE)[1]) due to the push for electrification amid climate challenges and rising living standards (Figure 2.3) (International Energy Agency, 2024a). Additionally, energy consumption has shifted toward green electricity, with increased interest in energy-efficient appliances and renewable sources, driven by climate awareness and the energy crisis following the Russia and Ukraine war.

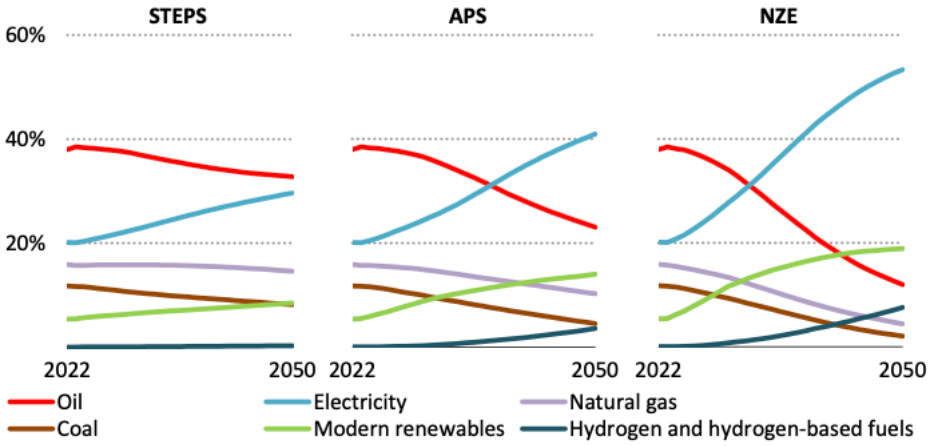


Figure 2.3. Share of global total final consumption by fuel and scenario

*Source: International Energy Agency, 2024*

Regarding electricity supply, global electricity generation has increased over the years, reaching almost 30 TWh in 2023, and registering only a decline in 2020. Fossil fuels have been the main source of electricity generation worldwide, with almost 60% of the electricity produced by coal and natural gas-fired plants. However, the share of global electricity generated from clean energy sources – including renewables and nuclear power – has seen remarkable growth over the past decade (Statista, 2024a).

In 2023, renewables accounted for 30% of global electricity supply, a figure projected to rise to 35% by 2025, while coal's share is anticipated to decrease from 36% to 33%. Solar photovoltaic and wind energy are driving this transformation, with their combined share

[1] STEPS is considered the pessimistic scenario, the APS the optimistic scenario and NZE the normative or ideal scenario, but somewhat hypothetical. These scenarios will be further explained in detail in section 2.2.4 (Energy Sector Outlook).

expected to grow from 13% in 2023 to 15% in 2024 and 18% in 2025, a significant increase from just 4% a decade ago. By 2024, solar and wind generation are forecasted to provide an additional 750 TWh, and over 900 TWh in 2025, surpassing hydropower and marking a critical turning point for the energy sector (International Energy Agency, 2024b). The transition towards renewable energy is expected to reach a major milestone by 2025, with renewable generation set to surpass coal-fired output (Figure 2.4).

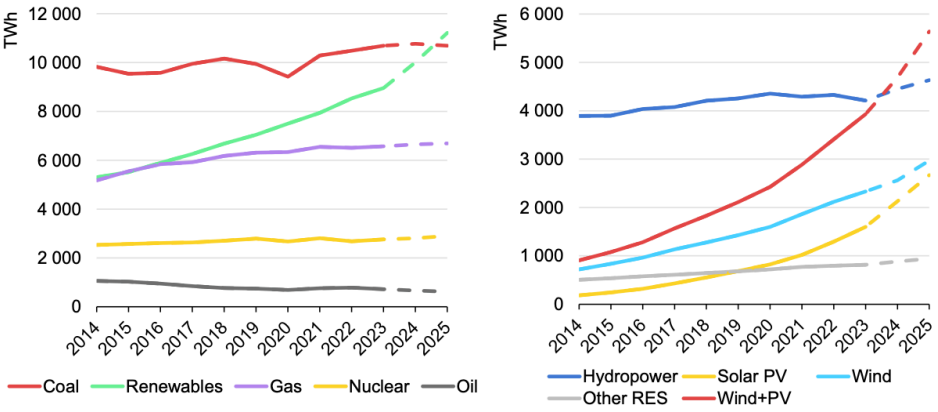


Figure 2.4. Global electricity generation by source, 2014-2025

*Source: International Energy Agency, 2024*

Amid the shifting dynamics of the energy sector, which is increasingly exposed to price volatilities, geopolitical events, and fluctuating market conditions, Power Purchase Agreements (PPAs) have become useful risk mitigation tools and helpful for aligning energy production with consumption patterns.

A PPA is a long-term agreement to purchase clean energy from a specific asset at a predetermined price between a renewable energy developer and a consumer, generally a company requiring large amounts of electricity. The consumer commits to purchase a specific amount of electricity generated by the renewable energy project at a fixed price for a set period of time, often 10 to 20 years (Iberdrola, 2024a). By securing long-term contracts with consumers, including businesses and utilities, it allows the developers to invest in new assets because of the long-term predictable revenue stream they provide. For the consumer, signing a PPA makes it feasible to invest in renewable assets, thereby reducing the amount of power generated from polluting sources and meeting sustainability goals, while securing a stable and predictable electricity price (Iberdrola, 2024a).

According to Bloomberg (2023), faced with the context of a global energy crisis, supply chain disruptions and high interest rates, private companies and public institutions signed contracts to secure a record 36.7 gigawatts (GW) of renewable energy to power their operations in 2022, +18% vs 2021.

However, PPAs also come with inherent risks. For energy developers, the potential for changes in market conditions or technological advancements may render the terms of the PPA less favourable over time and can expose developers to the risk of counterparty default if the customer fails to meet their obligations.

### 2.2.2 Installed Capacity

Installed capacity is the maximum electricity output that an installation is able to produce from a given primary energy source. In 2022, the global installed electricity capacity worldwide was around 7.9 TWh, of which 4.57 TWh corresponded to fossil-based energy sources and 3.35 TWh from renewables (Statista, 2024b). Coal continues to be the leading source of electricity generation worldwide, representing about 29% of the total electricity capacity in 2022, followed by natural gas. Concerning renewable energy, hydroelectricity, solar, and wind energy are the most notorious technologies (Figure 2.5).

Although fossil fuels still dominate, the installed capacity of renewables has more than doubled over the past decade. The costs associated with renewable energy have steadily declined, making these technologies more cost-effective and widespread across the globe. With the increasing emphasis on transitioning to low-emission energy sources, renewables are gradually taking the place of traditional fossil fuels, and its energy capacity is expected to expand by more than 350 GW annually in the coming decades, while coal usage is anticipated to decrease (Statista, 2024b).

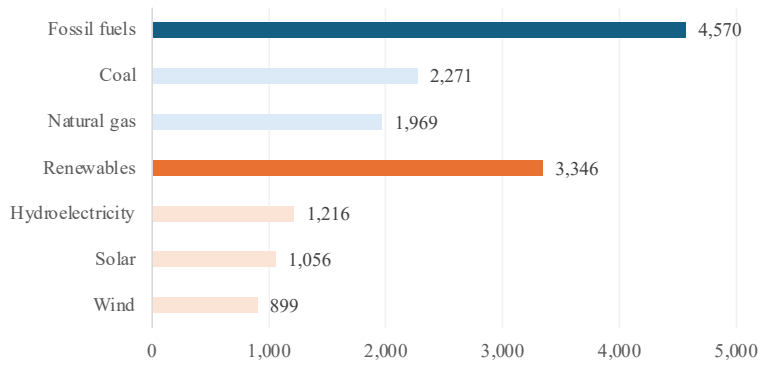


Figure 2.5. Global installed electricity capacity 2022, by sources (in GW)

*Source: Own elaboration and Statista*

In this journey toward a fully decarbonized economy, 2023 marks a pivotal moment. Amid geopolitical and macroeconomic uncertainties, COP28 in Dubai achieved a significant global consensus on climate action of nearly 200 countries committing to phasing out fossil fuels and significantly accelerating investment in electrification, aiming to triple renewable energy capacity by 2030 (Iberdrola, 2023a).

### 2.2.3 Russia's invasion of Ukraine

Russia has long been a key global supplier of oil and natural gas. Following Russia's invasion of Ukraine in 2022, it cut off around 80 billion cubic meters of pipeline gas to Europe following sanctions and geopolitical tensions, triggering an energy crisis in the region. This supply shock caused a surge in global energy prices, particularly for natural gas and oil, further driving inflation worldwide (See Figure 2.6). With reduced access to Russian energy, Europe and other regions rapidly shifted their energy trade patterns, significantly increasing liquefied natural gas imports from new suppliers such as the U.S. (International Energy Agency, n.d.).

The conflict has profoundly reshaped the global energy landscape, with shifts in oil and gas trade and a rapid acceleration in renewable energy growth. Governments globally have implemented new policies to boost renewable energy, enhance energy efficiency, and reduce reliance on imported fossil fuels, spurring investments in renewables and clean technologies. According to the International Energy Agency (n.d.), these shifts could lead to a peak in global demand for oil, gas, and coal within the decade, marking a potential turning point in the fossil fuel era.

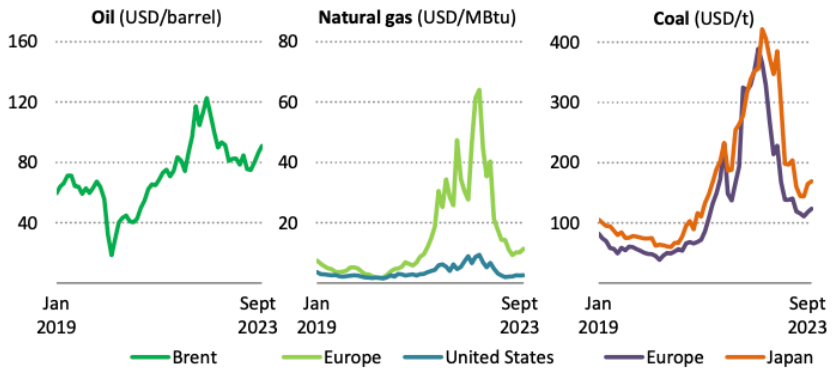


Figure 2.6. Prices for oil, natural gas and coal, 2019-2023

*Source: International Energy Agency*

### 2.2.4 Energy Sector Outlook

The International Energy Agency (2023) World Energy Outlook outlines three key scenarios to examine potential pathways for the energy sector to 2050. Each scenario addresses the core economic and demographic factors driving increased demand for energy services in distinct ways.

- Net Zero Emissions (NZE) by 2050 Scenario: This is a normative scenario that represents the most ambitious pathway, outlining a route for the global energy sector to achieve net-zero emissions by 2050, in line with the Paris Agreement's more stringent goal of limiting warming to 1.5°C. However, this scenario remains somewhat hypothetical, as it assumes aggressive actions and policies that are yet to be fully implemented.
- Announced Pledges Scenario (APS): This scenario explores a future where all countries implement their announced climate and energy pledges, including those made under the Paris Agreement, such as net-zero commitments by various governments, resulting in a significant shift towards renewables and emissions reduction, but still falling short of the 1.5°C target. Therefore, it is considered the optimistic scenario (with a 50% probability).
- Stated Policies Scenario (STEPS): This scenario reflects the prevailing trajectory of the energy system based on the current existing policies, assuming no additional policy changes beyond what is currently stated. Unlike the APS, which focuses on governments' stated goals, STEPS examines the current actions being taken to achieve those targets. This leads to modest changes in energy demand and emissions, with reliance on fossil fuels continuing. This is considered the pessimistic scenario (with a 50% probability).

# 3 Company Overview

This chapter provides a comprehensive analysis of Iberdrola, detailing its organisational and structural framework, shareholder structure, and share performance. It explores the company's historical financial and operational performance across its business segments, highlighting key growth drivers, and outlines Iberdrola's strategic outlook for the coming years, focusing on its ambitious investment plans centred on driving the energy transition towards a more sustainable model. Ultimately, a SWOT analysis was performed, examining the strengths, weaknesses, opportunities, and threats that define Iberdrola's competitive landscape and growth potential.

