MASTER IN BUSINESS ADMINISTRATION (MBA)

Master's thesis

Capstone project

Securing Sustainable Growth: A Comprehensive Financial Statements and Profitability Analysis of Iberdrola S.A. Under Network Saturation and Regulatory Challenges

Author: Manuel Rodríguez Pérez

Supervisor: Alessandro Carpenzano

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EXECUTIVE SUMMARY

The energy transition is generating a critical infrastructure constraint across major electricity markets: the accelerated deployment of inverter-based renewables is degrading system strength at connection points, creating widespread grid saturation and growing queues of projects unable to connect to the network. For Iberdrola, one of the world's largest integrated utilities, this constraint poses a direct threat to its capacity to sustain shareholder value creation.

This project addresses the following research question: how should Iberdrola adapt its strategy to keep generating sustainable shareholder value in a context of grid saturation and regulatory constraints? To answer it, the methodology combines a comprehensive company and sector analysis with the application of Penman's financial statement reformulation framework to five years of consolidated accounts, enabling a full profitability decomposition and the quantification of the financial impact of the constraint. The findings are then translated into concrete strategic recommendations.

The analysis confirms that Iberdrola generates genuine economic returns above its cost of capital. However, construction intensity, understood as the fraction of the capital base trapped in pre-operational assets, has risen from 9.5% to 13.3% between 2021 and 2024, suppressing asset turnover and keeping returns below their potential. A significant share of this trapped capital corresponds to assets pending grid connection approval, making infrastructure saturation a quantifiable financial drag. Four strategic recommendations are proposed in response: monetising the constraint as a business opportunity, embedding connection risk into capital allocation decisions, redirecting investment toward geographies with faster capital conversion, and accelerating contracted revenues to protect margins.

The central conclusion is that grid saturation is not only a technical challenge but a financial one, visible in the profitability ratios of the affected companies and requiring a response from capital allocation and strategic planning.

Keywords: grid saturation, financial statement analysis, Penman reformulation, value creation, renewable energy, capital allocation

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1 INTRODUCTION

1.1 BACKGROUND AND RELEVANCE

Europe's power sector is advancing quickly towards decarbonisation, with renewable generation becoming a central pillar of the electricity mix. Across the EU, renewables already account for a very large share of electricity supply, and policy ambition continues to rise (the revised Renewable Energy Directive raises the 2030 target to at least 42.5%). Within this context, Spain stands out as one of the clearest examples of this shift, with renewables generating 56.8% of its electricity in 2024. Figure 1 places Spain's position in context by comparing the renewable electricity share across European countries in 2024, showing both the EU average and the dispersion between member states. Looking ahead, national planning in Spain points to further acceleration, targeting 81% renewables in the power mix by 2030, consistent with the EU's long-term climate neutrality pathway.

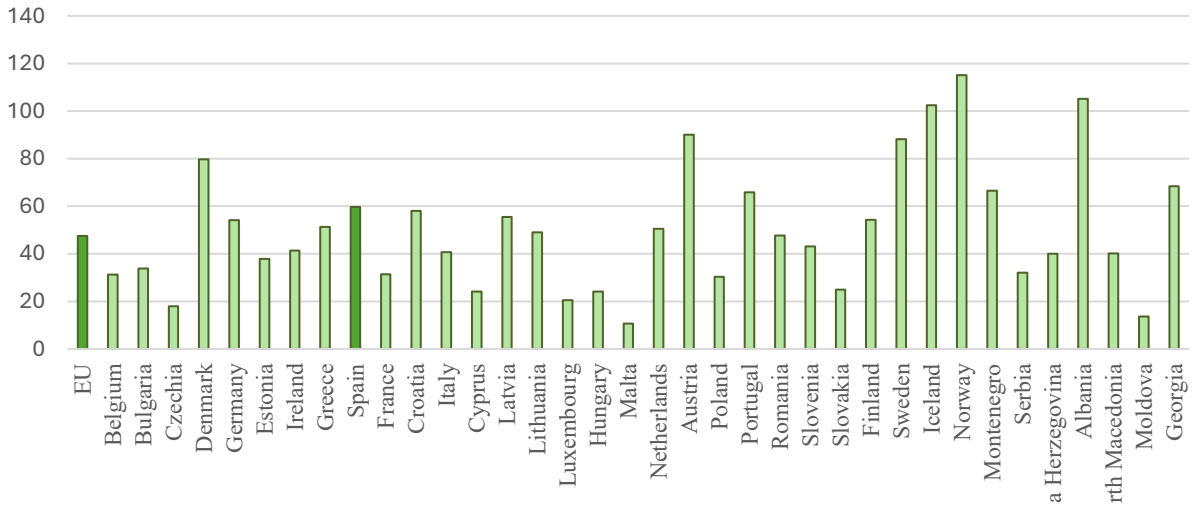

Figure 1. Renewable electricity share (%) by country (2024)

However, integrating such high volumes of renewables is creating new challenges for electricity networks. Unlike conventional power plants, wind and solar are mostly inverter-based and do not contribute the same level of system inertia or short-circuit strength. As renewable penetration increases, some areas of the grid become "weaker" from a stability perspective, meaning that additional generation cannot be connected safely without reinforcements or specific technical solutions. In practice, this translates into saturated

connection points and longer connection queues, even when there is strong interest in developing new projects.

This context is particularly relevant for Iberdrola, Spain's largest electricity utility and one of the global leaders in renewables. The company's growth plan relies on expanding renewable generation and networks, but the pace at which new capacity can be delivered increasingly depends on grid access conditions and system-strength limitations at connection points. As a result, network saturation becomes not only a technical issue, but also a potential constraint on investment execution, cash-flow timing, and ultimately shareholder value creation.

These tensions motivate a deep financial analysis: how will network saturation and integration constraints affect Iberdrola's sustainable growth and valuation? The project is thus driven by the consulting challenge of linking sector dynamics (renewable penetration, grid rules) with corporate value creation.

1.2 RESEARCH QUESTION AND CONSULTING PROBLEM

This study treats Iberdrola's value creation as the consulting problem to solve under external constraints. The research question can be stated as: "How should Iberdrola change its activity to keep on generating a sustainable shareholder value while reaching grid saturation?"

Based on that, the study will start with an analysis of Iberdrola's last five years performance, to see how the grid backlog and related regulations may have impacted growth quality. For example, Spain's regulator has introduced advanced connection rules incorporating metrics like Weighted Short Circuit Ratio to ensure system stability. Projects failing these tests face delays or denials.

Standard accounting statements alone obscure such effects. They mix operating performance with financing choices and do not highlight sustainability of returns, therefore an accounting-based valuation approach will be adopted. This method is based on the frameworks introduced by Stephen H. Penman in his book Financial Statement Analysis and Security Valuation, which consists of a reformulation of financial statements separating the operating component from the financing ones. This allows clearer calculation of profitability metrics and growth drivers. A key task is to decompose Iberdrola's recent profitability into sustainable (operational) versus transitory (financing or one-off) components.

To address the research question, Iberdrola's publicly available financial statements for the last five fiscal years are collected and organised into a consistent dataset. Following Penman's guidelines, the balance sheet, income statement and cash flow statement are then reformulated to separate operating from financing activities. This reformulated basis is used

to carry out the profitability analysis recommended in book, allowing Iberdrola's recent performance and value creation to be assessed in a clearer and more comparable way over time.

Finally, the consulting deliverable will recommend strategic levers to strengthen value creation under grid constraints.

1.3 SPECIFIC GOALS

As introduced in the previous section, this study aims to offer a comprehensive, consulting-oriented answer to how network saturation intersects with Iberdrola's financial sustainability, thus the project will be structured around three main blocks: diagnosis, analysis, and recommendation, which are composed by the following specific goals:

- Explain how grid capacity and stability constraints at connection points can affect renewable project delivery, investment needs and risk for Iberdrola
- Reformulate Iberdrola's financial statements following Penman's framework, clearly separating operating and financing activities and computing key analytical metrics.
- Measure Iberdrola's profitability and value creation in terms of return on common equity, return on net operating assets, and economic spread relative to the estimated cost of capital.
- Identify the extent to which recent profit growth is driven by genuine operating efficiency versus financial leverage or regulatory effects.
- Formulate a set of financial and strategic recommendations to strengthen sustainable value creation under the identified constraint

2 CONTEXT

2.1 COMPANY OVERVIEW

Iberdrola's business model is (and electricity systems in general) vertically segmented into generation (renewable and conventional), networks (transmission and distribution), and retail supply activities, each operating under different regulatory and competitive conditions. While networks are natural monopolies subject to regulated returns, generation and retail are market-based activities exposed to price competition, technological change and evolving customer behaviour. This hybrid structure means that utilities must balance stable, regulated returns with more cyclical and competitive business lines.

Recent corporate disclosures highlight a strategic bias toward grid investment, with organic CAPEX increasingly allocated to Networks. Considering the current grid saturation status, this strategic move work as a key lever for value creation, as grid expansion and reinforcement enable the integration of renewable generation and the acceleration of electrification.

2.1.1 BUSINESS MODEL, SEGMENTS, AND GEOGRAPHIES

Iberdrola's corporate strategy and financial performance are best understood through the structure of its business model and the different risk–return profiles of its operating segments. As an integrated utility, the group combines regulated electricity networks with renewable generation and retail supply activities, allowing a balance between stable, regulation-based cash flows and growth opportunities linked to electrification and decarbonisation. This segmentation is particularly relevant for the present study, as exposure to infrastructure constraints and grid connection conditions differs markedly across business lines and geographies.

The Network segment includes the construction, operation and maintenance of electrical lines, substations, transformer centres and other infrastructure required to bring electrical power from production centres to the end user. This segment constitutes the structural backbone of the group, providing predictable and relatively low-risk returns based on regulated asset bases (RAB) and allowed remuneration frameworks. These activities generate stable operating cash flows, reduce earnings volatility, and support credit quality.

The Production segment includes construction, operation and maintenance of generating plants, as well as the purchase/sale of energy on wholesale markets. It covers onshore wind, offshore wind, solar photovoltaic, hydroelectric, green hydrogen and other generation assets. Growth in recent years has been driven primarily by onshore and offshore wind expansion, supported by selective solar investments. This renewable generation assets have supported margin expansion through capacity additions and long-term power sales agreements, although they remain more exposed to market prices, capture rates, and permitting or connection constraints.

The Retail segment focuses on the supply to end users of electricity, gas, products and complementary services. While strategically relevant for vertical integration, this segment typically exhibits lower margins and higher competitive pressure compared to infrastructure activities.

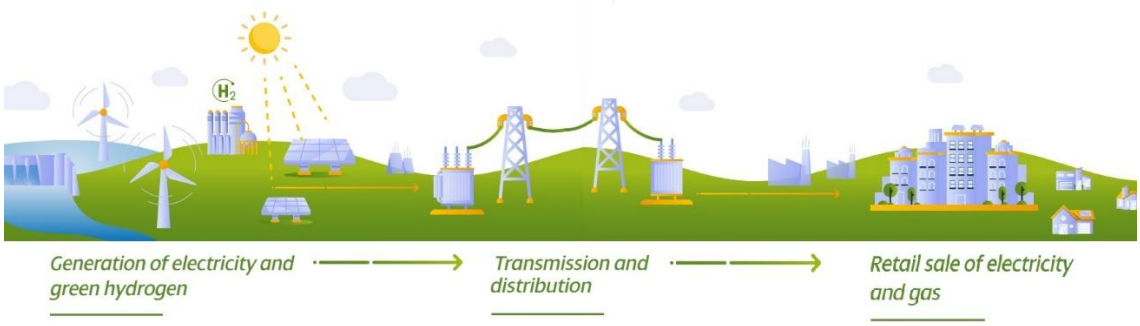

Figure 2. Iberdrola's Value Chain

Overall, this business structure allows risk diversification between regulated and market-exposed activities, while leveraging scale advantages in engineering, project execution, and financing. The capital-intensive nature of the business requires disciplined allocation, strong access to capital markets, and a robust balance sheet.

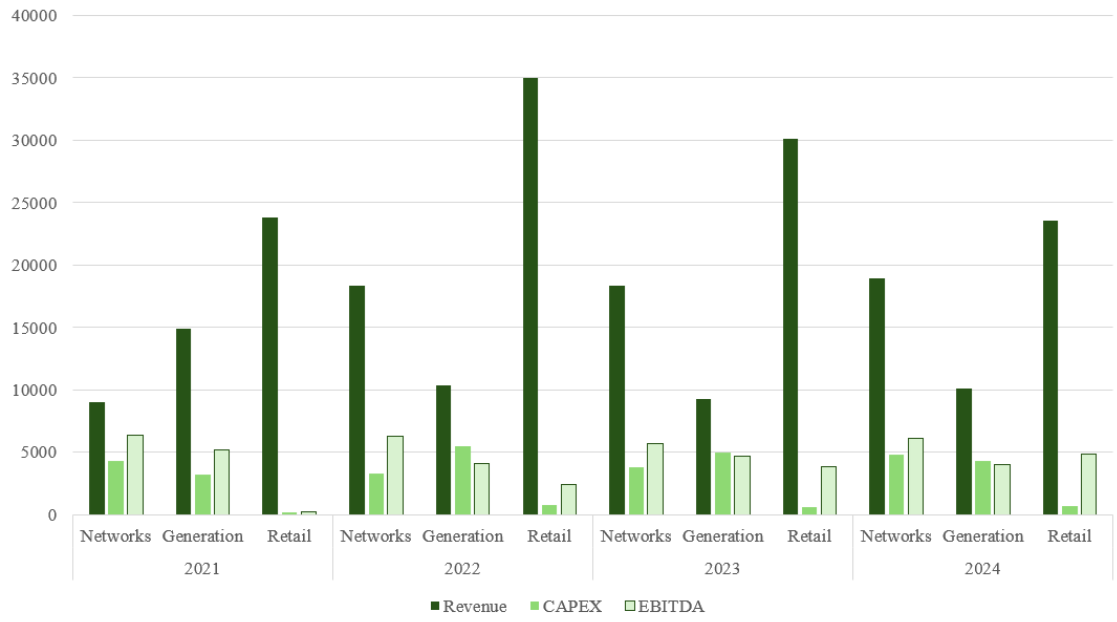

Figure 3. Revenue, CAPEX and EBITDA by business segment (FY2021–FY2024, € millions)

Figure 3 reinforces the business-model discussion presented above. Over 2021–2024, the Retail segment consistently accounts for the largest share of reported revenue, yet it contributes comparatively less EBITDA and receives limited capex, in line with the lower margins and more competitive nature of the segment. By contrast, Networks shows a much stronger relationship between investment intensity and operating cash generation, with high and relatively stable EBITDA supported by sustained capex, consistent with its role as the group's backbone. Finally, the Generation segment displays the most pronounced capital intensity, as capex remains elevated relative to EBITDA, which is consistent with growth being driven by renewable capacity additions and long-cycle project development, precisely the area where permitting and grid-connection constraints can become binding.

Geographically, Iberdrola maintains diversified exposure. Spain remains a core market, but significant earnings contributions also come from the United Kingdom (ScottishPower), the United States (Avangrid), Brazil and Mexico. This diversification reduces reliance on a single regulatory environment while increasing exposure to different market and investment dynamics. Figure 4 summarises revenues, gross investment (capex), and EBITDA by geography for 2021–2024.

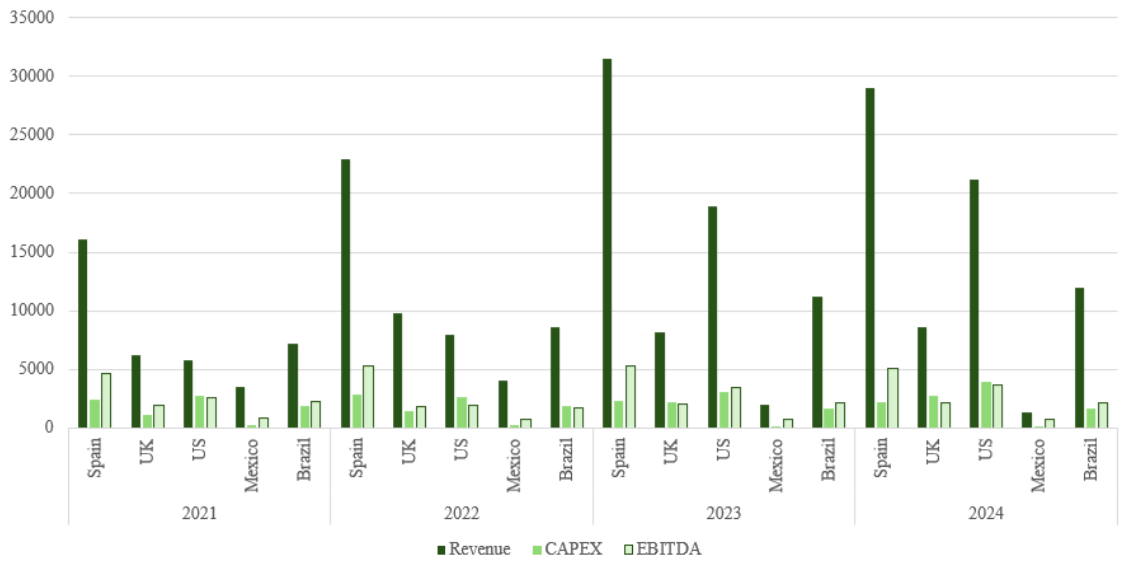

Figure 4. Revenue, CAPEX and EBITDA by geography (FY2021–FY2024, € millions)

Across Iberdrola's core markets, Spain is consistently the largest revenue base while the United States stands out for high investment intensity and growing scale. The United Kingdom and Brazil contribute sizeable, relatively stable EBITDA, and Mexico is smaller and more variable, with occasional spikes in investment.

2.1.2 KEY FINANCIAL INFORMATION

Iberdrola is a capital-intensive utility where value creation depends on the scale and stability of operating cash flows and disciplined investment and financing choices over time. For the purposes of this thesis, a concise set of headline figures helps frame Iberdrola's financial "starting point" before moving into the reformulated statements and value-creation diagnostics later in the analysis. Key figures are reported in Table 1:

Table 1. Key Financial figures (€ millions)

Metric	2021	2022	2023	2024
Revenues	39113.5	53949.4	49334.9	44739.3
EBITDA	12005.7	13228.1	14417.4	16847.7
Net profit	3884.8	4338.6	4802.8	5611.9
Gross investment	9531.0	10730.4	11382.2	11945.6
Net financial debt	39360.0	44185.0	47914.0	52667.0

Two patterns stand out. First, revenues fluctuate materially across the period, reflecting changing market conditions and price effects that are particularly visible in integrated utilities. Second, EBITDA and net income follow an upward trend, suggesting stronger underlying operating performance and/or a more favourable business mix. These dynamics will be examined in greater detail in the subsequent accounting-based analysis, where operating and financing effects are separated.

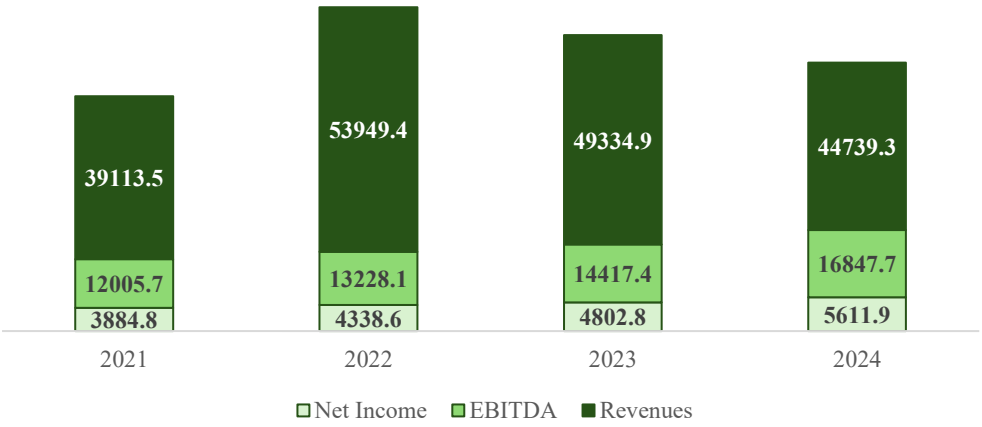

Figure 5. Iberdrola's Revenue, EBITDA and Net Income (FY2021–FY2024, € millions)

Figure 5 provides a visual summary of this evolution, highlighting that profitability growth has been achieved despite lower revenues in 2023–2024 compared with 2022. This reinforces the importance of moving beyond headline revenue figures and focusing on operating drivers, capital allocation, and the sustainability of returns, especially given the group's sustained investment programme and the external constraints previously discussed.

Besides this, investment levels remain structurally high over the period, consistent with Iberdrola's long-cycle, capital-intensive business model. Beyond the segment allocation discussed previously, the key point in this subsection is the persistence of elevated gross investment as a defining feature of the group's growth strategy.

From a financing perspective, net financial debt has been consistently increasing, reflecting the funding requirements of the investment programme. This reinforces the relevance of assessing value creation through an accounting-based framework, considering that when growth is financed alongside rising leverage, the central question becomes whether incremental investment continues to generate returns above the cost of capital. In this context, any external constraint that delays or reshapes project execution may influence both future cash-flow generation and the sustainability of value creation.

2.2 MARKET OVERVIEW

Electricity is entering a new demand cycle after a decade in which consumption in many mature markets was broadly flat. Growth is increasingly driven by electrification (heat, transport, industrial processes), digital infrastructure (data centres), and policy-led reindustrialisation, while supply is being reshaped by renewables, flexibility needs, and constraints in grid expansion and connection capacity. These forces influence competitive dynamics differently across Iberdrola's main geographies.

2.2.1 ELECTRICITY DEMAND IN IBERDROLA'S CORE MARKETS AND FORWARD DRIVERS

Across Iberdrola's main geographies, electricity demand has followed markedly different trajectories over 2021–2025, reflecting heterogenous macroeconomic conditions, weather effects, and sector-specific drivers.

In Spain, electricity demand declined from 2021 to 2023 and then recovered sharply in 2024–2025. The initial contraction is consistent with the context of Europe's energy-price shock. The decline in consumption can be mainly attributed to reduced industrial electricity use in a context of economic slowdown and elevated energy prices. Weather also played a role in the European demand drop, as a milder winter reduced heating needs, partially offset by summer cooling needs. The subsequent recovery that follows can be linked to a more normalised price environment, gradual economic improvement, and the fact that electrification trends are increasingly supporting demand again.