## 3.1 Company Profile and Organisation

Iberdrola is a Spanish multinational energy utility company headquartered in Bilbao, Spain. Founded in 1992 from the fusion of Hidroeletrica Española and Iberduero, Iberdrola is now one of the world's leading energy companies, a leader in renewable energy, and one of the three largest companies in the industry by market capitalization (€75.38B - YE2023 (Iberdrola, 2024b)).

The Iberdrola Group's organisation is based on a matrix structure of geographic areas and businesses. The Group carries out its activities in almost thirty countries and is organised by 6 geographic areas: Spain, United Kingdom (U.K.), United States (U.S.), Brazil, Mexico and Iberdrola Energía International (IEI), which includes Portugal, Australia, Germany, Greece, France, Ireland, Italy, Hungary and Poland, and has entered into several agreements to begin developing offshore wind projects in new markets, such as Sweden, Poland, Japan, Taiwan, Vietnam, etc. (Iberdrola, 2023a).

Iberdrola's activities span the entire energy value chain, including generation, transmission, distribution, and retail. It makes electricity available to its customers through a broad array of technologies, services, and solutions in the following businesses (Iberdrola, 2023b):

- Renewables and Sustainable Generation business, which includes electricity generation from renewable sources – onshore and offshore wind, photovoltaic, and hydroelectric – , and other sources – nuclear, combined cycle gas turbine (CCGT), and cogeneration.
- Networks business, including all the energy transmission and distribution activities, such as gas and electricity, and any other regulated activity.
- Customers business, involving energy retail supply activities, mainly gas and electricity, and other products and services, including hydrogen.
- Other businesses, which incorporate other non-energy businesses.

Iberdrola performs these operations either totally or substantially, or through the ownership of shares or other equity investments in other companies, which are subject to the applicable legislation and, especially, to the prevailing laws in the energy industry.

Iberdrola's leadership in the energy transition to a sustainable model is sustained by its investments in smart grid and renewables businesses, large-scale energy storage, and digital transformation. Also, it focuses on being present in countries with high credit ratings, diversifying its portfolio of projects and markets (Iberdrola, 2024c).

The Group supplies energy to about 100 million people in several countries, has over 600,000 shareholders, a workforce of more than 42,000 employees, and assets in excess of 150 billion euros (Iberdrola, 2024c).

## 3.2 Corporate Structure

The Iberdrola Group is divided into sub-holding companies according to the locations of their activities (See Annex A1). Iberdrola España, S.A.U., Scottish Power Ltd., Iberdrola México, S.A. de C.V. and Iberdrola Energía Internacional, S.A.U. are sub-holding companies owned by Iberdrola, which through subsidiaries, carry out their activities within the various countries producing and distributing energy. Avagrid, Inc. (U.S.) and Neoenergia, S.A. (Brazil) are listed sub-holding companies in their countries' stock exchanges. The Iberdrola Energía Internacional operates in Australia, Cyprus, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Poland, Portugal, Taiwan and Romania (Iberdrola, 2024d).

Iberdrola also owns entities that support its energy operations but that are not standalone energy businesses, which are, Iberdrola Ingeniería y Construcción, S.A.U., one of the Group's technological cores that provides engineering and construction services, and Iberdrola Inmobiliaria, S.A.U., a national real estate agency (Iberdrola, 2024d).

## 3.3 Shareholder Structure and Share Performance

Iberdrola shares are listed on all four Spanish stock markets and are traded through the electronic continuous market (Spanish Stock Exchange). In New York, it is listed as an ADR (American Depositary Receipt) and the shares of Avangrid (81.5% owned by Iberdrola, S.A.) are listed on the NYSE (New York Stock Exchange). Furthermore, due to its stake in Neoenergia (of which it controls 50% + 1 share), it is also listed on the Brazilian Stock Exchange (Iberdrola, 2024e).

As of the end of 2023, the company's share capital totalled €4,762,708,500.00, made up of 6,350,278,000 shares of the same class and series, each with a nominal value of €0.75. Its equity interests are approximately distributed as 70.07% of international investors, 22.20% of Domestic individual investors and 7.73% of Domestic entities (Iberdrola, 2023c).

The main shareholders that have held a significant interest in the equity of Iberdrola or the voting rights in the last three financial years are Qatar Investment Authority, holding a stake of 8.71% of the company, BlackRock, Inc. a stake of 5.30%, and Norges Bank of 3.45% (Iberdrola, 2023c). The Board of Directors also owns 0.26% of the company and has an estimated float of 80.60%, as presented in Figure 3.1.

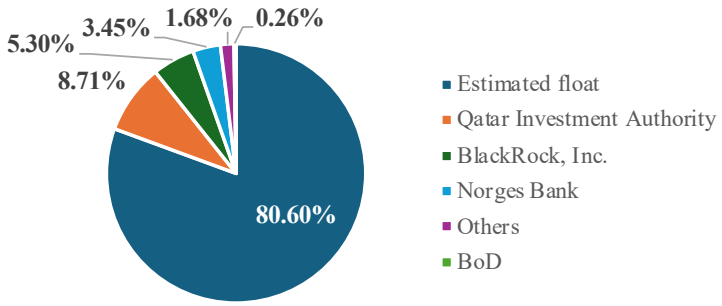


Figure 3.1. Shareholder Structure, as of December 2023

*Source: Own elaboration and Iberdrola (2023)*

Regarding share performance, over the last five years, the company's share price has registered a significant increase, going from an opening price of €6.948 in 2019 to a closing price of €11.870 at the end of 2023, representing a growth of 69.62%. It recorded an all-time high at the beginning of 2021, as perceptible in the figure below, reaching €12.505 (Figure 3.2). In 2023, Iberdrola's shareholders received a total return of 13.6% and 109.75% in just 5 years.

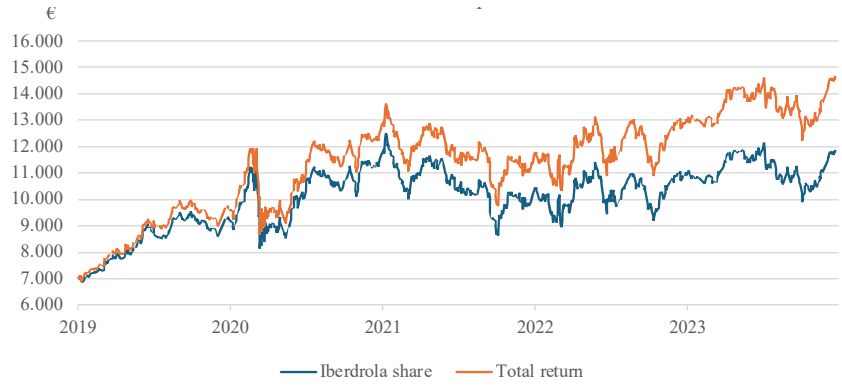


Figure 3.2. Iberdrola share price 2019-2023

*Source: Own elaboration and Iberdrola*

To get a better perspective of the stock's performance, it is helpful to compare it to its main benchmark indexes in the same time frame, as presented in Annex A2. Over the 5 years, the Euro Stoxx 50 increased by 51.07%, the Euro Stoxx Utilities by 36.89%, and lastly, the Ibex 35 by 18.15%, meaning Iberdrola's share growth has surpassed its benchmark indexes.

## 3.4 Business Performance

Regarding analyses of company performance, in order to more effectively highlight the performance of the businesses, they are reported based on network activities (regulated) and a combined category of energy production and customer activities (including both renewable and conventional sources).

The Networks Business is the core of the company's entire business model, enabling the integration of new renewable capacity and the deployment of new solutions and services, and it constitutes essential infrastructure to handle the transition of the energy model. Iberdrola's investments are primarily focused on this business since it benefits from predictable regulatory frameworks with investment incentives, minimising risks.

At the end of 2023, the company had 33.67 million supply points (+1.2% vs 2022), while the energy distributed totalled 233,704 GWh (-0.8% vs 2022) (Table 3.1).

Table 3.1. Operating figures – Networks Business

| Country | Energy Distributed (GWh) | Supply Points (Millions) |
|---|---|---|
| Spain | 87,866 | 11.44 |
| U.K. | 30,321 | 3.56 |
| U.S. | 37,174 | 2.32 |
| Brazil | 78,343 | 16.35 |
| **Total Group** | **233,704** | **33.67** |

*Source: Own elaboration and Iberdrola (2023)*

Furthermore, in 2023 the Group's regulatory asset base (RAB) was €42.2 billion, an increase of 8% compared to 2022, which was driven by growth in the U.K. (+8%), U.S. (+7%) and Brazil (+18%), leading to a more diversified mix in high-rating countries (Iberdrola, 2023d).

Regarding the Electricity Production and Customers Business, Iberdrola is focused on strengthening its leadership in storage and focused on the highest value renewable technologies. Offshore wind is considered the key to the company's future growth and more than half of its

investments in renewables are directed to offshore wind projects already under construction in the U.S., U.K., France and Germany.

At the end of 2023, Iberdrola's installed capacity totalled 62,883 MW, +3.5% compared to 2022, and of which 45,364 MW are emission-free sources (72.1% of total capacity) – including renewables and nuclear power. In terms of production, electricity generated totalled 168,599 GWh, +3% in comparison with 2022, with 61.3% of the total being emission-free (103,333 GWh) (Table 3.2). Onshore wind is the leading technology contributing to these results, accounting for 33.2% of Iberdrola's installed capacity and 26.2% of the electricity distributed. However, the technologies that have demonstrated the highest growth are offshore wind and solar, reflecting the company's strategic investments in expanding these areas.

Table 3.2. Operating figures – Electricity Production and Customers Business

| Country | Installed Capacity (MW) | Electricity Generated (GWh) |
|---|---|---|
| Spain | 30,807 | 61,263 |
| UK | 3,002 | 7,459 |
| USA | 9,673 | 23,326 |
| Mexico | 11,197 | 56,797 |
| Brazil | 4,395 | 13,653 |
| IEI | 3,809 | 6,102 |
| **Total Group** | **62,883** | **168,599** |

*Source: Own elaboration and Iberdrola (2023)*

Additionally, Iberdrola has been leading the European PPA Market with almost 1,000 MW contracted in 2023 (7% of the whole EU market) and increasing its PPA portfolio by signing partnerships with large global customers with prospects of sustained growth in demand in different geographies, such as Vodafone, TMD and Salzgitter. In fact, at the end of September 2023, the company sold around 90% of the energy it had planned to generate in the 2023-2025 period, mainly through long-term contracts and PPAs (Iberdrola, 2024a).

Regarding financial figures, over the past five years, Iberdrola has demonstrated a robust and resilient business model, consistently growing its revenues and achieving a CAGR of 7.9% from 2019 to 2023, amounting to €49.3 billion in 2023. Although revenues experienced a slight decline in 2020 due to the COVID-19 pandemic, this setback was compensated in the following year. In 2023, revenues decreased, primarily due to decreases in the Electricity Production and Customers Business revenues, but despite this, Iberdrola still managed to achieve a higher EBITDA relative to 2022 (+9.0% in total and +28.4% in Electricity Production and Customers Business), due to the recovery of production and operational efficiency (Figure 3.3).

The business with the highest revenues is the Electricity Production and Customers Business, which represents around 60% of the total revenues of the Group and registered a CAGR of 8.8% over the 5 years. Disaggregating the Electricity Production and Customers Business into the Customers and Renewables and Sustainable Generation businesses, it is perceptible that this growth is mainly due to Renewables, which registered a CAGR of 24.7%, underscoring Iberdrola's strategic focus on expanding its renewable energy portfolio and driving the global transition to cleaner energy sources.

The Networks Business reported €18.4 billion in revenues in 2023, registering a CAGR of 6.6% over the same period (Figure 3.3).