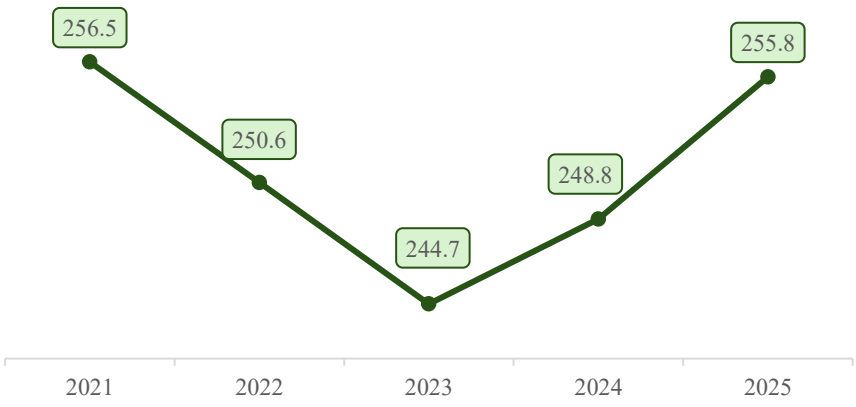

Figure 6. Electricity Demand in Spain (2021–2025, TWh)

In the United Kingdom, demand follows a similar pattern. stronger levels in 2021, a decline into 2023, and then stabilisation rather than a sharp rebound. This suggests that, in the short

run, efficiency improvements and structural changes in the economy still offset part of the electrification effect. In other words, demand growth is likely to come more from specific new loads (e.g., heat pumps, EVs, new industrial demand) rather than from a broad recovery of legacy consumption.

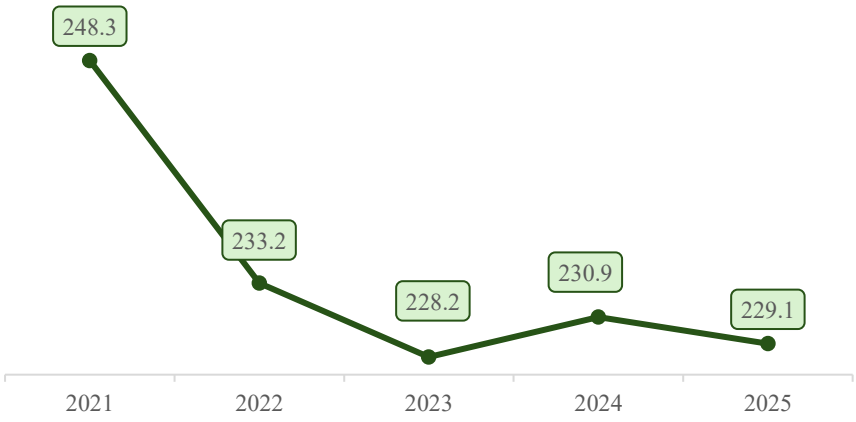

Figure 7. Electricity Demand in the United Kingdom (2021–2025, TWh)

The United States shows a different trajectory, with a sustained upward trend throughout the period, with acceleration in the latest years. This reflects stronger underlying economic momentum, climate-driven load (heating/cooling), and a shift in growth drivers toward the commercial and industrial sectors. Official U.S. projections explicitly link future growth to large computing facilities and data centres, which are becoming an increasingly material source of demand.

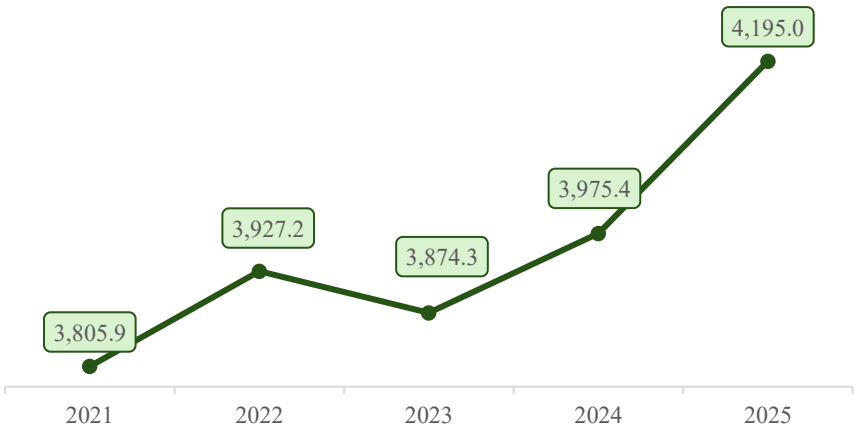

Figure 8. Electricity Demand in the United States (2021–2025, TWh)

Brazil displays the strongest and most consistent growth profile, which fits a developing-market context where electricity consumption expands with economic activity and household and commercial demand. Additionally, weather-related demand (especially cooling) is becoming more relevant globally and can amplify growth and peak load requirements.

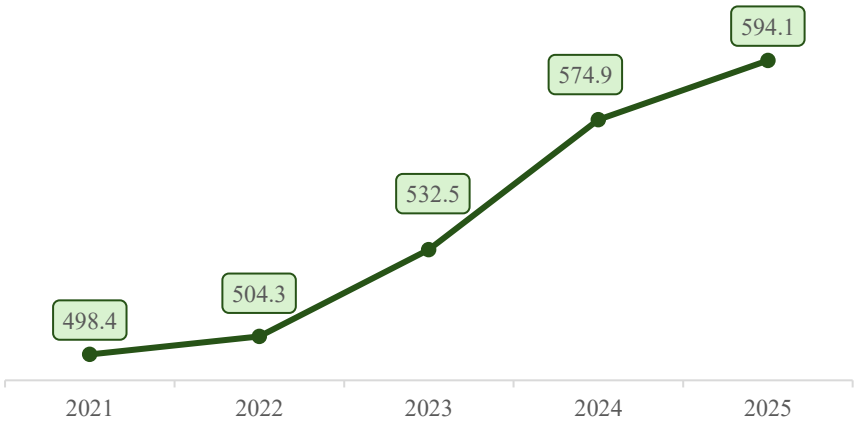

Figure 9. Electricity Demand in Brazil (2021–2025, TWh)

Looking ahead, the outlook for electricity demand is shaped by a combination of reinforcing structural forces rather than a single dominant factor. First, the expansion of digital infrastructure is becoming a material source of incremental load due to the increase of construction of large computing facilities, including data centres. Second, electrification of end uses continues to lift baseline consumption (ex. heat pumps and electric vehicles supporting residential and transport electricity use). Third, industrial policy and reindustrialisation of energy-intensive sectors (including batteries or semiconductors) can create large, location-specific loads that intensify grid investment needs and connection challenges. Finally, climate and weather effects are increasingly relevant, largely through cooling needs, implying that peak load and seasonal demand volatility are likely to remain important drivers of network investment requirements.

For Iberdrola, these forward drivers are strategically important because they strengthen the demand for network investment and renewable build-out, while simultaneously increasing the likelihood that growth becomes constrained by connection availability and system integration limits.

2.2.2 KEY PLAYERS AND IBERDROLA'S POSITIONING

At a global level, the sector is dominated by large integrated utilities and energy groups with significant scale in networks and renewables. Companies such as NextEra Energy, Enel,

EDF, State Grid Corporation of China and other multinational utilities compete for capital allocation, renewable development opportunities and regulatory positioning across jurisdictions (main competitors list in Figure 10). Competition increasingly takes place not only in traditional generation capacity but also in renewable deployment, grid modernisation, storage integration and digital infrastructure. The growing electrification of the economy and the energy transition have intensified competition for high-quality projects, connection capacity and regulated asset bases.

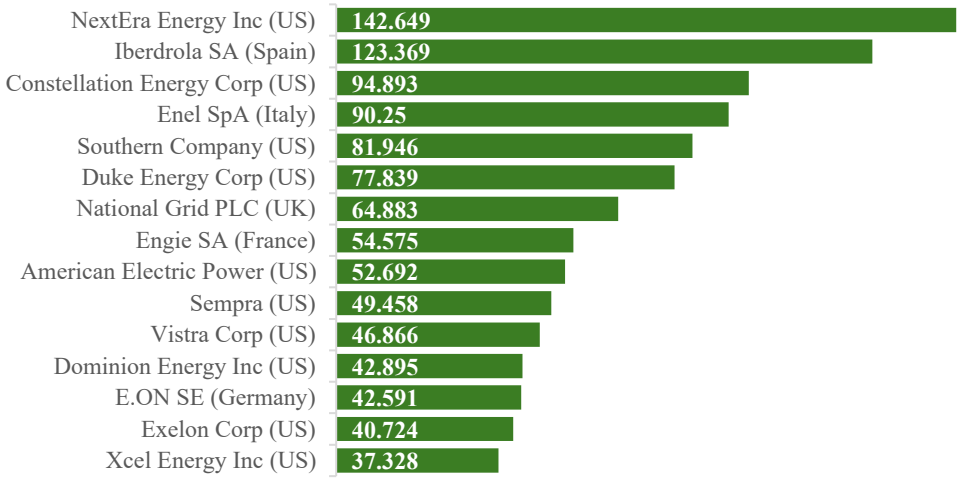

Figure 10. Largest Listed Electric Utilities Worldwide by Market Capitalization (USD bn, December 2025)

Within this landscape, Iberdrola has positioned itself as a utility with a clear strategic focus on regulated networks and renewable generation. The company is recognised as one of the global leaders in wind power, with a strong presence in both onshore and offshore segments. Offshore wind, in particular, has become a strategic pillar in markets such as the United Kingdom and the United States, where scale, technological expertise and long development cycles create significant barriers to entry. This leadership in wind generation not only strengthens Iberdrola's renewable portfolio but also provides long-term contracted revenues and diversification across jurisdictions.

In parallel, Iberdrola has also built a leadership position in smart grids and digitalised network infrastructure. Investment in advanced metering systems, grid automation, digital monitoring and system control enhances operational efficiency and resilience while enabling higher penetration of distributed renewable generation. Smart grids are especially relevant in a context where variable renewables, self-consumption and electrified end uses increase system complexity. By prioritising digitalisation, Iberdrola aims to strengthen system reliability, reduce losses and optimise asset utilisation, reinforcing its competitive position in regulated markets.

Iberdrola's positioning can therefore be summarised along several strategic dimensions:

- Leadership in regulated networks, providing predictable cash flows through an expanding regulated asset base in stable jurisdictions.
- Renewable generation scale and diversification, with a large portfolio of onshore and offshore wind, solar and hydro assets, creating scale advantages and long-term contracted revenue streams.
- Advanced smart grid capabilities, supporting renewable integration, decentralisation and system efficiency.
- Geographical diversification, reducing single-regulator exposure and allowing dynamic capital allocation.
- Integrated business model, that allows coordination between networks, generation and supply allows Iberdrola to capture synergies in planning, system optimisation and customer management.

Overall, Iberdrola combines structural growth exposure (renewables and electrification) with regulatory stability (networks), while leveraging technological leadership in wind and smart grids. This positioning is particularly relevant in a sector where infrastructure constraints, renewable integration and digital transformation increasingly shape long-term value creation.

This strategic positioning is also supported by academic evidence on Iberdrola's innovation model. Alvarez-Meaza, Pikatza-Gorrotxategi and Rio-Belver (2020) show that Iberdrola has progressively embedded open innovation into its business model, using collaboration with universities, research centres and companies as a mechanism to strengthen scientific and technological development. This is especially relevant for a utility operating in a context of renewable integration and grid digitalisation, since the required capabilities cannot be developed only through internal resources. In this sense, Iberdrola's sustainable business model reinforces its competitive position by combining infrastructure scale with external knowledge networks, innovation partnerships and a long-term orientation towards decarbonisation. The authors also find that this open and sustainability-oriented approach has contributed positively to Iberdrola's reputation and financial performance, which supports the link between technological leadership, sustainability and value creation.

2.2.3 CUSTOMERS AND SUPPLIERS BY BUSINESS LINE

Iberdrola's exposure to customers and suppliers varies significantly across its three core business segments (Networks, Generation, and Retail), reflecting differences in regulatory structure, competitive dynamics and operational risk.

- Networks: In transmission and distribution, Iberdrola's "customers" are end users connected to the grid, but revenues are determined by regulated remuneration frameworks rather than bilateral commercial negotiation. Therefore, customer concentration risk is limited, and income stability depends primarily on the regulated asset base (RAB) and allowed returns set by national regulators. On the supplier side, networks depend heavily on engineering and equipment providers, including manufacturers of transformers, substations, cables, smart meters and digital control systems. Global suppliers such as Siemens Energy, Hitachi Energy, ABB and Prysmian are key actors in this segment. Dependence risk arises not from single counterparties but from supply-chain constraints and equipment lead times, which can affect project execution and capex schedules.
- Generation (Renewables and Other Production): In renewable generation, Iberdrola's main customers are wholesale electricity markets and counterparties under long-term power purchase agreements (PPAs), including large industrial consumers and utilities. Customer concentration is therefore moderate, depending on the structure of contracted versus merchant exposure. On the supplier side, the company relies on turbine manufacturers (e.g., Siemens Gamesa, Vestas, GE), solar module producers and EPC contractors. While supplier diversification reduces single-counterparty risk, the renewable segment is exposed to supply-chain bottlenecks, commodity prices and technological dependency in key components.
- Retail (Supply): In the retail segment, customers are residential, commercial and industrial end users. Competition is stronger in this business line, and customer switching can materially affect volumes and margins. As a result, the segment faces higher demand elasticity and pricing pressure compared to regulated networks. From a supplier perspective, retail depends on energy procurement in wholesale markets and on internal generation. Hedging strategies and access to generation capacity are therefore critical in managing price volatility.

2.2.4 TRENDS AND COMPETITIVE DYNAMICS

The electricity sector is undergoing structural transformation driven by electrification, decarbonisation, digitalisation and increasing system complexity.

The main trends shaping competition and strategy in Iberdrola's core markets can be summarised as follows:

- Electricity is progressively becoming the central energy vector of the economy. Growth increasingly comes from new electric uses (EVs, heat pumps, electrified industry and digital infrastructure). This shifts competition toward utilities that can expand networks and connect new loads quickly.
- The acceleration of renewable deployment, particularly wind and solar, that has reshaped competition in generation which is increasingly about securing high-quality projects, permits and grid access, rather than only adding capacity. Utilities with strong development capabilities and financial strength can secure high-quality projects and long-term contracts, while smaller players face increasing barriers linked to permitting, supply chains and grid availability.
- Growing importance of smart grids and digitalisation. As systems become more complex (distributed generation, self-consumption, electric vehicles, storage…) investing in advanced metering, automation and digital grid management have become critical to be competitive in the sector. In this context, companies with established smart grid platforms (such as Iberdrola) strengthen their positioning by improving reliability, reducing losses and facilitating renewable integration.
- The sector is becoming more capital-intensive and infrastructure-constrained. Demand growth can not automatically translate into revenue expansion as it depends on the ability of networks to connect and transport electricity efficiently. As a result, competitive dynamics are shifting toward access to regulated asset growth, grid reinforcement capacity and capital discipline.
- Retail remains margin-sensitive, with high customer switching and strong consumer protection. Differentiation increasingly depends on service quality, pricing structure and hedging capabilities rather than pure scale.

Overall, the main competitive dynamic in the industry can be summarised as a shift from pure generation competition toward infrastructure leadership, technological capability and regulatory positioning.

To conclude and synthesise the main findings of the market analysis presented above, Porter's Five Forces framework is applied as a structured lens to assess the competitive intensity and structural attractiveness of the electricity sector:

- Competitive Rivalry: High (Generation & Retail) Low (Networks)
  Generation and retail markets show significant rivalry among large integrated utilities and independent suppliers. However, networks operate under regulated monopoly frameworks, reducing direct competitive rivalry in that segment.
- Threat of New Entrants: Moderate
  Entry barriers in generation are increasing due to capital requirements, permitting complexity and grid constraints. In retail, digital suppliers can enter more easily, although scale and brand remain advantages.
- Bargaining Power of Buyers: Moderate to High
  Retail customers can switch suppliers, particularly in liberalised markets, creating price pressure. In networks, buyer power is limited due to regulated frameworks.
- Bargaining Power of Suppliers: Moderate
  Dependence on turbine manufacturers, grid equipment suppliers and EPC contractors can create temporary bottlenecks, especially in renewable and grid expansion cycles.
- Threat of Substitutes: Increasing
  Distributed generation and self-consumption represent partial substitutes to traditional supply models, although they typically remain connected to the grid and therefore reinforce the strategic importance of networks.

2.3 INFRASTRUCTURE CONSTRAINT: SYSTEM-STRENGTH LIMITS AT CONNECTION POINT

The transition of the global energy mix towards decarbonisation has precipitated a paradigm shift in how electricity grids are planned and expanded. As established in the market overview, while demand is surging due to electrification, supply is increasingly dominated by renewable energy. However, integrating massive volumes of asynchronous generation into legacy power grids has surfaced a critical infrastructure constraint: system-strength limits at connection points.

For an integrated utility like Iberdrola, navigating this constraint is a central strategic and financial challenge. It directly dictates capital expenditure (CAPEX) efficiency, project delivery timelines, and the sustainability of profitability metrics.

2.3.1 THE TECHNICAL PARADIGM: SYSTEM STRENGTH, INERTIA, AND INVERTER-BASED RESOURCES

Historically, electricity grids relied on synchronous generators (such as fossil fuel or nuclear plants). These massive rotating machines possess inherent physical inertia, which refers to kinetic energy that naturally resists sudden changes in system frequency. Furthermore, they

provide high levels of fault current (Short Circuit Level, or SCL) during disturbances, which supports voltage stability and enables protection systems to detect and clear faults effectively.

In contrast, wind and solar photovoltaic (PV) facilities are Inverter-Based Resources (IBRs). They do not possess large rotating masses coupled to the grid, meaning they provide no inherent physical inertia. Moreover, their power electronics artificially limit the fault current they can inject (often around 1.2–1.5 per unit), which is materially lower than the contribution of synchronous machines (commonly several per unit). This reduction in fault current can weaken protection performance and reduce "system strength" at the connection point.

Beyond these technical differences, the intermittent nature of their power generation (they rely on wind and sun light) introduces more uncertainty in a system in which, generally speaking, demand must be instantly satisfy, considering that electricity large-scale storage is still limited.

At the same time, the design philosophy with which networks were conceived is also under pressure. Traditionally, power systems were designed around a relatively simple "top-down" structure: large centralised plants fed electricity into the transmission grid, which then flowed through distribution networks to passive consumers. Today, the rise of renewables is disrupting that model. Generation is increasingly decentralised and variable (coming from wind farms, solar plants and even rooftop PV located close to (or at) consumption points) creating more bidirectional flows, higher volatility and new stability requirements that legacy networks were not originally built to handle. As illustrated in Figure 11, grid modernisation is therefore becoming essential to manage distributed generation, new loads and flexibility resources in a system that is no longer strictly one-way.

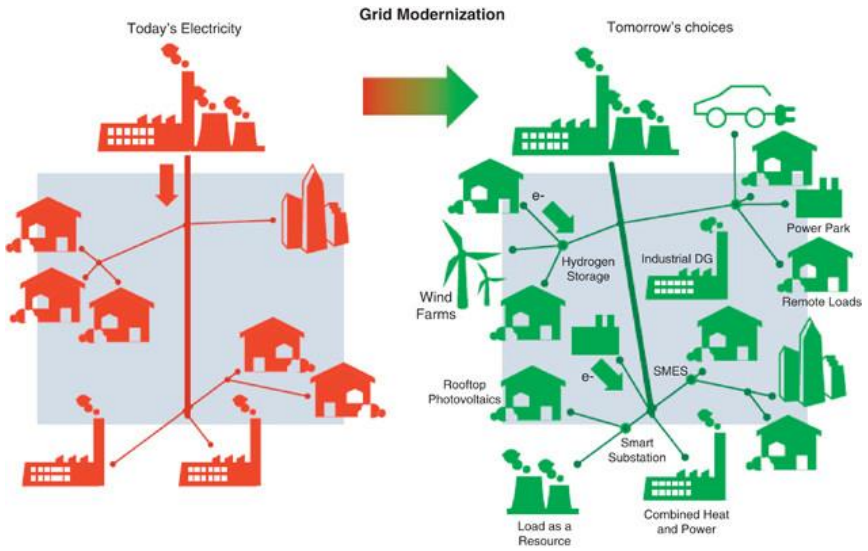

Figure 11. From Centralised Power Systems to Distributed Energy Resources: The Need for Grid Modernisation

Overall, it seems obvious that renewable energy does not fit well within the traditional power-system architecture without adaptations. The combination of lower inertia and lower fault current from IBRs, together with more complex and bidirectional power flows, helps explain the issues discussed previously regarding grid saturation and the increasing difficulty of connecting additional renewable capacity at certain nodes. In practice, even where thermal capacity might exist, weak-grid conditions at the connection point can limit access capacity, trigger additional technical requirements, or force network reinforcements before new generation can be connected and operated securely.

To analyse these constraints in a structured way, it is necessary to introduce the concept of system strength, which refers to a grid's ability to maintain stable voltage and phase angle during and after a disturbance, and the specific technical indicators used to assess it at connection points:

1. **Short Circuit Ratio (SCR):** The ratio of the grid's short-circuit apparent power at the point of interconnection to the megawatt rating of the connecting generator. A low SCR indicates a "weak" grid susceptible to voltage instability.
2. **Weighted Short Circuit Ratio (WSCR):** While SCR evaluates a single IBR, WSCR accounts for the complex mutual interactions of multiple IBRs clustered in the same geographical area.

When WSCR thresholds fall below acceptable limits, grid operators must halt new connections. Resolving these deficits requires significant CAPEX in grid reinforcements or stability assets, such as synchronous condensers or Grid-Forming (GFM) inverters.

2.3.2 GLOBAL DIAGNOSIS: GRID SATURATION ACROSS IBERDROLA'S CORE MARKETS

The manifestation of system-strength limits varies across jurisdictions, influenced by local regulatory frameworks and the pace of renewable deployment. An analysis of Iberdrola's four core markets reveals the scale of this operational bottleneck.

Spain

Spain is a European leader in the energy transition, with renewable energy accounting for 56.8% of total electricity generation in 2024. However, this rapid deployment has severely strained the transmission network operated by Red Eléctrica de España (REE).

Recent data indicates that 75% of transmission nodes are effectively saturated, while regulatory maps show that 83–87% of medium-voltage nodes are at capacity, leaving virtually no available capacity at many substations. In 2024 the industry requested about 67 GW of new grid access, but only about half could be granted, a figure that doubles the peak demand of its entire national distribution grid, which stands at around 18 GW. Roughly 60 billion € of investment projects were rejected.

This diagnosis is consistent with the Spanish regulatory literature. Morales Plaza (2022) identifies the shortage of available capacity at transmission-grid connection nodes as one of the most pressing barriers for renewable deployment in Spain. Although competitive access-capacity tenders can improve transparency in the allocation of scarce grid access, the author argues that they are only a short-term response and that the structural solution requires expanding electricity infrastructure and developing more adaptive regulation.

Figure 12 provides further evidence of the current situation. It presents a map published by i-DE (Iberdrola's distribution system operator) showing the number of connection nodes with non-zero available capacity (583 out of the 2,990 nodes reported) together with their geographical distribution across Spain.

Figure 12. Map of Electric Power Generation Capacity

To manage this, the regulator (CNMC) and REE implemented the *Especificaciones de Detalle* (EEDD) framework, utilizing the WSCR metric to strictly evaluate system strength for new connections.

Operating through its distribution subsidiary, i-DE, Iberdrola faces the dual challenge of reinforcing distribution nodes while managing generation project delays.