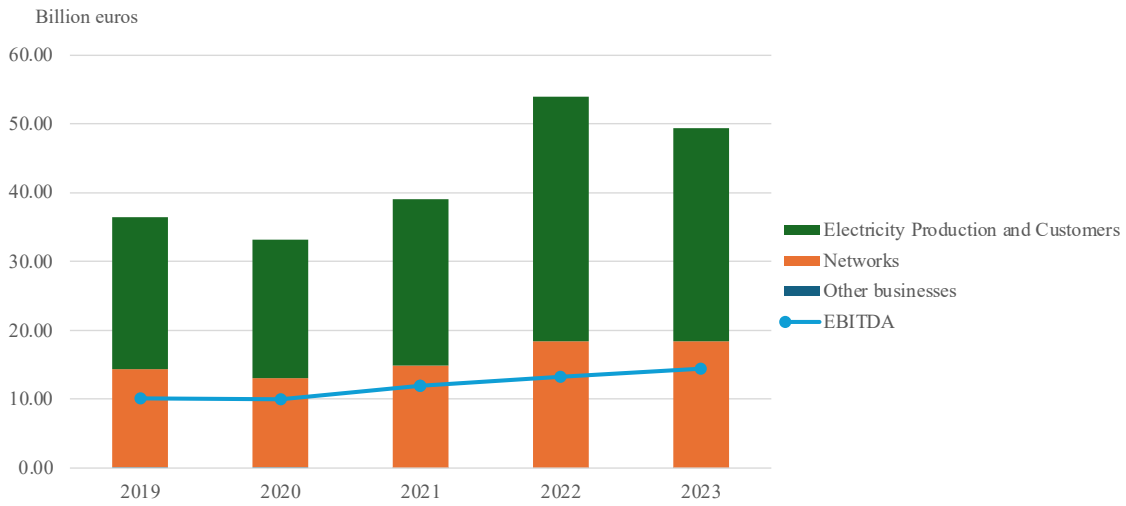


Figure 3.3. Revenues per business

*Source: Own elaboration and Iberdrola Reports (2019-2023)*

Regarding the geographical distribution, around 40% of the revenues come from Spain, which in 2023 represented €18.3 billion (Figure 3.4). Despite its revenues registering a CAGR of 6% over the 5 years, in 2023 it decreased by 20% compared to the previous year, which was due to abnormal performance in 2022 (low output from renewables and nuclear), however, production reached normal levels in the following year.

Although most of the company's revenues come from Spain, Iberdrola has been able to extend its presence over the years, especially in the U.K. and Brazil, where the company generated 22% and 18% of its revenues, amounting €10.8 and €9 billion, respectively (Figure 3.4). The U.K. has shown the highest revenue growth, registering a CAGR of 16.8% from 2019 to 2023, due to a higher asset base in the Networks Business and, in Electricity Production and Customers, due to the normalisation of margins in the supply business and higher offshore wind production.

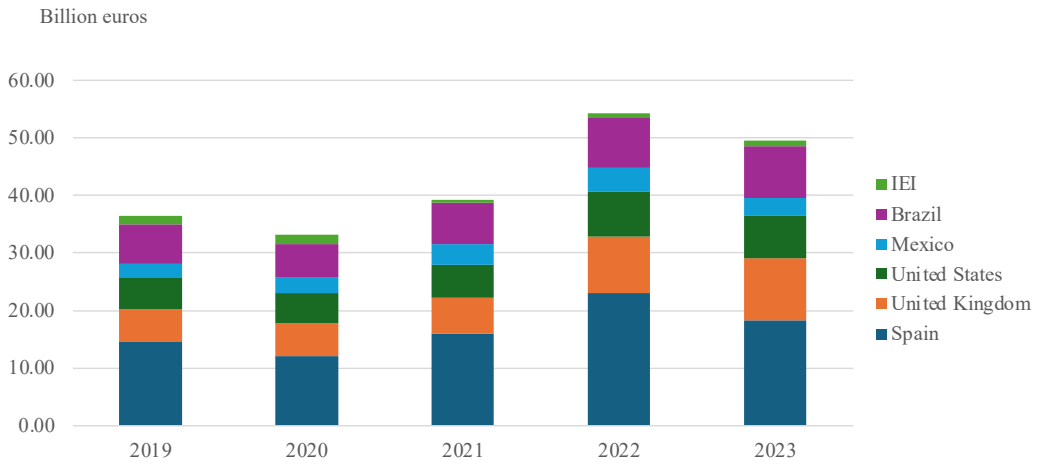


Figure 3.4. Revenues per region

*Source: Own elaboration and Iberdrola Reports (2019-2023)*

Looking beyond revenues, Iberdrola has consistently grown its EBITDA, reaching €14.4 billion in 2023 and achieving a CAGR of 9.3% over the five years. During the same period, Iberdrola's net profit demonstrated a CAGR of 8.5%, totalling €4.8 billion in 2023, highlighting the company's consistent financial performance and ability to generate increasing shareholder value (Table 3.3).

Table 3.3. Key financial figures 2019-2023

| €M | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| Revenues | 36,438 | 33,145 | 39,114 | 53,949 | 49,335 |
| COGS | 20,175 | 17,000 | 22,052 | 33,750 | 26,033 |
| **GROSS MARGIN** | **16,263** | **16,145** | **17,062** | **20,199** | **23,302** |
| Operating Expenses | 6,159 | 6,107 | 5,056 | 6,971 | 8,884 |
| **EBITDA** | **10,104** | **10,038** | **12,006** | **13,228** | **14,417** |
| **EBIT** | **5,877** | **5,564** | **7,343** | **7,984** | **8,973** |
| **NET PROFIT** | **3,466** | **3,611** | **3,885** | **4,339** | **4,803** |

*Source: Iberdrola Reports, 2019-2023*

## 3.5 Strategic Outlook

Iberdrola firmly believes that achieving a carbon-neutral economy by 2050 is not only technologically feasible but also economically viable and socially necessary. The Group has been at the forefront of this transition for over two decades, with a firm commitment to renewable energy, leading to investments exceeding €150 billion (Iberdrola, 2023a).

Looking ahead, Iberdrola plans to continue its ambitious investment strategy, foreseeing investments of €41 billion for the 2024-2026 period (with €5 billion contributed by the

company's partners), aiming to increase installed renewable capacity and smart grids (Iberdrola, 2024e).

This commitment will be fulfilled through a business model with the following features, accelerating value creation for all (Iberdrola, 2023a; Iberdrola, 2024e):

1. Aimed to meet stakeholder expectations by integrating ESG+F factors into the management and strategy of the business.
2. Investment is primarily focused on the Networks business because it benefits from predictable regulatory frameworks with investment incentives, minimizing risks. A total of €21.5 billion will be allocated to networks in the 2024-2026 period, to reach an asset base of €54 billion in 2026. This investment will be allocated mainly to the U.S., representing about 44% of the total invested, 25% for the U.K., 21% for Brazil, and 10% for Spain.
3. It is supplemented by selective investments in renewables, ensuring the projects with the best risk profile are selected, in an effort to build a portfolio with future growth and viable alternatives. Investments will reach €15.5 billion (€5 billion from contributions of the company's renewable partners), with over 54% allocated to offshore wind (one of the keys to the company's future), 20% to onshore wind, and 18% to solar photovoltaic.
4. Geographical diversification, with a focus on countries with high credit ratings, ambitious electrification goals, and regulatory stability. Of the €36 billion net investment for 2024-2026, 85% will go to these countries (such as the U.S. (35%), the U.K. (24%), and Iberia (15%), among others).
5. Commitment to maintaining its strong financial position, which preferentially relies on green finance instruments since the investment plan is highly aligned with the EU Taxonomy. This includes cash recovery as a key investment criterion, fixed-rate financing as a preference, long-term profile of maturities with active liquidity management, diversification of financing sources maximising use of green financing, and no capital increases.
6. A dividend policy that establishes a strong and growing dividend aligned with the increase in the company's profits, aiming for a payout ratio between 65% and 75%.

These investments will enable the company to improve its financial strength, therefore, it is forecasted that EBITDA will reach €16.5-17 billion by the end of 2026, and net profit to increase to a range of €5.6-5.8 billion (Iberdrola, 2024e).

For the period 2026-2030, driven by growth in all markets and accelerating electrification, investments could reach €65-75 billion to exceed 100 GW of installed capacity (over 80% renewable) and €65 billion in network assets (Iberdrola, 2023b). The goal is to attain carbon neutrality for Scopes 1 and 2[2] by 2030, offsetting any residual emissions after that year. Ultimately, Iberdrola is committed to achieving Net Zero emissions by 2040 (Iberdrola, 2023a).

## 3.6 Competitive Landscape

Iberdrola operates in a highly competitive industry that is constantly evolving, driven by the increasing demands for sustainability and the transformative impact of new technologies. The global energy market, especially the renewable energy segment, is marked by intense competition as companies race to meet the growing demand for clean energy, reduce emissions, and capitalise on the transition toward sustainable energy models. Despite these pressures, Iberdrola has managed to secure a leading position within the global market.

Based on a list of peers extracted from Refinitiv, Iberdrola's main competitors include Naturgy Energy Group SA, Engie SA, RWE AG, Endesa SA, Enel SpA, EDP SA, Redeia Corporacion SA, and Enagas SA. These companies are significant players in the energy industry and share Iberdrola's commitment to sustainability and renewable energy.

Naturgy Energy Group (Spain), Endesa (Spain), Enel (Italy), and EDP (Portugal) are among Iberdrola's main competitors, all with a strong focus on renewable energy and sustainability. These companies are aggressively investing in expanding their renewable energy portfolios, particularly in wind and solar power, as part of the global transition to a low-carbon economy. Their efforts align with Iberdrola's strategic objectives in renewable energy and decarbonisation, making them direct rivals for the leadership in the clean energy sector. Additionally, these companies have significant regional and global presence, with operations across Europe, Latin America, and other key markets, heightening the competitive pressure on Iberdrola to maintain its leading position in the energy transition. Also in Spain, Redeia Corporacion and Enagas focus on enhancing the efficiency and resilience of energy distribution and storage infrastructure, positioning them as crucial actors in supporting the broader energy transition.

[2] Scope 1 emissions are the direct emissions owned or controlled by a company and Scope 2 emissions are indirect emissions that result from the company's activities but originate from sources not owned or directly controlled by it.

From France and Germany, respectively, Engie and RWE have been actively investing in green hydrogen and battery storage technologies, which could redefine energy markets and intensify competition in these emerging areas.

Despite these competitive pressures, Iberdrola has managed to maintain its position through its expansive renewable energy portfolio, strategic global investments, and focus on innovation. As presented in Figure 3.5, Iberdrola stands as the leading company by market capitalization among its key peers, highlighting its competitive strength and success within the industry.

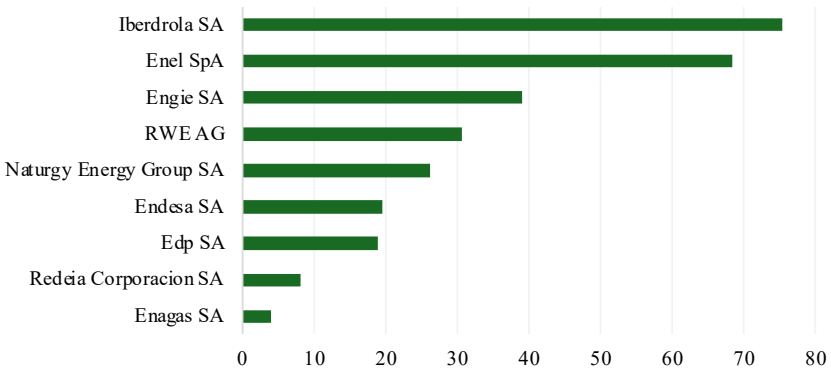


Figure 3.5. Market capitalisation: Iberdrola and peers, 2023

*Source: Own elaboration and Iberdrola (2024)*

## 3.7 SWOT Analysis

After conducting a thorough analysis of the company, industry, and macroeconomic factors, a SWOT analysis can be performed to offer a complete view of Iberdrola's strategic positioning. This analysis provides a clear picture of where the company stands, examining its strengths and weaknesses, what challenges it faces, and where it can capitalize on opportunities (See Annex A3).

# 4 Financial Analysis

This chapter provides a comprehensive financial analysis of Iberdrola, focusing on profitability, liquidity, capital structure and solvency to assess the company's overall financial health and performance. Such an analysis is critical to understanding how effectively Iberdrola manages its resources, meets its financial obligations, and positions itself for future growth. Together, these insights offer a comprehensive view of Iberdrola's financial standing and future outlook and, ultimately, are essential for accurately estimating its value.