United States

The U.S. bulk power system is grappling with an interconnection queue of unprecedented proportions. According to Lawrence Berkeley National Laboratory (LBNL), the queue held approximately 10,300 active projects at the end of 2024, representing nearly 2,300 GW of capacity (1,400 GW of generation and 890 GW of storage). Wait times have doubled, with projects built between 2018 and 2024 facing a median duration of over four years from request to commercial operation.

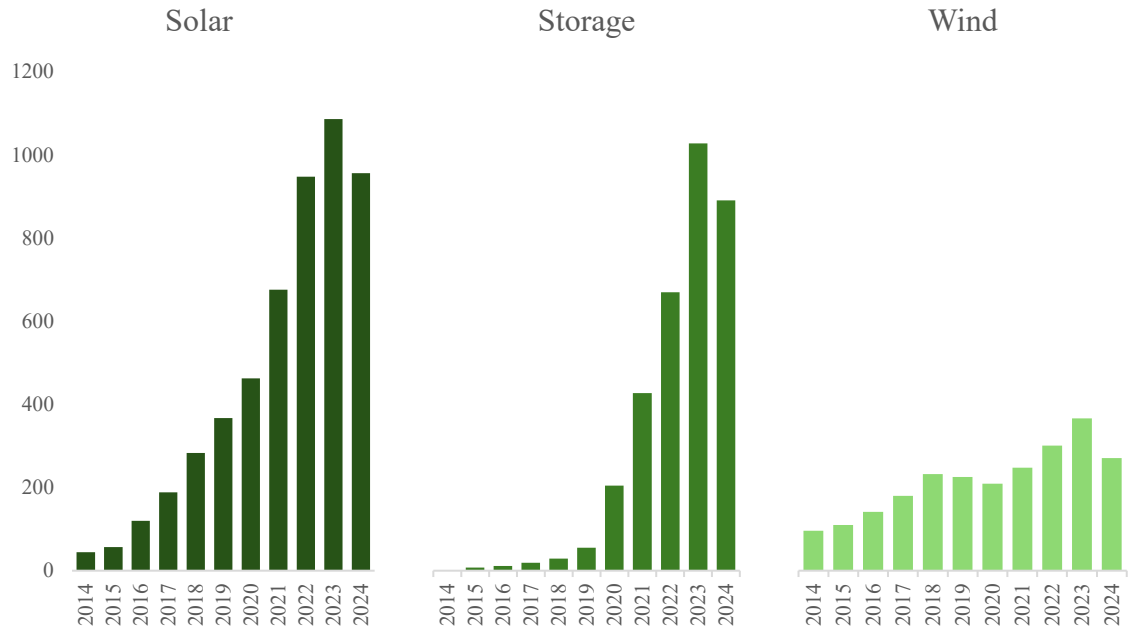

Figure 13. Exponential growth of the U.S. Interconnection Queue (Total capacity in GW)

The Federal Energy Regulatory Commission (FERC) intervened with Order No. 2023, transitioning the grid from a "first-come, first-served" serial study process to a "first-ready, first-served" cluster study approach.

It also imposes new strict site control requirements such as new IBRs being forced to possess advanced voltage ride-through models.

Iberdrola's subsidiary, Avangrid, operates 80 power facilities in the U.S. and is bypassing localized generation queues by deploying $7.3 billion into transmission upgrades.

United Kingdom

The UK's energy system transition has resulted in severe locational constraints, most notably at the "B6 boundary" dividing Scotland's wind generation from England's demand centers. By 2024, the UK's connection queue reached over 700 GW, prompting the National Energy System Operator (NESO) to launch the TMO4+ connections reform, which filters out speculative projects through stringent readiness gates.

To combat the loss of system strength, NESO launched the *Stability Pathfinders* program, tendering long-term contracts exclusively for inertia and Short Circuit Level services. Additionally, Grid Code GC0137 established specifications for Grid-Forming inverters.

ScottishPower (Iberdrola's UK arm) is monetizing these constraints by securing a £600 million loan to develop the Eastern Green Links subsea interconnectors, avoiding terrestrial bottlenecks entirely.

Brazil

Brazil's recent capacity growth has been heavily dominated by onshore wind and solar PV, concentrated in the Northeast region, which produces 91% of the nation's wind energy. This explosive growth has vastly outpaced transmission line development, creating acute system-strength deficits.

Consequently, the National Electric System Operator (ONS) was forced to curtail approximately 20.6% of total wind and solar generation capacity in 2025 to maintain stability, resulting in an estimated 20 TWh of wasted energy and financial losses of BRL 6.5 billion.

Iberdrola operates in Brazil through its 84% stake in Neoenergia. While generation assets suffer from curtailment risks, Neoenergia's regulated transmission segments benefit directly from the urgent national mandate to expand the grid.

3 THEORETICAL AND ANALYTICAL FRAMEWORK

3.1 PURPOSE OF THE FRAMEWORK: FROM REPORTED STATEMENTS TO VALUE-RELEVANT DRIVERS

A central challenge in fundamental analysis is that standard financial statements, prepared under Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS), are designed to serve multiple stakeholders, including creditors, regulators, and tax authorities. Consequently, they do not present information in a format optimized for equity valuation. To accurately assess a company's ability to generate sustainable shareholder value (particularly in the context of capital-intensive transitions like Iberdrola's grid investments) the analyst must dig in deeper and reorganize the financial data.

The primary purpose of reformulating financial statements is to draw a strict boundary between a firm's operating activities and its financing activities. Operating activities generate value through the delivery of goods and services (e.g., renewable energy generation, grid distribution), while financing activities merely raise the cash to support those operations and disburse the excess cash they generate.

By systematically reformulating the statements, we eliminate the noise introduced by capital structure choices. This improves comparability across peers and time periods and isolates the core operating performance. Ultimately, this clean separation yields consistent, value-relevant drivers (such as operating profit margins and asset turnovers) that serve as the foundational inputs for forecasting and accounting-based valuation models like the residual operating income model.

3.2 PENMAN'S FINANCIAL-STATEMENT "ARCHITECTURE" AND ARTICULATION

The theoretical backbone of this analysis relies on the financial-statement architecture developed by Stephen Penman. In this framework, financial statements are viewed as a cohesive lens on the business, governed by the logic of "stocks and flows".

A balance sheet represents the "stocks" of value at a specific point in time, while the income statement and cash flow statement represent the "flows" that explain how those stocks

change between two periods. The concept of articulation describes how these statements inherently tie together. In Penman's architecture, the standard accounting equation (Assets = Liabilities + Equity) is overridden by a value-creation equation.

The firm is viewed strictly as a dual-engine vehicle:

1. Operating Engine: Where investments are made in net operating assets to generate operating income.
2. Financing Engine: Where the firm interacts with capital markets to fund the operating engine or return capital to claimholders.

The goal of this architecture is to track the generation of value. Comprehensive income (all value added to equity) is driven primarily by operating income, with financing activities typically treated as zero-net-present-value transactions in efficient capital markets.

3.3 REFORMULATED FINANCIAL STATEMENTS

Reformulated Balance Sheet

The traditional balance sheet categorizes items by liquidity (current vs. non-current). The reformulated balance sheet regroups them by business function, yielding two primary net balances: Net Operating Assets (NOA) and Net Financial Obligations (NFO). The governing equation becomes:

$$Common\ Equity\ (CE) = Net\ Operating\ Assets\ (NOA) - Net\ Financial\ Obligations\ (NFO)$$

Classification logic and reclassifications:

- Operating Assets and Liabilities: These are items directly tied to the business of selling products and services. Accounts receivable, inventory, and property, plant, and equipment (PPE) are operating assets. Accounts payable, accrued wages, and deferred taxes are operating liabilities. Subtracting operating liabilities from operating assets yields NOA.
- Financial Assets and Obligations: These items represent the firm's interactions with the capital markets. Short-term and long-term debt, lease obligations (capitalized), and preferred stock are financial obligations.
- Cash Reclassification: Standard cash balances must be split. "Working cash" (the minimum cash required to face daily operations) is classified as an operating asset.

Any cash above this threshold is deemed "excess cash" and is classified as a financial asset (acting as negative debt).

This reformulation is critical. By isolating NOA, we can accurately measure the capital actually deployed in the business, which is essential for evaluating the true return on the firm's strategic investments.

Reformulated Income Statement

The reported income statement computes Net Income, which mixes operating profitability with the costs of financing. The reformulated income statement separates these components to reveal the true enterprise performance.

The primary output is Net Operating Profit After Tax (NOPAT), also referred to as Operating Income After Tax. The remaining component is Net Financial Expense (NFE) after tax.

A critical step in reformulating the income statement is tax allocation. Reported tax expense is a blended figure. Because interest expense is tax-deductible, the financing activities generate a "tax shield." To measure the true profitability of operations as if the firm had no debt, taxes must be reallocated:

1. Operating Taxes: The taxes the firm would have paid if it had no debt. This is calculated by adding the tax benefit of interest expense back to the reported tax provision.
2. Financing Taxes (Tax Shield): The tax savings generated by debt. This is subtracted from gross interest expense to find the after-tax Net Financial Expense.

By calculating a clean NOPAT, we remove the distortion of corporate leverage, allowing for an unbiased assessment of Iberdrola's operating margins in its generation and network businesses.

Reformulated Cash Flow Statement

Standard cash flow statements (GAAP/IFRS) notoriously classify interest payments as operating cash flows. From a valuation perspective, this is incorrect, interest is a financing flow.

According to Penman’s framework the cash flow statement is reorganized to calculate Free Cash Flow (FCF) directly from the operating engine. FCF is defined simply as Cash from Operations (clean of interest) minus Cash Investment in operations (FCF = C - I).

Crucially, in the reformulated architecture, FCF is viewed as a "dividend" from the operating activities to the financing activities. If operations consume more cash than they generate (e.g., during periods of heavy CAPEX to relieve grid bottlenecks), FCF is negative, requiring the financing engine to raise new debt or equity. By reformulating the cash flow statement, the limitations of raw statutory cash flows are bypassed, providing a crystal-clear view of the firm's self-funding capacity and capital requirements.

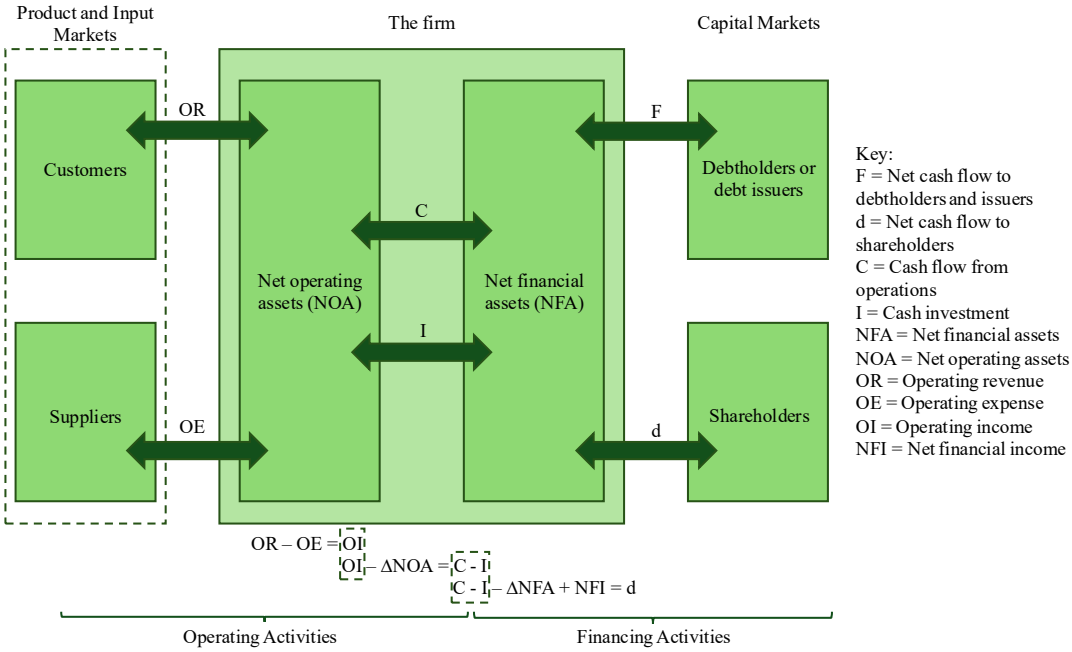

Figure 14. Reformulated Cash Flow Statement Scheme

3.4 PROFITABILITY ANALYSIS AS THE ANALYTICAL ENGINE

With the statements reformulated, the framework shifts to diagnosing the quality and drivers of the business. The analytical engine of the Penman framework is the stepwise decomposition of profitability.