## 4.1 Profitability

Profitability analysis is crucial for understanding Iberdrola's financial health and its ability to generate sustainable earnings over time. Key profitability metrics, including Gross Profit margin, EBITDA margin, and Net Profit margin, will be analysed to assess how efficiently the company converts its revenues into profits.

As presented in Table 4.1, Iberdrola's Gross Profit margin, calculated by dividing Gross profit by revenues, averaged 44.33% between 2019 and 2023, outperforming the global utilities industry average of 36.20% (Damodaran, 2024), which suggests that Iberdrola is more efficient in managing its production costs relative to its peers, enabling it to retain a larger portion of its revenue as gross profit. The margin has been fairly stable over this period and has grown at a CAGR of 1.42%.

Concerning EBITDA, its margin (obtained by dividing EBITDA by revenues) averaged 28.49% over the past five years, significantly surpassing the industry's average of 16.47% (Damodaran, 2024). This indicates a strong operational efficiency and profitability relative to its peers. Additionally, the margin has experienced a CAGR of 1.32%, reflecting a steady, but modest, growth trend in its EBITDA performance (Table 4.1).

Lastly, Net Profit margin (Net profit divided by revenues) averaged 9.62% over the same period, which is notably above the industry average of 6.36% (Damodaran, 2024), indicating that Iberdrola has achieved a higher level of profitability compared to its peers (Table 4.1).

Table 4.1. Profitability Margins

| | 2019 | 2020 | 2021 | 2022 | 2023 | Average | CAGR |
|---|---|---|---|---|---|---|---|
| **Gross Profit Margin** | 44.63% | 48.71% | 43.62% | 37.44% | 47.23% | **44.33%** | 1.42% |
| **EBITDA Margin** | 27.73% | 30.29% | 30.69% | 24.52% | 29.22% | **28.49%** | 1.32% |
| **Net Profit Margin** | 9.51% | 10.89% | 9.93% | 8.04% | 9.74% | **9.62%** | 0.58% |

*Source: Own elaboration*

Additionally, it is useful to analyse indicators such as the Return on Assets (ROA), Return on Equity (ROE), and Return on Invested Capital (ROIC) to provide deeper insights into the company's ability to generate returns for its shareholders and optimise the use of its capital.

The ROA, calculated by dividing the net income by the total assets, indicates how effectively the company uses its assets to generate profits. As shown in Table 4.2, Iberdrola has achieved an average ROA of 3.0% over the past five years, which is closely aligned with the industry's average of 2.9%, indicating that Iberdrola's efficiency in utilising its assets to generate earnings is consistent with industry norms. Additionally, it has been growing at a CAGR of 3.18%.

The ROE, obtained by dividing the net income by the equity of shareholders of the parent, measures the profitability relative to shareholders' equity, i.e., how well the company uses equity from its investors to generate growth. Iberdrola's ROE has averaged 10.27% over the past five years, which is also almost aligned with the industry average of 10.61% (Damodaran, 2024), suggesting that Iberdrola's performance in generating profits relative to shareholders' equity is in line with industry standards. Moreover, it has grown consistently, having registered a CAGR of 5.52% over the same period (Table 4.2).

Finally, the ROIC measures the company's efficiency in allocating its capital to generate returns, including both equity and debt, and is obtained by dividing the NOPLAT by the IC. From 2019 to 2023, Iberdrola's ROIC averaged 6% (Table 4.2), which is below the industry's average of 8.32% (Damodaran, 2024). Despite this, the company has demonstrated a positive trend, with ROIC growing at a CAGR of 4.01% over the period, indicating that even though it is behind the industry average, it is improving steadily.

Table 4.2. Profitability Ratios

| | 2019 | 2020 | 2021 | 2022 | 2023 | Average | CAGR |
|---|---|---|---|---|---|---|---|
| Net Income *(€M)* | 3,466 | 3,611 | 3,885 | 4,339 | 4,803 | | |
| Assets *(€M)* | 120,256 | 119,091 | 137,720 | 145,507 | 147,013 | | |
| **ROA** | **2.88%** | **3.03%** | **2.82%** | **2.98%** | **3.27%** | **3.00%** | **3.18%** |
| Net Income *(€M)* | 3,466 | 3,611 | 3,885 | 4,339 | 4,803 | | |
| Equity *(€M)* | 37,678 | 35,413 | 40,479 | 41,119 | 43,111 | | |
| **ROE** | **9.20%** | **9.88%** | **10.24%** | **10.63%** | **11.40%** | **10.27%** | **5.52%** |
| NOPLAT *(€M)* | 4,963 | 4,482 | 5,429 | 6,823 | 7,363 | | |
| IC *(€M)* | 86,200 | 84,479 | 96,428 | 103,587 | 109,252 | | |
| **ROIC** | **5.76%** | **5.31%** | **5.63%** | **6.59%** | **6.74%** | **6.00%** | **4.01%** |

*Source: Own elaboration*

## 4.2 Liquidity

Liquidity analysis is useful for understanding the company's ability to meet its short-term obligations. By examining key liquidity ratios such as the Current Ratio, Quick Ratio, Cash Ratio and the Cash Conversion Cycle (CCC) indicator, this analysis will provide insights into Iberdrola's capacity to cover its short-term liabilities using its available short-term assets and how quickly Iberdrola converts its working capital components into cash.

The Current Ratio assesses the company's ability to pay off its short-term obligations using its short-term assets and, therefore, is calculated by dividing its current assets by its current liabilities. Iberdrola's current ratio averaged 0.82 over the period in analysis, as presented in Table 4.3. Regarding the Quick Ratio, it measures the company's ability to meet its short-term obligations using its short-term assets, excluding inventory. This is useful because it focuses on the most liquid assets that can be quickly converted to cash, without depending on the sale of inventory. Iberdrola's quick ratio averaged 0.71, as observable in Table 4.3. Lastly, the Cash Ratio is the strictest liquidity ratio and measures a company's ability to pay its current liabilities with only its cash and cash equivalents. Iberdrola's cash ratio averaged 0.15 (Table 4.3).

As it is possible to observe, all the ratios are below 1.0, which might indicate that the company could face difficulties meeting its short-term obligations. However, it is also important to consider the industry in which Iberdrola operates. It is relatively normal for companies in the energy sector to have low liquidity levels due to its capital-intensive nature that requires significant investment in infrastructure such as power plants, transmission lines, and renewable energy installations. Also, energy companies usually have stable and predictable revenue streams due to long-term contracts and regulated prices, which can allow them to effectively operate with lower liquidity.

Nevertheless, Iberdrola has established solid relationships with financial institutions and banks and has a liquidity policy designed to ensure that it can meet its payment obligations without resorting to financing under disadvantageous conditions. Looking ahead to 2024, Iberdrola expects to cover its planned ordinary investments with cash on hand and cash flow generated from its operations (Iberdrola, 2023b).

Table 4.3. Liquidity Ratios

| | 2019 | 2020 | 2021 | 2022 | 2023 | Average | CAGR |
|---|---|---|---|---|---|---|---|
| Current Assets *(€M)* | 13,558 | 14,972 | 22,384 | 23,225 | 23,063 | | |
| Current Liabilities *(€M)* | 19,131 | 17,930 | 24,353 | 28,840 | 28,071 | | |
| **Current Ratio** | **0.71** | **0.84** | **0.92** | **0.81** | **0.82** | **0.82** | **3.77%** |
| | | | | | | | |
| Current Assets - Inventories | 11,016 | 12,529 | 19,744 | 21,067 | 20,512 | | |
| Current Liabilities *(€M)* | 19,131 | 17,930 | 24,353 | 28,840 | 28,071 | | |
| **Quick Ratio** | **0.58** | **0.70** | **0.81** | **0.73** | **0.73** | **0.71** | **6.14%** |
| | | | | | | | |
| Cash and Cash Equivalents | 2,113 | 3,427 | 4,033 | 4,608 | 3,019 | | |
| Current Liabilities *(€M)* | 19,131 | 17,930 | 24,353 | 28,840 | 28,071 | | |
| **Cash Ratio** | **0.11** | **0.19** | **0.17** | **0.16** | **0.11** | **0.15** | **-0.66%** |

*Source: Own elaboration*

Regarding the CCC, it measures the time it takes for the company to convert its investments in inventory and other resources into cash flows from sales, by using the Days Sales Outstanding (DSO), Days Inventory Outstanding (DIO) and Days Payable Outstanding (DPO) metrics. A low or decreasing CCC indicates a more efficient management of working capital. Despite decreases in the individual components of the CCC over the past five years, Iberdrola's CCC grew at a CAGR of 9.82% and averaged 22.28 days, as presented in Table 4.4. This growth reflects a slightly longer cycle of cash conversion compared to earlier years, however, it remains closely aligned with the industry's average which has also increased in recent years, partly due to the economic impacts of the Russian war that have led to disruptions in supply chains.

Table 4.4. Cash Conversion Cycle

| | 2019 | 2020 | 2021 | 2022 | 2023 | Average | CAGR |
|---|---|---|---|---|---|---|---|
| Accounts Receivable *(€M)* | 6,674 | 6,478 | 8,183 | 9,869 | 8,906 | | |
| Sales *(€M)* | 36,438 | 33,145 | 39,114 | 53,949 | 49,335 | | |
| **DSO** | **66.86** | **71.33** | **76.36** | **66.77** | **65.89** | **69.44** | **-0.36%** |
| | | | | | | | |
| Inventories *(€M)* | 2,542 | 2,443 | 2,639 | 2,159 | 2,550 | | |
| COGS *(€M)* | 20,175 | 17,000 | 22,052 | 33,750 | 26,033 | | |
| **DIO** | **45.98** | **52.45** | **43.69** | **23.35** | **35.75** | **40.24** | **-6.10%** |
| | | | | | | | |
| Accounts Payable *(€M)* | 5,098 | 5,137 | 5,964 | 5,927 | 5,112 | | |
| COGS *(€M)* | 20,175 | 17,000 | 22,052 | 33,750 | 26,033 | | |
| **DPO** | **92.23** | **110.30** | **98.72** | **64.10** | **71.67** | **87.40** | **-6.11%** |
| | | | | | | | |
| **CCC** | **20.61** | **13.49** | **21.32** | **26.02** | **29.97** | **22.28** | **9.82%** |

*Source: Own elaboration*

## 4.3 Capital Structure and Solvency

This analysis delves into Iberdrola’s capital structure, focusing on key ratios that highlight the company's approach to financing and debt management. Given the capital-intensive nature of the energy industry, where significant investments in infrastructure and technologies are required, understanding Iberdrola’s capital structure is useful in assessing its financial health and risk profile. By examining metrics such as the Debt-to-Capital Ratio, Debt-to-Equity (D/E) Ratio, Interest Coverage Ratio and Net Debt-to-EBITDA, it is possible to obtain insights into Iberdrola's leverage, capacity to cover interest expenses and overall financial stability.

The Debt-to-Capital Ratio shows the percentage of capital that comes from debt and was calculated by dividing the financial debt by the sum of the financial debt and the book value of equity. This ratio has consistently been around 46% over the past five years, indicating a stable and predictable capital structure where debt comprises 46% of the company's capital, with equity constituting the remaining 54% (Table 4.5). It highlights the company's constant reliance on borrowed funds to finance its operations and investments, however it can signify higher potential risks. Nevertheless, this level of leverage is common in these industries with high capital requirements and it is also below the industry average, which according to Damodaran (2024), the average Debt-to-Capital Ratio (also utilising financial debt) was 56.36% in the global utilities industry.

The D/E Ratio measures the proportion of debt used relative to equity and was obtained by dividing the financial debt by the book value of equity. Iberdrola’s D/E Ratio has remained relatively stable over the past five years, averaging 0.85 (Table 4.5).

The Interest Coverage ratio indicates how comfortably a company can cover its interest expenses with its EBIT, being calculated by dividing EBIT by the interest expenses. A higher ratio suggests greater ease in handling interest expenses, which is a positive sign of financial health and stability. Iberdrola's average Interest Coverage ratio over the past five years was 4.34, meaning that its EBIT could cover its interest expenses by over four times, on average, which suggests a strong financial condition to cover its interest payments. However, this ratio registered a CAGR of -6.37%, due to an increase in interest expenses higher than the increase registered in EBIT but is still considered a healthy ratio (Table 4.5). Also, compared to the industry average of 3.60 (Damodaran, 2024), Iberdrola is notably above, indicating a solid position in managing its financial obligations relative to its peers.

The Net Debt-to-EBITDA ratio is a leverage ratio that measures a company's ability to pay off its net debt using its EBITDA, determined by dividing the financial debt minus cash and

cash equivalents by the EBITDA. As presented in Table 4.5, Iberdrola's average Net Debt-to-EBITDA ratio was 3.55, meaning it would take them around 3.55 years to pay off its net debt using its current EBITDA. This ratio demonstrated a CAGR of -3.15% during the period, indicating an improvement in the company's financial stability and its ability to handle debt. Compared to the industry's average Net Debt-to-EBITDA ratio, which was 4.83 (Damodaran, 2024), Iberdrola's lower ratio highlights its effective debt management strategies and its stronger financial health relative to its peers.

Table 4.5. Capital Structure and Solvency Ratios

| | 2019 | 2020 | 2021 | 2022 | 2023 | Average | CAGR |
|---|---|---|---|---|---|---|---|
| Debt *(€M)* | 41,119 | 40,687 | 44,334 | 50,081 | 51,980 | | |
| Debt + Equity *(€M)* | 88,314 | 87,906 | 100,460 | 108,195 | 112,272 | | |
| **Debt-to-Capital Ratio** | **0.47** | **0.46** | **0.44** | **0.46** | **0.46** | **0.46** | **-0.14%** |
| Debt *(€M)* | 41,119 | 40,687 | 44,334 | 50,081 | 51,980 | | |
| Equity *(€M)* | 47,195 | 47,219 | 56,126 | 58,114 | 60,292 | | |
| **Debt-to-Equity Ratio** | **0.87** | **0.86** | **0.79** | **0.86** | **0.86** | **0.85** | **-0.26%** |
| EBIT *(€M)* | 5,877 | 5,564 | 7,343 | 7,984 | 8,973 | | |
| Interest expenses *(€M)* | 1,354 | 1,179 | 1,361 | 2,053 | 2,690 | | |
| **Interest Coverage Ratio** | **4.34** | **4.72** | **5.40** | **3.89** | **3.34** | **4.34** | **-6.37%** |
| Net Debt *(€M)* | 39,006 | 37,260 | 40,301 | 45,473 | 48,961 | | |
| EBITDA *(€M)* | 10,104 | 10,038 | 12,006 | 13,228 | 14,417 | | |
| **Net Debt-to-EBITDA Ratio** | **3.86** | **3.71** | **3.36** | **3.44** | **3.40** | **3.55** | **-3.15%** |

*Source: Own elaboration*

In conclusion, Iberdrola's financial analysis reveals solid performance with growth potential, reflecting the company's strong market position. While certain indicators, such as lower liquidity ratios and a high reliance on debt, may appear risky at first glance, these metrics are typical for the capital-intensive energy sector. Additionally, Iberdrola has been fairly closely aligned with the industry average across most metrics, indicating that its financial performance is consistent with sector standards.

# 5 Valuation

In this chapter, Iberdrola's intrinsic value as of December 31st, 2023 was estimated, using the DCF methodology and Relative Valuation (or multiples valuation), as a complementary approach. The results were then compared to the actual market price at that time to determine whether Iberdrola's shares were undervalued, overvalued, or fairly priced, and an investment recommendation was provided to either buy, sell, or hold the shares.

## 5.1 Assumptions and Forecasts

This subchapter presents all the assumptions and calculations used for the DCF valuation, aiming to produce accurate forecasts for Iberdrola's future cash flows. It was used historical data from 2019 to 2023 and projections extended to 2030, aligning with the standard period commonly used in industry forecast analysis and consistent with Iberdrola's strategic outlooks. A terminal value was established beyond this period to account for the perpetual cash flows expected after 2030, ensuring a comprehensive assessment of the company's long-term value.

### 5.1.1 Revenues

The revenue projections are segmented by Iberdrola's two main business areas: Electricity Production and Customers and Networks.

Regarding the Electricity Production and Customers Business, the revenue projections for the forecasted period were estimated by considering two key factors: installed capacity and energy price growth.

Due to a series of events in the previous years, such as the pandemic and the Russian war, historical growth rates are not suitable for future projections, as these events have significantly disrupted the energy sector, making past performance less reliable as an indicator of future growth. Additionally, with the increasing efforts by countries and consumers to transition towards cleaner energy sources, the industry is expected to undergo substantial changes. Therefore, it was more appropriate to base the forecasts on energy industry outlooks and market expectations, which better capture the expected shifts and trends within the sector.

Starting with installed capacity, the projections were based on two scenarios: optimistic and pessimistic. As mentioned in the Industry Overview subchapter, the optimistic and pessimistic scenarios were aligned with the IEA's APS and STEPS scenarios, respectively. Using these scenarios is appropriate since Iberdrola defines its strategic outlook based on the APS scenario, ensuring that the projections align with both industry expectations and the company's strategy.

Then, a base scenario was created, representing an average of the projections from both optimistic and pessimistic scenarios, which will be the one used for the revenue projections.

The annual growth rates for the installed capacity of each source are presented in Table 5.1. These growth rates directly follow the IEA projections for both scenarios for all the sources, except for the optimistic scenario of the CCGT & cogeneration. This scenario was adjusted to reflect Iberdrola's plans to sell 50% of its CCGT capacity by 2030 (agreement to sell 88% of Mexico's CCGT capacity), aligning the forecasts more closely with the company's strategic intentions. This significant negative growth rate is included in the optimistic scenario as it reflects the global trend to reduce fossil fuel use, making this decline in CCGT capacity a positive step toward sustainability. The growth rate for this scenario was calculated by determining the annual rate of decline necessary to reach half of the current CCGT capacity by 2030.

Table 5.1. Installed capacity forecasted annual growth rate, by scenario, 2024-2030

| | Optimistic | Pessimistic | Base |
|---|---|---|---|
| Renewables | 13.20% | 11.41% | 12.30% |
| Nuclear | 2.22% | 1.85% | 2.03% |
| CCGT & Cogeneration (1) | -9.43% | -0.10% | -4.76% |
| **Total** | **8.73%** | **8.44%** | **8.48%** |

(1) Unabated fossil fuels

*Source: Own elaboration and IEA (2024)*

Then, the projections for installed capacity in the base scenario are outlined in Table 5.2. These values are aligned with Iberdrola's Strategic Plan, which aims to exceed 100 GW of total installed capacity by 2030, with around 80% of this capacity coming from renewable energy sources, as mentioned in the Strategic Outlook section in the Company Overview chapter.

Table 5.2. Installed capacity forecasts, 2024-2030

| | 2023A | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F | CAGR | % of total |
|---|---|---|---|---|---|---|---|---|---|---|
| **Renewables** | 42.2 | 47.4 | 53.2 | 59.7 | 67.1 | 75.3 | 84.6 | 95.0 | **12.30%** | 85.51% |
| **Nuclear** | 3.2 | 3.2 | 3.3 | 3.4 | 3.4 | 3.5 | 3.6 | 3.7 | **2.03%** | 3.29% |
| **CCGT & Cogeneration** | 17.5 | 16.7 | 15.9 | 15.1 | 14.4 | 13.7 | 13.1 | 12.4 | **-4.76%** | 11.20% |
| **Total** | **62.9** | **67.3** | **72.4** | **78.2** | **84.9** | **92.6** | **101.3** | **111.1** | **8.48%** | **100.00%** |

*Source: Own elaboration*

Concerning price projections, it is anticipated that energy prices will decrease following its recent high levels driven by the Russian war. Additionally, the increasing share of renewables

in the energy mix helps reduce exposure to the volatility of fossil fuel prices, as renewables are generally more affordable and their levelized costs have been decreasing, enabling energy providers to offer lower prices to consumers. For electricity prices, inputs from the U.S. Energy Information Administration (2023) and SolarPower Europe (2024) suggest an average annual growth rate of -3.17% until 2030 (Table 5.3). For gas prices, the International Monetary Fund (April, 2024) projections were used, specifically the "Commodity Natural Gas Price Index" including European, Japanese, and American Natural Gas Price Indices, which forecasts an annual growth rate of -4.09%. Considering the weighted average of Iberdrola's share of each energy source, the overall energy price annual growth rate was forecasted to be -3.33% until 2030 (Table 5.3).

Table 5.3. Energy price forecasted annual growth rate, by scenario, 2024-2030

| | CAGR 2024-2030 | Share |
|---|---|---|
| **Electricity** | -3.17% | 82.28% |
| **Gas** | -4.09% | 17.72% |
| **Weighted total energy price** | **-3.33%** | |

*Source: Own elaboration*

Finally, the revenue growth rate of the Electricity Production and Customers Business was determined through a combined effect of the installed capacity and energy price projected growth. As observable in Table 5.4, the annual growth rate for the forecasted period is 4.86%, with revenues expected to reach €44,175 million by 2030.

Table 5.4. Electricity Production and Customers Business revenues forecast, 2024-2030

| Revenues (€M) | 2023A | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F | CAGR |
|---|---|---|---|---|---|---|---|---|---|
| Electricity Production & Customers | 31,683 | 33,224 | 34,840 | 36,534 | 38,310 | 40,173 | 42,127 | 44,175 | **4.86%** |

*Source: Own elaboration*

For the Networks Business, the revenue forecast was based on inputs from Iberdrola's Strategic Plan 2024-2026 and its objectives for 2030 and it was assumed that they will grow in line with the RAB evolution. As mentioned in the Strategic Outlook section in the Company Overview chapter, Iberdrola expects its RAB to grow by 28% by 2026, reaching €54 billion, and aims to reach €65 billion by 2030. Consequently, the revenue growth was divided into two periods – 2023-2026 and 2027-2030 – to align with the company's projections. The first period reflects an annual growth rate of 8.6%, while the second period reflects a rate of 4.7%, with

revenues anticipated to reach €28,284 million by 2030 (Table 5.5). Additionally, since the majority of Iberdrola's investments are focused on expanding the Networks segment, it is reasonable to expect the growth rate of this segment to exceed that of the EP&C segment. This investment strategy reflects Iberdrola's commitment to strengthening its transmission and distribution infrastructure, which is essential for supporting the transition to a more resilient and sustainable energy system.

Table 5.5. Networks Business revenues forecast, 2024-2030

| | 2023-2026 | 2027-2030 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Regulated Asset Base | 8.6% | 4.7% | | | | | | |
| **Revenues (€M)** | **2023A** | **2024F** | **2025F** | **2026F** | **2027F** | **2028F** | **2029F** | **2030F** |
| Networks | 18,363 | 19,936 | 21,644 | 23,498 | 24,613 | 25,780 | 27,003 | 28,284 |

*Source: Own elaboration and Iberdrola (2024)*

Table 5.6 presents the total revenue projections, combining the forecasts from both the Electricity Production and Customers and Networks segments. The overall annual growth rate for total revenues was projected to be 5.4%, with revenues expected to reach €72,460 million by 2030.

Table 5.6. Total revenues forecast, 2024-2030

| €M | 2023A | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F | CAGR |
|---|---|---|---|---|---|---|---|---|---|
| Electricity Production & Customers | 31,683 | 33,224 | 34,840 | 36,534 | 38,310 | 40,173 | 42,127 | 44,175 | |
| Networks | 18,363 | 19,936 | 21,644 | 23,498 | 24,613 | 25,780 | 27,003 | 28,284 | |
| **Total revenues** | **50,046** | **53,160** | **56,483** | **60,032** | **62,923** | **65,953** | **69,130** | **72,460** | **5.4%** |

*Source: Own elaboration*

### 5.1.2 Operating costs and EBIT

For the operating costs, including COGS, Operating Expenses (OPEX), and D&A, it was assumed that they would grow in line with the revenues, based on the average historical proportion of these costs relative to revenues.

See Annex B1 for the income statement until EBIT with the segment breakdown and the average historical proportion of operating costs relative to revenues. As observable, the forecasts align with the company's projections of reaching an EBITDA of €16.5-17 billion by 2026, with a 50/50 split between the two segments, as discussed in the Strategic Outlook section in the Company Overview chapter. In Table 5.7 is presented the consolidated income statement until the EBIT for the forecasted period.