The ultimate measure of shareholder return is the Return on Common Equity (ROCE). However, ROCE is a blended metric. To understand how value is created, it must be decomposed into operating and financing components.

First-Level Breakdown: Operating Profitability and Financial Leverage

ROCE is driven by the Return on Net Operating Assets (RNOA) and the effects of financial leverage:

$$ROCE = RNOA + (FLEV \times (RNOA - NBC))$$

Where:

- RNOA: Operating Income (NOPAT) divided by NOA. This is the unlevered return on the core business.
- FLEV (Financial Leverage): Net Financial Obligations divided by Common Equity.
- NBC (Net Borrowing Cost): The after-tax cost of debt.
- Operating Spread: RNOA - NBC.

This formula provides profound intuition: financial leverage only boosts shareholder returns (ROCE) if the core business return (RNOA) exceeds the cost of borrowing (NBC). If grid constraints delay projects and depress RNOA below the borrowing cost, leverage becomes destructive.

Second-Level Breakdown: Drivers of RNOA

RNOA is further decomposed into two distinct operational levers (the DuPont expansion):

1. Operating Profit Margin (PM): NOPAT divided by Sales. This measures pricing power and cost efficiency.
2. Asset Turnover (ATO): Sales divided by NOA. This measures capital efficiency (how many dollars of sales are generated for every dollar invested in the grid and renewable plants).

$$RNOA = PM \times ATO$$

A "good" RNOA can be achieved through high margins (typical of monopolistic networks) or high turnover. A deteriorating ATO often signals capital getting trapped in construction work-in-progress due to interconnection delays.

Third-Level Breakdown: Operating Liability Leverage

Finally, the framework assesses Operating Liability Leverage (OLLEV). Operating liabilities (like accounts payable) are essentially interest-free financing provided by suppliers. A high OLLEV favourably levers the return on operating assets, demonstrating strong supply-chain bargaining power.

Just as financial liabilities lever ROCE, operating liabilities can lever the return on net operating assets. Trade payables, provisions, and other operating liabilities arise naturally in

the course of operations and represent implicit financing obtained from suppliers without explicit interest. OLLEV measures the extent to which these liabilities reduce the net capital that investors must fund:

$$OLLEV = \frac{OL}{NOA}$$

However, this financing is not costless. Suppliers who provide implicit credit typically price it into their goods and services. The framework therefore estimates an implicit interest charge using the firm's short-term borrowing rate (after tax) applied to the operating liability base, which allows calculation of ROOA (the return on gross operating assets as if no operating liabilities existed):

$$ROOA = \frac{OI + Implicit\ interest\ after\ tax}{OA}$$

RNOA can then be expressed as:

$$RNOA = ROOA + (OLLEV \times OLSSPREAD)$$

where OLSSPREAD = ROOA − Short-term borrowing rate (after tax).

The structure mirrors the financial leverage equation for ROCE. RNOA is driven by the unlevered asset return plus a premium determined by leverage and its spread. The effect is favourable when ROOA exceeds the short-term rate, and unfavourable otherwise. This decomposition also serves as an internal cross-check, since both methods of computing RNOA must converge.

4 FINANCIAL STATEMENT ANALYSIS

This chapter constitutes the empirical and analytical core of the project. Its purpose is to translate the five-year financial history of Iberdrola (2020–2024) into value-relevant insight, following the reformulation methodology developed by Penman and applying the profitability framework outlined in Chapter 3.

The analysis is organised into two main blocks. Section 4.1 presents the reformulated financial statements: balance sheet, income statement, and cash flow statement, explaining the reclassification logic applied to each and interpreting what the restated figures reveal about Iberdrola's operating and financing dynamics over the period. Section 4.2 applies the full profitability decomposition, tracing value creation from RNOA through its DuPont drivers, assessing the leverage effect and the operating spread, and evaluating whether Iberdrola has sustained returns above its cost of capital through a period of record investment, rising debt, and significant macroeconomic and regulatory headwinds.

4.1 IBERDROLA'S REFORMULATED FINANCIAL STATEMENTS

4.1.1 REFORMULATED BALANCE SHEET

The reported IFRS balance sheet of Iberdrola, presented in condensed form in Table 2 (the extended version of all the statements can be found in the Annex), follows the standard classification by liquidity, separating current from non-current items on both the asset and liability sides. While this presentation satisfies accounting and creditor-oriented reporting requirements, it combines items that serve fundamentally different economic purposes: operating assets deployed in the electricity generation and network businesses are presented alongside financial assets held as excess liquidity or as derivative instruments. Similarly, trade payables and provisions that arise naturally from the operating cycle sit alongside interest-bearing debt and lease obligations on the liability side. This mixing makes it impossible to directly assess the capital actually committed to the operations of the business, or the net financing burden that the firm carries as a result of its capital structure choices.

Table 2. Condensed Reported Balance Sheet (€ millions)

Assets	31.12.2020	31.12.2021	31.12.2022	31.12.2023	31.12.2024
Intangible assets	18,222.00	19,909.00	20,118.00	20,255.00	20,255.00
Investment property	301.00	310.00	307.00	431.00	420.00
Property, plant and equipment	71,779.00	79,981.00	86,326.00	87,821.00	94,461.00
Right-of-use asset	1,974.00	2,260.00	2,370.00	2,488.00	2,630.00
Non-current investments	5,461.00	6,499.00	10,508.00	9,740.00	13,032.00
Non-current trade and other receivables	3,161.00	3,764.00	4,614.00	3,343.00	3,876.00
Current tax assets	666.00	729.00	736.00	883.00	832.00
Deferred tax assets	5,982.00	5,917.00	6,321.00	2,009.00	1,952.00
Total non-current assets	107,546.00	119,369.00	131,300.00	126,970.00	137,458.00
Assets held for sale	-	124.00	308.00	4,720.00	404.00
Nuclear fuel	260.00	267.00	259.00	278.00	318.00
Inventories	2,443.00	2,639.00	2,159.00	2,550.00	2,987.00
Current trade and other receivables	7,664.00	10,956.00	11,220.00	10,039.00	10,777.00
Current financial assets	1,178.00	4,364.00	4,813.00	2,457.00	2,267.00
Cash and cash equivalents	3,427.00	4,033.00	4,608.00	3,019.00	4,082.00
Total current assets	14,972.00	22,383.00	23,367.00	23,063.00	20,835.00
Total assets	122,518.00	141,752.00	154,667.00	150,033.00	158,293.00
Equity and liabilities	31.12.2020	31.12.2021	31.12.2022	31.12.2023	31.12.2024
Total equity	47,218.00	56,126.00	58,114.00	60,292.00	61,051.00
Capital grants	1,240.00	1,261.00	1,247.00	1,136.00	1,305.00
Facilities transferred or financed by third parties	5,043.00	5,424.00	5,673.00	6,021.00	6,683.00
Non-current provisions	5,836.00	5,330.00	4,225.00	4,536.00	4,624.00
Non-current financial liabilities	35,096.00	37,175.00	44,216.00	41,775.00	46,094.00
Other non-current liabilities	262.00	418.00	309.00	435.00	434.00
Current tax liabilities	285.00	300.00	362.00	387.00	418.00
Deferred tax liabilities	9,607.00	11,364.00	11,682.00	7,379.00	7,545.00
Total non-current liabilities	57,369.00	61,272.00	67,714.00	61,669.00	67,103.00
Liabilities linked to assets held for sale	-	-	27.00	1,097.00	197.00
Current provisions	579.00	789.00	922.00	920.00	795.00
Current financial liabilities	15,470.00	21,297.00	25,079.00	23,120.00	25,528.00
Other current liabilities	1,882.00	2,268.00	2,811.00	2,935.00	3,619.00
Total current liabilities	17,931.00	24,354.00	28,839.00	28,072.00	30,139.00
Total equity and liabilities	122,518.00	141,752.00	154,667.00	150,033.00	158,293.00

The reformulation regroups every balance sheet item by its economic function, separating the operating engine, which generates value through the delivery of electricity and network

services, from the financing engine, which merely funds the operating base and distributes its surplus.

Operating Assets (OA) include all tangible and intangible infrastructure (PP&E, concessions, goodwill), right-of-use assets, equity-accounted investees, trade and other receivables, inventories, nuclear fuel, deferred tax assets, and working cash. Operating Liabilities (OL) encompass trade payables, provisions, capital grants, third-party infrastructure contributions, deferred tax liabilities, and working-capital tax balances. The difference yields Net Operating Assets (NOA), the capital actually deployed in the business. On the other hand, Financial Obligations (FO) comprise all interest-bearing instruments: bonds and bank debt, IFRS 16 lease liabilities, and hybrid instruments classified as financial liabilities. Financial Assets (FA) include liquid financial assets, non-current financial receivables, and derivative assets. Net Financial Obligations arise from the expression: (NFO) = FO − FA.

The identity NOA − NFO = CSE + NCI holds in all five years, confirming internal consistency of the reclassification.

Table 3. Reformulated Balance Sheet (€ millions)

Operating Assets	31.12.2020	31.12.2021	31.12.2022	31.12.2023	31.12.2024
OA	114,886.00	128,898.00	137,819.00	137,074.00	145,243.00
Operating Liabilities:					
OL	29,872.00	33,118.00	33,185.00	29,958.00	31,803.00
NOA (OA-OL)	85,014.00	95,780.00	104,634.00	107,116.00	113,440.00
Financial Obligation:					
FO	45,428.00	52,508.00	63,368.00	59,783.00	65,439.00
Financial Assets:					
FA	7,632.00	12,854.00	16,848.00	12,959.00	13,050.00
NFO (FO-FA)	37,796.00	39,654.00	46,520.00	46,824.00	52,389.00
Common Shareholders' Equity					
Parent	35,412.00	40,479.00	41,119.00	43,111.00	47,125.00
CSE	35,412.00	40,479.00	41,119.00	43,111.00	47,125.00
Minority (noncontrolling) interest					
Non-controlling interests	11,806.00	15,647.00	16,995.00	17,181.00	13,926.00
NCI	11,806.00	15,647.00	16,995.00	17,181.00	13,926.00
NOA-NFO	47,218.00	56,126.00	58,114.00	60,292.00	61,051.00
CSE+NCI	47,218.00	56,126.00	58,114.00	60,292.00	61,051.00

NOA expanded from €85.0bn in 2020 to €113.4bn in 2024, a 33% increase over five years. This growth is almost entirely driven by the sustained escalation of the investment programme. PP&E rose from €71.8bn to €94.5bn, reflecting the build-out of electricity networks in the United States (Avangrid), the United Kingdom (ScottishPower), Brazil (Neoenergia), and Spain (i-DE), as well as the addition of renewable generation capacity across geographies. Critically, assets under construction grew from €6.9bn to €15.1bn, more than doubling in absolute terms and rising from approximately 10% to 16% of gross PP&E (expressed in the extended balance sheet). This accumulation of work-in-progress is the balance sheet footprint of the capital deployment phase, representing committed investment that is not yet generating revenues or operating income. Crucially, not all of this delay is within Iberdrola's control. A significant share of construction WIP corresponds to generation and network assets that are technically complete or near-complete but pending grid connection approval, held back by the system-strength constraints and saturated connection queues described in Chapter 2. In this sense, the WIP balance is not only a natural feature of a long investment cycle, but also a direct financial consequence of infrastructure saturation, as capital that has already been spent found its returns being deferred by external regulatory and technical bottlenecks. The implications for profitability (specifically for asset turnover) are examined in detail in Section 4.2.