Table 5.7. Operating costs and EBIT forecasts, 2024-2030

| €M | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F |
|---|---|---|---|---|---|---|---|
| Revenues | 53,160 | 56,483 | 60,032 | 62,923 | 65,953 | 69,130 | 72,460 |
| COGS | 29,971 | 31,753 | 33,649 | 35,273 | 36,976 | 38,760 | 40,631 |
| **GROSS MARGIN** | **23,190** | **24,731** | **26,382** | **27,650** | **28,978** | **30,370** | **31,829** |
| Operating Expenses | 8,339 | 8,894 | 9,490 | 9,946 | 10,423 | 10,924 | 11,449 |
| **EBITDA** | **14,850** | **15,836** | **16,893** | **17,704** | **18,555** | **19,446** | **20,380** |
| Depreciation and Amortization | 5,869 | 6,256 | 6,671 | 6,992 | 7,328 | 7,680 | 8,049 |
| **EBIT** | **8,981** | **9,580** | **10,222** | **10,713** | **11,227** | **11,766** | **12,332** |

*Source: Own elaboration*

### 5.1.3 Capital Expenditures

The CapEx forecast was aligned with Iberdrola's strategy as presented in the Strategic Outlook section in the Company Overview chapter. Concerning increases in CapEx, Iberdrola targets investments of €36 billion (alongside an additional €5 billion from the company's strategic partners that were not accounted for in the CapEx) over the 2024-2026 period, being distributed equally across the years. As disclosed by Iberdrola (2024e), of this total, €14.5 billion (plus €5 billion from partners) will be allocated to the Electricity Production and Customers Business, while the remaining €21.5 billion will be dedicated to the Networks, as presented in Table 5.8.

For the 2026-2030 period, Iberdrola expects to invest between €65-75 billion, driven by growth across all markets and accelerating electrification trends (Iberdrola, 2023b). For the projections, it was assumed that it would invest €65 billion (from this value was subtracted €12 billion from 2026 investments already projected in 2024-2026) and the same distribution between the segments in the 2024-2026 period forecasts was applied (Table 5.8).

Table 5.8. Investments in CapEx forecast, 2024-2030

| €Bn | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F |
|---|---|---|---|---|---|---|---|
| Electricity Production & Customers | 4.83 | 4.83 | 4.83 | 5.34 | 5.34 | 5.34 | 5.34 |
| Networks | 7.17 | 7.17 | 7.17 | 7.91 | 7.91 | 7.91 | 7.91 |
| **Investments in CAPEX** | **12.00** | **12.00** | **12.00** | **13.25** | **13.25** | **13.25** | **13.25** |

| €Bn | 2024-2026 | 2027-2030 | Distribution |
|---|---|---|---|
| Electricity Production & Customers (1 | 14.50 | 21.35 | 40.28% |
| Networks | 21.50 | 31.65 | 59.72% |
| **Total Investments** | **36.00** | **53.00** | |

*Source: Own elaboration*

Iberdrola's strategic approach also includes planned disinvestment in CAPEX, as part of its asset rotation plans. These asset rotation strategies are crucial for raising capital to fund new projects and investments, enabling the company to maintain financial flexibility and focus on

growth areas, such as renewable energy. According to Iberdrola's asset rotation plan for the 2024-2026 period, the company plans to sell assets worth €7.2 billion (Iberdrola, 2024f). Notably, there is information that in 2023, Iberdrola nearly completed this target through the sale of Mexico's CCGT plants, valued at €5.7 billion (Iberdrola, 2024g). As a result, a portion of this value (€5.4 billion), will be received in 2024, with the remainder distributed over the following two years. From 2026 onwards, since there is no specific information on Iberdrola's future asset rotation plans, it will be assumed that the historical target before 2023, which was 4% of investments, will continue to apply (Table 5.9).

Table 5.9. Disinvestment in CapEx forecast, 2024-2030

| *€Bn* | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F |
|---|---|---|---|---|---|---|---|
| **Disinvestments in CAPEX** | 5.40 | 0.90 | 0.90 | 0.53 | 0.53 | 0.53 | 0.53 |

| *€Bn* | 2024-2026 | 2027-2030 |
|---|---|---|
| **Asset rotation plan** | 7.20 | 2.12 |

*Source: Own elaboration*

### 5.1.4 Working Capital

For the forecasts of the changes in working capital, the average historical proportions of each WC component relative to revenues were used (See Annex B2).

The current assets include accounts receivable, other receivables, inventory and nuclear fuel, and the current liabilities include accounts payable, accrued expenses and other payables.

Table 5.10 presents the WC and changes in WC forecasts for the 2024-2030 period. See Annex B3 for detailed forecasts of each WC component.

Table 5.10. Working capital forecast, 2024-2030

| *€M* | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F |
|---|---|---|---|---|---|---|---|
| **Current assets** | 15,573 | 16,546 | 17,586 | 18,433 | 19,321 | 20,251 | 21,227 |
| **Current liabilities** | 9,395 | 9,982 | 10,610 | 11,121 | 11,656 | 12,218 | 12,806 |
| **Net Working Capital** | 6,178 | 6,564 | 6,976 | 7,312 | 7,664 | 8,034 | 8,421 |
| **Changes in WC** | 581 | 386 | 412 | 336 | 352 | 369 | 387 |

*Source: Own elaboration*

### 5.1.5 WACC

The WACC was calculated using Equation (3) and resulted in 4.23%, which represents the minimum return required by investors for investing in the company (Table 5.11). The

components of the WACC, including the cost of debt, the cost of equity, and the company's target capital structure, are further detailed in the subsections below.

Table 5.11. WACC

| | |
|---|---|
| Debt (€M) | 51,980 |
| Equity (€M) | 75,378 |
| After-tax cost of debt | 3.35% |
| Cost of equity | 4.83% |
| **WACC** | **4.23%** |

*Source: Own elaboration*

#### 5.1.5.1 Capital Structure

Regarding capital structure, the MV of equity was calculated by multiplying the number of outstanding shares (6,350,278,000) by the share price (€11.87) as of December 31, 2023, resulting in a total of €75,378 million. The MV of debt was assumed to be equal to the book value of debt, which stands at €51,980 million (Table 5.12), resulting in a capital structure composed of 41% of debt and 59% of equity.

Table 5.12. Capital Structure

| | 2023 |
|---|---|
| # of shares outstanding (millions) | 6,350 |
| Share price (€) | 11.87 |
| MV of Equity (€M) | 75,378 |
| MV of Debt (€M) | 51,980 |
| D/(D+E) | 0.41 |
| E/(D+E) | 0.59 |

*Source: Own elaboration*

#### 5.1.5.2 Cost of Debt

To estimate the cost of debt, the YTM data was retrieved from Refinitiv for Iberdrola's bonds with maturities of longer than 10 years. By averaging the YTMs of these bonds, a pre-tax cost of debt of 4.59% was obtained, reflecting the company's long-term borrowing cost.

The WACC computation uses the after-tax cost of debt. Since Iberdrola operates across multiple regions – Spain, U.K., U.S., Mexico, and Brazil – it was used a weighted average of the marginal tax rates across the countries where Iberdrola operates, based on the proportion of revenues generated in each country, ensuring a more accurate reflection of the company's global

tax exposure. Therefore, based on the marginal tax rates provided by Damodaran (2024), an average of 26.84% was used, resulting in an after-tax cost of debt of 3.35%.

#### 5.1.5.3 Cost of Equity

The cost of equity was calculated using the CAPM method, as represented by Equation (5), which resulted in a cost of equity of 4.80% (Table 5.13). The calculation of each component of the cost of equity, including the risk-free rate, beta, and market risk premium, is detailed in the following subsections.

Table 5.13. Cost of equity

| | |
|---|---|
| Risk-free rate | 2.39% |
| Beta | 0.68 |
| Market risk premium | 6.68% |
| Country risk premium | 2.08% |
| **Cost of equity** | **4.83%** |

*Source: Own elaboration*

##### 5.1.5.3.1 Risk-free rate

As recommended by Damodaran (2012), the risk-free rate used for calculating Iberdrola's cost of equity was based on the 10-year German government bond. It was used the average of its monthly yields in 2023, which was 2.39%.

##### 5.1.5.3.2 Beta

The beta estimation was performed using the average unlevered beta of the utilities industry as a benchmark, which is 0.45 (Damodaran, 2024). Assuming that Iberdrola shares similar systematic risks with the overall industry, the company was assigned the same unlevered beta. Subsequently, a “re-leveraging” was applied to account for Iberdrola’s specific capital structure and tax rate, following Equation (6), which resulted in a levered beta of 0.68 (Table 5.14).

Table 5.14. Beta

| | |
|---|---|
| Unlevered beta | 0.45 |
| Debt (€M) | 51,980 |
| Equity (€M) | 75,378 |
| Tax rate | 26.84% |
| **Levered beta** | **0.68** |

*Source: Own elaboration*

#### 5.1.5.3.3 Market Risk Premium

The risk premium was calculated by obtaining the individual MRP and CRP for each of the regions in which Iberdrola operates and a weighted average was performed based on the proportion of revenues of each region, ensuring that the risk premium used accurately accounts for the different levels of risk associated with each market in which Iberdrola is present.

The MRP and CRP used are presented in Table 5.15.

Table 5.15. Market and Country Risk Premiums

| | MRP | CRP | Proportion |
|---|---|---|---|
| Spain | 6.94% | 2.34% | 42.60% |
| UK | 5.48% | 0.88% | 18.51% |
| US | 4.60% | 0.00% | 15.13% |
| Mexico | 7.38% | 2.78% | 7.47% |
| Brazil | 9.00% | 4.40% | 16.29% |
| **Average** | **6.68%** | **2.08%** | |

*Source: Own elaboration and Damodaran (2024)*

## 5.2 DCF Valuation

Finally, the FCFF was computed using Equation (2), incorporating all the assumptions for its components stated above. The detailed FCFF projections are presented in Table 5.16.

Table 5.16. FCFF forecast, 2024-2030

| €M | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F |
|---|---|---|---|---|---|---|---|
| EBIT | 8,981 | 9,580 | 10,222 | 10,713 | 11,227 | 11,766 | 12,332 |
| - Taxes | 2,411 | 2,571 | 2,743 | 2,875 | 3,013 | 3,158 | 3,310 |
| **= NOPLAT** | **6,571** | **7,009** | **7,478** | **7,837** | **8,214** | **8,608** | **9,022** |
| + D&A | 5,869 | 6,256 | 6,671 | 6,992 | 7,328 | 7,680 | 8,049 |
| **= Operational CF** | **12,440** | **13,265** | **14,149** | **14,829** | **15,541** | **16,288** | **17,070** |
| - ΔWC | 581 | 386 | 412 | 336 | 352 | 369 | 387 |
| - Investment in CapEx | 12,000 | 12,000 | 12,000 | 13,250 | 13,250 | 13,250 | 13,250 |
| + Disinvestment in CapEx | 5,400 | 900 | 900 | 530 | 530 | 530 | 530 |
| **= FCFF** | **5,259** | **1,779** | **2,637** | **1,773** | **2,469** | **3,199** | **3,964** |

*Source: Own elaboration*

### 5.2.1 Terminal Value

The final step in calculating the EV of Iberdrola involves determining the perpetuity-based continuing value. The approach used is the stable growth model, which assumes that the company will grow at a constant rate after the forecast period.

The perpetual growth rate was aligned with the forecasted demand for electricity in the industry, as projected by Iberdrola (2023b). The company assumes a CAGR of 1.7% until 2050, so this was the rate adopted for the calculation. Furthermore, as recommended by Damodaran (2012), the perpetual growth rate should not exceed the expected growth rate of the economies in which the company operates. Given that the average GDP growth rate of the countries where Iberdrola is present is projected to stabilise at 1.8% from 2025 onward, a 1.7% growth rate is reasonable and closely aligned with economic growth. Consequently, a 1.7% growth rate was used to calculate the perpetuity cash flows following Equation (7), which resulted in a terminal value of €159,592M and a discounted terminal value of €119,450M.

### 5.2.2 Fair Value

Ultimately, the EV was estimated using Equation (9), which combines the PV of the FCFF generated during the forecasted period and the discounted Terminal Value. This calculation resulted in an EV of €137,434M.