A notable movement on the asset side is the sharp contraction in deferred tax assets between 2022 and 2023, from €6.3bn to €2.0bn. This does not reflect a reversal of deferred tax positions or any deterioration in operating performance. Rather, it is a pure presentational reclassification: in 2023, Iberdrola amended its accounting presentation to offset deferred tax assets and liabilities within the same tax groups, in accordance with IAS 12 and the applicable regulatory framework, restating the 2022 comparatives under IAS 8. The gross deferred tax asset at 2022 was indeed €6.3bn, but the net figure after the €4.6bn offset against deferred tax liabilities within the same jurisdictions was €1.8bn (significantly closer to the €2.0bn reported in 2023). The reformulation framework classifies both deferred tax assets and liabilities within the operating perimeter, so the NOA calculation in this analysis is unaffected by this presentational change. It is included here precisely to illustrate the kind of accounting reclassification that the reformulation framework is designed to identify and neutralise.

On the financing side, NFO grew from €37.8bn to €52.4bn over the period. The sharpest single-year increase was between 2021 and 2022 (+€6.9bn), coinciding with peak investment activity and a period of extreme energy price and interest rate volatility that temporarily inflated gross derivative positions on both sides of the balance sheet. From 2023 onwards, as energy market conditions normalised, financial asset positions contracted while the debt base continued to expand in line with the ongoing investment programme. Common

Shareholders' Equity grew steadily from €35.4bn to €47.1bn through retained earnings, as net profit consistently exceeded dividends. NCI declined sharply in 2024 to €13.9bn from a peak of €17.2bn, following the full consolidation of Avangrid and the closure of the Mexico divestment in February 2024, through which Iberdrola received approximately $6.2bn for 55% of its fossil generation business, redirecting that capital toward regulated network investment in the US and UK.

4.1.2 REFORMULATED INCOME STATEMENT

The reported income statement of Iberdrola, summarised in Table 4, follows IFRS presentation and reports a headline net profit figure that mixes operating performance with the effects of corporate financing choices. Two structural features of the reported statement are particularly problematic: first the tax charge is a blended figure that cannot be attributed cleanly to operating or financing activities, and second, finance income and expense include items that are economically distinct: returns on excess cash and financial investments, costs of debt, effects of derivatives, and the discounting of long-term provisions.

Table 4. Reported Income Statement (€ millions)

Income statement	2020	2021	2022	2023	2024
Revenue	33,145.00	39,114.00	53,949.00	49,335.00	44,739.00
Supplies	(17,000.00)	(22,052.00)	(33,750.00)	(26,033.00)	(20,863.00)
Gross income	16,145.00	17,062.00	20,199.00	23,302.00	23,876.00
Personnel expenses	(2,810.00)	(3,002.00)	(3,365.00)	(3,824.00)	(3,941.00)
Capitalised personnel expenses	661.00	716.00	847.00	864.00	947.00
External services	(2,841.00)	(2,936.00)	(3,602.00)	(4,000.00)	(4,159.00)
Other operating income	704.00	995.00	911.00	824.00	2,691.00
Net operating expenses	(4,286.00)	(4,227.00)	(5,209.00)	(6,136.00)	(4,462.00)
Taxes	(1,821.00)	(829.00)	(1,762.00)	(2,749.00)	(2,566.00)
Gross operating profit - EBITDA	10,038.00	12,006.00	13,228.00	14,417.00	16,848.00
Impairment losses, trade and other receivables	(381.00)	(369.00)	(470.00)	(618.00)	(471.00)
Amortisation, depreciation and provisions	(4,093.00)	(4,294.00)	(4,774.00)	(4,826.00)	(6,648.00)
Operating profit - EBIT	5,564.00	7,343.00	7,984.00	8,973.00	9,729.00
Result of equity-accounted investees	480.00	(39.00)	146.00	239.00	(37.00)
Finance income	1,038.00	1,265.00	1,204.00	1,535.00	2,377.00
Finance expense	(2,029.00)	(2,268.00)	(3,042.00)	(3,722.00)	(3,952.00)
Net finance income/(expense)	(991.00)	(1,003.00)	(1,838.00)	(2,187.00)	(1,575.00)
Profit before tax	5,053.00	6,301.00	6,292.00	7,025.00	8,117.00
Income tax	(1,083.00)	(1,914.00)	(1,161.00)	(1,610.00)	(2,150.00)
Net profit from continuing operations	3,970.00	4,387.00	5,131.00	5,415.00	5,967.00
Net profit/(loss) from discontinued operations (net of taxes)	(18.00)	(35.00)	(71.00)	(21.00)	(19.00)
Non-controlling interests	(341.00)	(467.00)	(721.00)	(591.00)	(336.00)
Net profit attributable to the parent	3,611.00	3,885.00	4,339.00	4,803.00	5,612.00

The reformulation produces NOPAT (the sum of Operating Income from Sales and Other Operating Income, both after tax) as the unlevered output of the operating business and NFE after tax as the net cost of the debt programme, enabling a clean assessment of operating profitability independent of capital structure. The key methodological step is tax allocation: a 25% statutory rate is applied directly to Other Operating Income and to gross NFE, generating the financing tax shield that comes from interest deductibility. The remaining reported tax charge is then assigned to Operating Income from Sales by difference. This ensures the three components sum exactly to the reported tax figure with no residual, and that NOPAT reflects the true operating return independent of capital structure. Other Operating Income (including gains on asset disposals and equity-method results) is retained within the operating perimeter but tracked separately given its lower recurrence relative to core sales income.

Table 5. Reformulated Income Statement (€ millions)

Income statement	2020	2021	2022	2023	2024
Operating income from sales (before tax)	4,860.00	6,348.00	7,073.00	8,149.00	7,038.00
Tax on operating income from sales	(1,034.75)	(1,925.75)	(1,356.25)	(1,891.00)	(1,880.25)
Tax as reported	(1,083.00)	(1,914.00)	(1,161.00)	(1,610.00)	(2,150.00)
Tax allocated to other operating income	(296.00)	(239.00)	(264.25)	(265.75)	(663.50)
Tax benefit (expenses) allocated to financing income	247.75	250.75	459.50	546.75	393.75
Operating income from sales (after tax)	3,825.25	4,422.25	5,716.75	6,258.00	5,157.75
Other Operating income (before tax)	1,184.00	956.00	1,057.00	1,063.00	2,654.00
Tax on other Operating Income	(296.00)	(239.00)	(264.25)	(265.75)	(663.50)
Other Operating income (after tax)	888.00	717.00	792.75	797.25	1,990.50
NOPAT	4,713.25	5,139.25	6,509.50	7,055.25	7,148.25
Net finance income/(expense)	(991.00)	(1,003.00)	(1,838.00)	(2,187.00)	(1,575.00)
Tax allocated to financing	247.75	250.75	459.50	546.75	393.75
Net financial income/(expense) after tax	(743.25)	(752.25)	(1,378.50)	(1,640.25)	(1,181.25)
Net profit from continuing operations	3,970.00	4,387.00	5,131.00	5,415.00	5,967.00
Net profit/(loss) from discontinued operations (net of taxes)	(18.00)	(35.00)	(71.00)	(21.00)	(19.00)
Non-controlling interests	(341.00)	(467.00)	(721.00)	(591.00)	(336.00)
Net profit attributable to the parent	3,611.00	3,885.00	4,339.00	4,803.00	5,612.00
Income tax	1,083.00	1,914.00	1,161.00	1,610.00	2,150.00
Effective tax rate	0.25	0.25	0.25	0.25	0.25

The most important insight from the reformulated statement is the persistent and widening divergence between revenue and NOPAT. Revenue peaked at €53.9bn in 2022 and declined sharply to €44.7bn in 2024, yet NOPAT grew continuously from €4.7bn to €7.1bn across the full period. This decoupling is structurally explained by the 2021–2022 European energy price shock: sky-high wholesale gas and power prices following Russia's invasion of Ukraine inflated both revenues and the Supplies cost line simultaneously and roughly symmetrically. The group's EBITDA grew 10% in 2022 despite the European energy crisis, driven by geographic diversification with the US and Brazil offsetting EU weakness. As prices normalised in 2023–2024, revenue fell but gross margins expanded, confirming that the volume of revenue had never been the driver of operating value creation.

The operating taxes line is a key analytical signal. It nearly tripled from €829m in 2021 to €2,749m in 2023, driven primarily by Spain's 1.2% revenue levy on large energy companies introduced for 2023–2024, which cost Iberdrola €438m in 2023 alone, alongside a separate levy targeting nuclear and hydro production revenues. This extraordinary fiscal burden directly compressed operating income from sales, making the 2023 NOPAT figure somewhat misleading.

The 2024 NOPAT of €7.1bn is elevated by approximately €2.0bn of other operating income after tax, the largest component of which is the capital gain from the Mexico divestment. Excluding this non-recurring item, core operating income from sales after tax was €5.2bn (below 2023's €6.1bn). The apparent year-on-year decline reflects the sharp jump in D&A from €4.8bn to €6.6bn, a direct and positive consequence of major infrastructure assets being commissioned after the prior years' investment cycle. Accelerating depreciation signals productive capital entering into service, not a deterioration of operating efficiency, and its effect on forward NOPAT will reduce as the new asset base ramps up to full capacity. The NFE line confirms the expected financing cost trajectory. After-tax interest burden rose from €743m to a peak of €1,640m in 2023 as Euribor climbed and the gross debt stock expanded, before moderating to €1,181m in 2024 as Mexico proceeds reduced gross debt.

4.1.3 REFORMULATED CASH FLOW STATEMENT

Under IFRS, Iberdrola's cash flow statement does not present the information in a format suitable for valuation analysis. On the one hand, the investing block mixes investment in operating assets (productive CAPEX) with transactions in financial assets and liabilities. On the other hand, the financing block bundles together debt issuance and repayment (F), dividends and treasury share transactions (d), and flows with non-controlling interests (NCI).

Table 6 presents the reported statement in condensed form for reference.

Table 6. Condensed Reported Cash Flow Statement (€ millions)

Cash flow statement	2020	2021	2022	2023	2024
Net cash flows from operating activities	8,347.00	8,106.00	10,443.00	12,130.00	11,925.00
Net cash flows used in investing activities	(6,644.00)	(9,488.00)	(10,154.00)	(9,693.00)	(8,397.00)
Net cash flows used in financing activities	(71.00)	1,869.00	11.00	(4,088.00)	(2,267.00)
Effect of exchange rate fluctuations	(318.00)	119.00	135.00	62.00	(198.00)
Net increase/(decrease) in cash and cash equivalents	1,314.00	606.00	575.00	(1,589.00)	1,063.00
Cash and cash equivalents at beginning of year	2,113.00	3,427.00	4,033.00	4,608.00	3,019.00
Cash and cash equivalents at end of year	3,427.00	4,033.00	4,608.00	3,019.00	4,082.00

The reformulation follows Penman's definition of Free Cash Flow as C – I, where C is cash from operations, and I is cash investment in operating assets (productive CAPEX net of proceeds from asset disposals and excluding transactions with financial assets and liabilities).