The EQV was then derived using Equation (10), which involves adding the NOA to the EV and subtracting debt, which resulted in an EQV of €88,474M. By dividing the EQV by the number of shares outstanding as of December 31st 2023, the EQV per share totals €13.93, which is +17.4% than the closing market price of €11.87 as of the end of 2023 (Table 5.17).

Table 5.17. DCF Valuation

| *€M* | 2023 | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F | Perpetuity |
|---|---|---|---|---|---|---|---|---|---|
| **= FCFF** | | **5,259** | **1,779** | **2,637** | **1,773** | **2,469** | **3,199** | **3,964** | |
| WACC | | 4.23% | | | | | | | |
| g | | 1.70% | | | | | | | |
| **= Discounted FCFF** | | **5,046** | **1,638** | **2,329** | **1,502** | **2,008** | **2,495** | **2,967** | |
| Terminal value | | | | | | | | | **159,592** |
| + Discounted terminal value | | | | | | | | | 119,450 |
| **= EV** | **137,434** | | | | | | | | |
| + NOA | 3,019 | | | | | | | | |
| - Debt | 51,980 | | | | | | | | |
| **= EQV** | **88,474** | | | | | | | | |
| # shares outstanding (millions) | 6,350 | | | | | | | | |
| **Fair share price** | **13.93** | | | | | | | | |
| Actual market price | 11.87 | | | | | | | | |

*Source: Own elaboration*

### 5.2.3 Sensitivity Analysis

A sensitivity analysis was conducted to evaluate the potential impact of changes in key assumptions on Iberdrola's share price. This analysis plays a vital role in equity valuation, enabling investors to observe the effect of varying key assumptions on a stock's value and gain

a clearer picture of the associated risks and potential rewards. This approach highlights the spectrum of possible outcomes and aids in making more informed investment decisions.

In this analysis, the cost of capital and the perpetual growth rate were selected as the critical variables in the valuation process, given their significant influence on the company's estimated value. The analysis involved adjusting the WACC by ± 0.2% and the growth rate by ± 0.1% (See Table 5.18 and Annex B4).

The findings indicate that the share price is highly sensible to changes in these assumptions, with price variations ranging from -40.1% to +84.5% compared to the original estimate (€8.35 the lowest price and €25.70 the highest). This highlights the importance of closely monitoring these variables, as shifts in economic conditions or company-specific factors affecting WACC or growth rate can substantially alter Iberdrola's perceived value.

Table 5.18. Sensitivity analysis

| | | g | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **13.93** | 1.40% | 1.50% | 1.60% | **1.70%** | 1.80% | 1.90% | 2.00% |
| **WACC** | 3.63% | 24.5% | 32.1% | 40.5% | 49.8% | 60.1% | 71.6% | 84.5% |
| | 3.83% | 9.3% | 15.6% | 22.5% | 30.1% | 38.4% | 47.5% | 57.7% |
| | 4.03% | -3.6% | 1.7% | 7.5% | 13.7% | 20.6% | 28.0% | 36.3% |
| | **4.23%** | -14.7% | -10.2% | -5.3% | **0.0%** | 5.7% | 11.9% | 18.6% |
| | 4.43% | -24.3% | -20.4% | -16.2% | -11.7% | -6.9% | -1.7% | 4.0% |
| | 4.63% | -32.7% | -29.3% | -25.7% | -21.8% | -17.7% | -13.3% | -8.5% |
| | 4.83% | -40.1% | -37.1% | -34.0% | -30.6% | -27.1% | -23.3% | -19.2% |

*Source: Own elaboration*

## 5.3 Relative Valuation

The relative valuation was performed to complement the DCF valuation and provide a more accurate estimation of Iberdrola's intrinsic value. A list of Iberdrola's main peers was extracted from Refinitiv, and their multiples – PER, P/BV, and EV/EBITDA – were collected. The average and standard deviation of the multiples within the peer group were calculated, and the following rules were applied to identify and exclude outliers to improve the estimation:

1. Any multiple equal to or above the average plus the standard deviation or equal to or below the average minus the standard deviation was excluded.
2. Any company with more than one multiple falling outside that range was also excluded.

After removing the outliers (See Annex B5), an adjusted average was calculated and used to estimate Iberdrola's EQV. For the PER multiple, the average of the peer group was multiplied

by Iberdrola's net income, resulting in an EQV of €80,838M, that divided by the 6,350M shares outstanding resulted in a share price of €12.73 (See Annex B6).

For the P/BV multiple, the average multiple was multiplied by Iberdrola's equity book value, resulting in an EQV of €94,537M and a share price of €14.89.

Regarding the EV/EBITDA multiple, the peer average was multiplied by Iberdrola's EBITDA, resulting in an EQV of €109,235M and a share price of €17.22.

## 5.4 Valuation Results

The valuation of Iberdrola was conducted using two different approaches: the DCF methodology and relative valuation, each producing different results (Figure 5.1). The DCF valuation, based on the FCFF and the assumptions made, resulted in a share price of €13.93, which is 17.4% higher than the market price of €11.87 on December 31st, 2023, indicating that Iberdrola's shares were undervalued and leading to a recommendation to buy.

In contrast, the relative valuation analysis, which considered the multiples PER, P/BV and EV/EBITDA, provided different outcomes. The PER yielded a share price of €12.73, suggesting Iberdrola's shares were undervalued by 7.2%. The P/BV multiple resulted in a share price of €14.89, implying an undervaluation of 25.4%. Lastly, the EV/EBITDA multiple suggested a share price of €17.22, indicating a significant undervaluation of 45%.

Despite the varying results, all the multiples indicated higher share prices compared to the actual market price, aligning with the outcome of the DCF valuation and providing strong evidence that Iberdrola's shares were undervalued (Figure 5.1). Nevertheless, it is crucial to note that these models are highly sensitive to changes in assumptions, which could lead to results diverging from those presented, as observed in the sensitivity analysis.

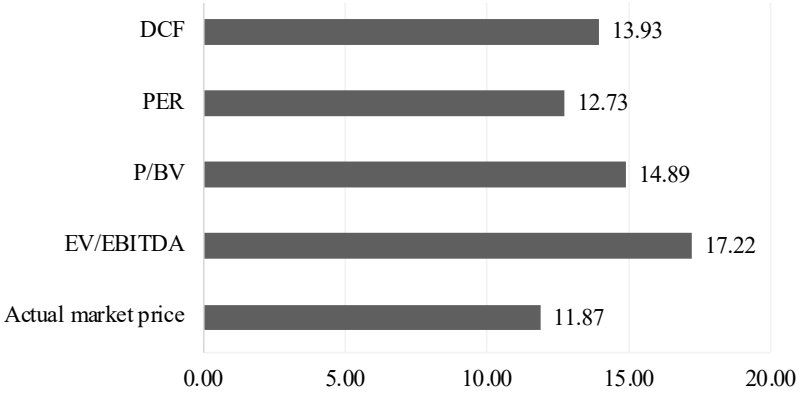


Figure 5.1. Valuation results as of December 31st 2023

*Source: Own elaboration*

# Conclusion

The main objective of this dissertation was to estimate the intrinsic value of Iberdrola's shares as of December 31st, 2023, and to compare it with the actual market price at that time to determine whether the company's shares were overvalued, undervalued, or fairly priced.

To achieve a comprehensive and accurate valuation, this project began with a thorough literature review, outlining the most relevant corporate valuation methods. This provided the foundation for selecting the most suitable methodologies to apply to Iberdrola's case. The research proceeded with a macroeconomic outlook to understand the broader economic environment, focusing on the current geopolitical and economic events shaping the energy sector, followed by a market overview, which analysed industry trends and developments. An in-depth analysis of Iberdrola was then conducted to examine its business strategy, objectives, and financial standing, ensuring a holistic view of the company. With this groundwork established, it became possible to make informed and sustained assumptions about the company's future performance, setting the stage for the valuation process.

The valuation of Iberdrola was carried out using two key methodologies: the DCF valuation through the FCFF and the Relative Valuation method as a complementary approach.

The DCF valuation, based on the assumptions and financial data used, resulted in a fair share price of €13.93, 17.4% higher than the actual market price of €11.87 on December 31st, 2023, suggesting that Iberdrola's shares were undervalued at that time. To test the robustness of the valuation, a sensitivity analysis was performed, adjusting the cost of capital and perpetual growth rate. The results revealed that Iberdrola's share price is highly sensitive to these key assumptions, with small changes potentially leading to significant fluctuations in valuation, including scenarios of both overvaluation and undervaluation.

The Relative Valuation method was employed through the PER, P/BV and EV/EBITDA multiples, which resulted in share prices of €12.73, €14.89, and €17.22, respectively. These differing results underscore the variability between valuation approaches and highlight the potential for varying interpretations of Iberdrola's value, however, all of them suggest an undervaluation of Iberdrola's shares, supporting the results obtained in the DCF valuation.

It is important to acknowledge the limitations posed by the data used in this valuation. Publicly available information, though comprehensive, may not fully capture all of Iberdrola's internal strategies or future market conditions, which could significantly affect the quality and accuracy of the assumptions made. Additionally, macroeconomic forecasts and industry trends are subject to change, potentially impacting future performance.

However, regardless of these limitations, the analysis indicates that Iberdrola's shares were undervalued as of December 31st, 2023, suggesting that the market had not fully recognised the company's intrinsic worth and, then, presenting an appealing investment opportunity to buy Iberdrola's shares. Considering Iberdrola's strong market position, its clear focus on renewable energy and sustainability, and its strategic commitments to innovation and energy transition, the company is well-positioned to maintain its leadership in the global energy market. Its robust financial model, combined with its proactive approach to meeting sustainability targets, suggests a positive outlook for the future.

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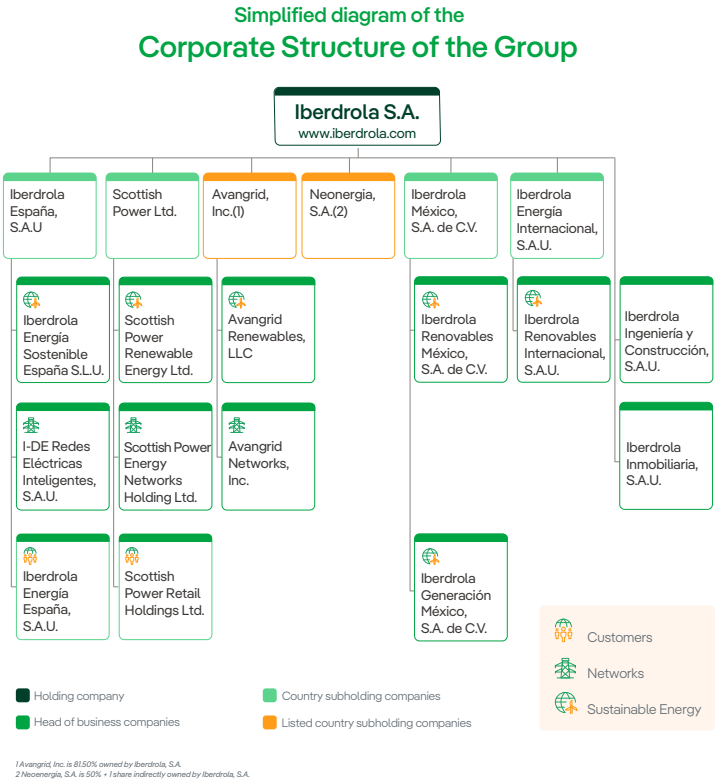
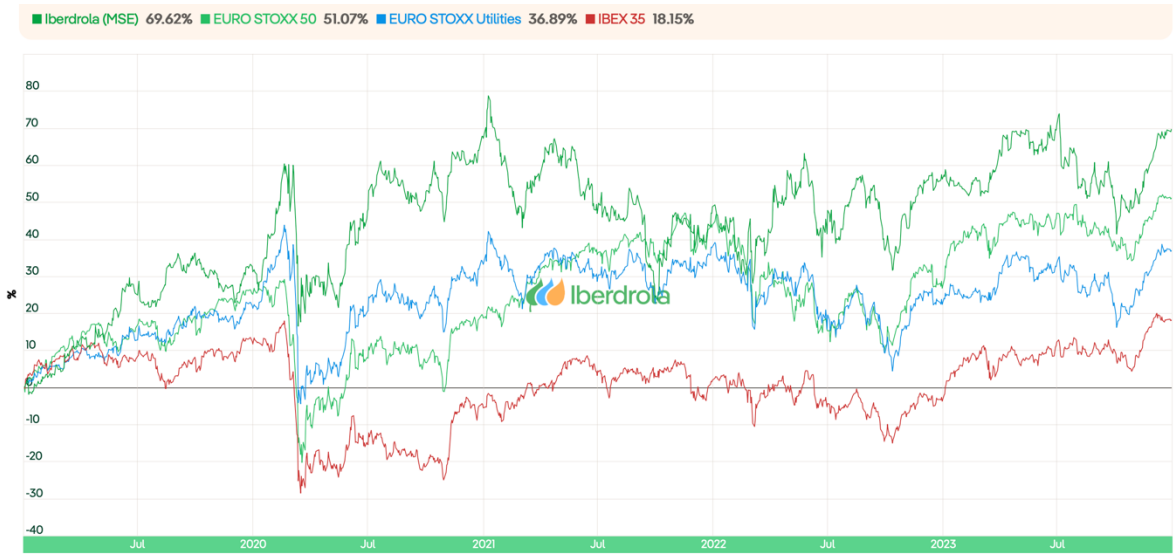
# Appendix A

**Annex A1.** Corporate structure




*Source: Iberdrola, 2023*

**Annex A2.** Iberdrola and benchmark indexes' share price 2019-2023




*Source: Iberdrola*

**Annex A3.** SWOT Analysis

| Strengths | Weaknesses |
|---|---|
| • Geographical presence: Established global presence, reducing its exposure to risks in any particular market and allowing it to capitalize on growth opportunities worldwide.<br>• Portfolio diversification: diversified portfolio of technologies from renewable sources – onshore and offshore wind, photovoltaic, and hydroelectric –, and other energy sources – nuclear, combined cycle, and cogeneration – which helps to reduce risks associated with particular technologies and ensures a more stable revenue stream.<br>• Brand reputation: Iberdrola is one of the world's leading energy companies with 100+ years of experience and expertise (as Hidroeléctrica Española) and has maintained a high reputation over the years. | • Geographical concentration: Even though Iberdrola has a worldwide presence, it still is strongly concentrated in a few countries, as compared to its competitors.<br>• Regulatory dependence: Iberdrola activities are subject to government regulations and incentives, and changes in these policies can negatively impact profitability. |

*Source: Own elaboration*

**Annex A3.** SWOT Analysis (continued)

| Opportunities | Threats |
|---|---|
| • Renewables growth: With the rising emphasis on switching to low-emission energy sources, renewables are increasingly replacing traditional fossil fuels. Also, renewable energy costs have continually decreased, making these technologies more cost-effective and widely available around the world.<br>• Global electricity demand: Global electricity demand is expected to rise at a faster rate over the next three years both in advanced and emerging economies.<br>• Higher government support: The governments are increasingly supporting renewable energy initiatives, including subsidies, tax incentives, and favorable regulations.<br>• Global expansion: Iberdrola has the potential to expand its presence in other markets, where energy consumption is increasing and there is a strong push for renewable energy, such as in Asia. | • Market risks: Exposure to volatility in variables like prices of electricity and other energy commodities, emission rights, exchange rate, interest rate, etc.<br>• Regulatory and political risks: Exposure to volatility in energy policies, which can negatively impact profits.<br>• Weather dependence: Its operations are sensitive to climate change and extreme weather events, which can disrupt production and distribution activities.<br>• Strong competition: The renewable energy business is becoming more competitive, with new and existing firms investing extensively in this sector. |

*Source: Own elaboration*

# Appendix B

**Annex B1.** Income statement until EBIT with the segment breakdown forecast, 2024-2030

| €M | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F | Average % of revenues |
|---|---|---|---|---|---|---|---|---|
| **Revenues** | 53,160 | 56,483 | 60,032 | 62,923 | 65,953 | 69,130 | 72,460 | |
| *Electricity Production & Customers* | *33,224* | *34,840* | *36,534* | *38,310* | *40,173* | *42,127* | *44,175* | |
| *Networks* | *19,936* | *21,644* | *23,498* | *24,613* | *25,780* | *27,003* | *28,284* | |
| **COGS** | 29,971 | 31,753 | 33,649 | 35,273 | 36,976 | 38,760 | 40,631 | |
| *Electricity Production & Customers* | *21,204* | *22,235* | *23,316* | *24,450* | *25,639* | *26,886* | *28,193* | *63.8%* |
| *Networks* | *8,767* | *9,517* | *10,333* | *10,823* | *11,336* | *11,874* | *12,438* | *44.0%* |
| **GROSS MARGIN** | **23,190** | **24,731** | **26,382** | **27,650** | **28,978** | **30,370** | **31,829** | |
| *Electricity Production & Customers* | *12,020* | *12,604* | *13,217* | *13,860* | *14,534* | *15,241* | *15,982* | |
| *Networks* | *11,170* | *12,126* | *13,165* | *13,790* | *14,444* | *15,129* | *15,847* | |
| **Operating Expenses** | 8,339 | 8,894 | 9,490 | 9,946 | 10,423 | 10,924 | 11,449 | |
| *Electricity Production & Customers* | *4,292* | *4,501* | *4,720* | *4,949* | *5,190* | *5,442* | *5,707* | *12.9%* |
| *Networks* | *4,047* | *4,394* | *4,770* | *4,997* | *5,234* | *5,482* | *5,742* | *20.3%* |
| **EBITDA** | **14,850** | **15,836** | **16,893** | **17,704** | **18,555** | **19,446** | **20,380** | |
| *Electricity Production & Customers* | *7,728* | *8,104* | *8,498* | *8,911* | *9,344* | *9,799* | *10,275* | |
| *Networks* | *7,122* | *7,732* | *8,395* | *8,793* | *9,210* | *9,647* | *10,105* | |
| **Depreciation and Amortization** | 5,869 | 6,256 | 6,671 | 6,992 | 7,328 | 7,680 | 8,049 | |
| *Electricity Production & Customers* | *3,121* | *3,272* | *3,432* | *3,598* | *3,773* | *3,957* | *4,149* | *9.4%* |
| *Networks* | *2,749* | *2,984* | *3,240* | *3,393* | *3,554* | *3,723* | *3,899* | *13.8%* |
| **EBIT** | **8,981** | **9,580** | **10,222** | **10,713** | **11,227** | **11,766** | **12,332** | |
| *Electricity Production & Customers* | *4,607* | *4,831* | *5,066* | *5,313* | *5,571* | *5,842* | *6,126* | |
| *Networks* | *4,374* | *4,749* | *5,155* | *5,400* | *5,656* | *5,924* | *6,205* | |

*Source: Own elaboration*

**Annex B2.** Working Capital components' historical proportions

| | 2019 | 2020 | 2021 | 2022 | 2023 | Average |
|---|---|---|---|---|---|---|
| **Current assets** | | | | | | |
| Accounts Receivable | 18.3% | 19.5% | 20.9% | 18.3% | 18.1% | **19.0%** |
| Other Receivables | 2.3% | 3.6% | 7.1% | 2.5% | 2.3% | **3.5%** |
| Inventory and Nuclear fuel | 7.8% | 8.2% | 7.4% | 4.5% | 5.7% | **6.7%** |
| | | | | | | |
| **Current liabilities** | | | | | | |
| Accounts Payable | 14.0% | 15.5% | 15.2% | 11.0% | 10.4% | **13.2%** |
| Accrued Expenses | 1.1% | 1.1% | 0.9% | 0.8% | 1.1% | **1.0%** |
| Other Payables | 3.5% | 4.2% | 3.7% | 2.6% | 3.3% | **3.5%** |

*Source: Own elaboration*

**Annex B3.** Working Capital components forecast, 2024-2030

| €M | 2024F | 2025F | 2026F | 2027F | 2028F | 2029F | 2030F |
|---|---|---|---|---|---|---|---|
| Accounts Receivable | 10,114 | 10,746 | 11,421 | 11,971 | 12,547 | 13,152 | 13,785 |
| Other Receivables | 1,886 | 2,004 | 2,129 | 2,232 | 2,339 | 2,452 | 2,570 |
| Inventory and Nuclear fuel | 3,574 | 3,797 | 4,036 | 4,230 | 4,434 | 4,647 | 4,871 |
| **Current assets** | **15,573** | **16,546** | **17,586** | **18,433** | **19,321** | **20,251** | **21,227** |
| | | | | | | | |
| Accounts Payable | 7,027 | 7,466 | 7,935 | 8,317 | 8,718 | 9,137 | 9,577 |
| Accrued Expenses | 528 | 561 | 597 | 625 | 656 | 687 | 720 |
| Other Payables | 1,840 | 1,955 | 2,078 | 2,178 | 2,283 | 2,393 | 2,508 |
| **Current liabilities** | **9,395** | **9,982** | **10,610** | **11,121** | **11,656** | **12,218** | **12,806** |
| | | | | | | | |
| **NET WORKING CAPITAL** | **6,178** | **6,564** | **6,976** | **7,312** | **7,664** | **8,034** | **8,421** |
| **Changes in WC** | **581** | **386** | **412** | **336** | **352** | **369** | **387** |

*Source: Own elaboration*

**Annex B4.** Sensitivity Analysis

| | | g | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **13.93** | 1.40% | 1.50% | 1.60% | **1.70%** | 1.80% | 1.90% | 2.00% |
| **WACC** | 3.63% | 17.34 | 18.41 | 19.58 | 20.87 | 22.31 | 23.91 | 25.70 |
| | 3.83% | 15.22 | 16.11 | 17.07 | 18.12 | 19.28 | 20.56 | 21.97 |
| | 4.03% | 13.43 | 14.17 | 14.97 | 15.85 | 16.80 | 17.84 | 18.98 |
| | **4.23%** | 11.89 | 12.52 | 13.20 | **13.93** | 14.73 | 15.59 | 16.53 |
| | 4.43% | 10.55 | 11.09 | 11.67 | 12.30 | 12.97 | 13.70 | 14.48 |
| | 4.63% | 9.38 | 9.85 | 10.35 | 10.89 | 11.47 | 12.08 | 12.75 |
| | 4.83% | 8.35 | 8.76 | 9.20 | 9.66 | 10.16 | 10.69 | 11.26 |

*Source: Own elaboration*

**Annex B5.** Peers selection

| Peers | PER | P/BV | EV/EBITDA |
|---|---|---|---|
| Naturgy Energy Group SA | 13.06 | 2.75 | 6.61 |
| Engie SA | 18.40 | 1.23 | 4.98 |
| RWE AG | 21.23 | 0.97 | 4.03 |
| Endesa SA | 26.33 | 2.78 | 8.25 |
| Enel SpA | 17.95 | 2.15 | 6.69 |
| Edp SA | 18.77 | 1.63 | 8.65 |
| Redeia Corporacion SA | 11.67 | 1.49 | 9.70 |
| EDP Renováveis SA | 61.01 | 1.71 | 14.54 |
| Enagas SA | 11.64 | 1.34 | 8.20 |
| **Average** | **22.23** | **1.78** | **7.96** |
| Standard deviation | 15.31 | 0.65 | 3.06 |
| Average + STD | 37.54 | 2.43 | 11.02 |
| Average - STD | 6.92 | 1.14 | 4.91 |
| **Adjusted average** | **16.83** | **1.57** | **7.58** |

*Source: Own elaboration and Refinitv (2024)*

**Annex B6.** Relative Valuation

| **PER** | |
|---|---|
| Average PER | 16.83 |
| Iberdrola Net income (€M) | 4,803 |
| EQV (€M) | 80,838 |
| # Shares outstanding (millions) | 6,350 |
| **Share price (€)** | **12.73** |
| **P/BV** | |
| Average P/BV | 1.57 |
| Iberdrola Equity BV (€M) | 60,292 |
| EQV (€M) | 94,537 |
| # Shares outstanding (millions) | 6,350 |
| **Share price (€)** | **14.89** |
| **EV/EBITDA** | |
| Average EV/EBITDA | 7.58 |
| Iberdrola EBITDA (€M) | 14,417 |
| EQV (€M) | 109,325 |
| # Shares outstanding (millions) | 6,350 |
| **Share price (€)** | **17.22** |

*Source: Own elaboration*