The financing block F consolidates net debt issuance and repayment, interest paid net of interest received, net transactions with financial assets, and the change in cash and equivalents. d represents net cash returned to common shareholders (dividends paid plus net treasury share purchases) and NCI captures net cash flows with non-controlling interests, including proceeds from or payments for transactions affecting the minority stakes in consolidated subsidiaries.

The reconciliation d + F + NCI = C – I holds for all available years (2021–2024), confirming the consistency of the reclassification.

Table 7. Reformulated Cash Flow Statement (€ millions)

	2021	2022	2023	2024
C	8,106.00	10,443.00	12,130.00	11,925.00
I	8,187.00	7,865.00	9,166.00	7,514.00
C-I	(81.00)	2,578.00	2,964.00	4,411.00
	2021	2022	2023	2024
Dividends	570.00	890.00	949.00	1,166.00
Acquisition of treasury shares	1,897.00	1,885.00	2,787.00	2,076.00
Proceeds from disposal of treasury shares	73.00	91.00	110.00	79.00
d	2,394.00	2,684.00	3,626.00	3,163.00
Net issue of debt	4,855.00	4,332.00	2,291.00	5,574.00
Interest on debt	884.00	1,725.00	2,266.00	1,917.00
Net purchase of financial assets	1,334.00	2,461.00	728.00	1,217.00
Net increase/(decrease) in cash and cash equivalents	606.00	575.00	(1,589.00)	1,063.00
Effect of exchange rate fluctuations	119.00	135.00	62.00	(198.00)
Interest received	33.00	172.00	201.00	334.00
F	(2,183.00)	122.00	(1,149.00)	(1,513.00)
Dividends to NCI	229.00	419.00	930.00	459.00
Payments to NCI	94.00	51.00	19.00	2,517.00
Proceeds from NCI	615.00	698.00	462.00	215.00
NCI	(292.00)	(228.00)	487.00	2,761.00
d+F+NCI	(81.00)	2,578.00	2,964.00	4,411.00

The reformulated cash flow statement is perhaps the most direct illustration of the strategic cycle that Iberdrola has been navigating over the period under review.

In 2021, Free Cash Flow was essentially zero at –€81 million. This was the peak year of a capital deployment surge. Gross operating investment (I) of €8.2 billion nearly matched the cash generated from operations (C) of €8.1 billion, leaving the business with no residual cash after meeting its operating investment needs. Penman's framework makes clear that a near-zero or negative FCF is not inherently a problem, it actually is the expected outcome for a utility in a heavy capital expansion phase.

From 2022 onwards, FCF turned positive and improved progressively: €2.6 billion in 2022, €3.0 billion in 2023, and €4.4 billion in 2024. This trend is driven primarily by the sustained growth in C. Cash from operations expanded from €8.1 billion in 2021 to €11.9 billion in 2024, reflecting the commissioning of capacity built during the prior investment cycle and the growth in regulated network earnings, while investment cash outflows moderated from their 2021 peak, partly because the 2024 figure for I (€7.5 billion) is net of the substantial

proceeds from the Mexico divestment (~€5.7 billion received in February 2024), which artificially reduces gross CAPEX in the reformulated investment figure for that year.

A critical observation for the thesis's consulting question concerns the relationship between the accumulation of assets under construction on the balance sheet and the FCF profile. As noted in the balance sheet analysis, construction WIP reached €15.1 billion in 2024. The €9.2 billion described by management as allocated to projects in construction and expected to commission in 2025–2026 represents a near-term source of cash flow conversion, but only if grid connection and regulatory hurdles are resolved on schedule. Any delay in commissioning (precisely the kind of delay associated with the grid saturation conditions described in Chapter 2) translates directly into a deferral of C, a period of extended negative or low FCF, and an increase in the financing requirement. This is the mechanical link between the infrastructure constraint analysed qualitatively in the Context chapter and the financial dynamics captured in the reformulated statements.

The financing section of the reformulated statement confirms the expected pattern. In years with low FCF (2021), the financing engine absorbed the gap through net debt issuance, whereas as FCF recovered, net financing flows moderated and dividend capacity improved.

4.2 PROFITABILITY AND VALUE CREATION ANALYSIS

With the financial statements reformulated, the analytical framework introduced in Chapter 3 can be applied in full. The objective is not to describe the metrics but to answer the central question of this thesis: is Iberdrola creating sustainable shareholder value, and how is network saturation affecting that process? The sections below follow the decomposition structure introduced in Chapter 3, moving from the shareholder return metric down through its operating and financial drivers to a final diagnosis anchored in the thesis's central question.

4.2.1 RETURN ON COMMON EQUITY (ROCE) AND THE LEVERAGE EFFECT

As established in Chapter 3, ROCE is the ultimate measure of shareholder return and is driven by the operating return and the effect of financial leverage: ROCE = RNOA + FLEV × (RNOA − NBC). The operating spread (RNOA − NBC) is the diagnostic variable. When it is positive, leverage amplifies shareholder returns, when it is negative, it destroys them.

Table 8. ROCE and Leverage Effect (2021–2024)

	2021	2022	2023	2024
ROCE (excluding NCI)	10.2%	10.6%	11.4%	12.4%
ROCE (including NCI)	8.5%	9.0%	9.1%	9.8%
RNOA	5.7%	6.5%	6.7%	6.5%
FLEV	1.02	1.06	1.11	1.10
NBC	1.9%	3.2%	3.5%	2.4%
(RNOA − NBC)	+3.8pp	+3.3pp	+3.2pp	+4.1pp

Iberdrola's ROCE (excluding NCI) improved from 10.2% in 2021 to 12.4% in 2024. This is a consistent improvement across the most intensive investment cycle in the group's history, achieved despite rising debt and sharply higher interest rates during 2022–2023. Financial Leverage (FLEV) remained broadly stable at 1.02x–1.11x, as equity grew through retained earnings roughly in parallel with the debt base, preventing the leverage ratio from deteriorating despite record CAPEX. NBC rose from 1.9% in 2021 to a peak of 3.5% in 2023 as Euribor climbed from negative territory, before moderating to 2.4% in 2024, reflecting the predominantly fixed-rate and long-duration structure of Iberdrola's debt portfolio.

The operating spread remained positive throughout the period: +3.8pp in 2021, narrowing to +3.2pp in 2023 at the peak of the rate cycle, and recovering to +4.1pp in 2024.

The central finding of the leverage analysis is that Iberdrola has consistently earned more on its operating assets than it pays on its debt, meaning every unit of leverage has been value-accretive. However, there is a forward-looking risk. If grid saturation systematically delays commissioning and suppresses RNOA, the spread could narrow to the point where further debt-financed expansion becomes self-defeating. This risk is examined in detail in Section 4.2.4.

4.2.2 RETURN ON NET OPERATING ASSETS (RNOA) AND DUPONT DECOMPOSITION

RNOA is the foundational measure of operating value creation, calculated as NOPAT divided by average NOA. It captures the return generated by the operating engine independently of how it is financed and decomposes into two distinct levers: Operating Profit Margin (PM = NOPAT / Sales) and Asset Turnover (ATO = Sales / Avg NOA).

Table 9. Drivers of RNOA: DuPont Decomposition (2021–2024)

Drivers RNOA	2021	2022	2023	2024
PM	13.1%	12.1%	14.3%	16.0%
ATO	0.43	0.54	0.47	0.41
RNOA	5.7%	6.5%	6.7%	6.5%
Sales PM	11.3%	10.6%	12.7%	11.5%
Other operating items PM	1.8%	1.5%	1.6%	4.4%

Iberdrola's RNOA improved from 5.7% in 2021 to 6.7% in 2023, before settling at 6.5% in 2024. The DuPont decomposition reveals a tension between the two drivers. PM improved consistently from 13.1% to 16.0%, driven by the growing weight of regulated network earnings and operational efficiencies. The 2024 PM, however, includes a significant contribution from non-recurring other operating income (the Mexico capital gain), as reflected in the jump in Other Operating Items PM from 1.6% in 2023 to 4.4% in 2024. Apart from that, the underlying Sales PM of 11.5% in 2024 is broadly in line with the prior trend, suggesting the structural margin improvement is real but more modest.

ATO moved in the opposite direction, declining from a peak of 0.54x in 2022 to 0.41x in 2024. These two forces have been working against each other. The margin improvement has been partially offset by declining capital efficiency, keeping RNOA broadly flat. The 2022 ATO peak is partly artificial driven by exceptionally high revenues due to the energy price shock. From 2023 onwards, as revenues normalised and NOA continued to expand with the investment programme, the structural ATO compression became clearly visible.

4.2.3 OPERATING LIABILITY LEVERAGE (OLLEV)

As introduced in Chapter 3, OLLEV measures the degree to which interest-free supplier financing reduces the capital that investors must fund, and its effect on RNOA is captured through the expression RNOA = ROOA + (OLLEV × OLSSPREAD). To estimate the implicit interest cost embedded in operating liabilities, the framework requires a short-term borrowing rate. In this analysis, the 3-month Euribor rate (2.135%, after-tax 1.62%) has been used as a proxy, consistent with Iberdrola's predominantly euro-denominated short-term financing and with the rate prevailing at the time of the analysis. This rate is an approximation, but it provides a reasonable and consistent benchmark for computing ROOA and OLSSPREAD across the period.

Table 10. Operating Liability Leverage (2021–2024)

	2021	2022	2023	2024
OLLEV	0.35	0.33	0.30	0.28
ROOA	4.7%	5.3%	5.5%	5.4%
OLSSPREAD	3.0%	3.7%	3.9%	3.8%
RNOA	5.7%	6.5%	6.6%	6.5%

OLLEV has declined steadily from 0.35x in 2021 to 0.28x in 2024. This is explained by the fact that NOA has grown at a faster pace than operating liabilities throughout the investment cycle, because CAPEX in the construction phase generates asset additions without a proportional increase in trade payables (contractors are paid in cash rather than on extended credit terms). As the WIP fraction of the asset base grows, the operating liability base provides a progressively smaller offset relative to the total capital deployed.

Despite this compression, the OLSSPREAD has remained positive and broadly stable at 3.0–3.9%, meaning that ROOA consistently exceeds the implicit cost of operating liabilities. Supplier financing continues to enhance RNOA, though its contribution is gradually reducing. The RNOA cross-check coincides with the primary RNOA calculation in all years, confirming the internal consistency of the reformulated statements.

The declining OLLEV trend is a secondary signal, but it points in the same direction as the ATO compression identified in the RNOA analysis. Both reflect the same underlying reality of a capital base growing faster than the operating structure that surrounds it.

4.2.4 CAPITAL TRAPPED

Construction intensity is a metric constructed directly from the reformulated balance sheet as the ratio of PP&E under construction to total NOA. It is not part of the standard Penman framework but is a natural extension of it, as it quantifies the fraction of the capital base not yet generating any operating income, and therefore directly explains the ATO compression identified in Section 4.2.2.

Table 11. Capital Trapped: Construction Intensity (2021–2024)

Capital trapped	2021	2022	2023	2024
PP&E under construction	9,062.00	11,513.00	14,355.00	15,106.00
NOA	95,780.00	104,634.00	107,116.00	113,440.00
Construction intensity	9.5%	11.0%	13.4%	13.3%

Construction intensity rose from 9.5% in 2021 to 13.4% in 2023, stabilising at 13.3% in 2024. In absolute terms, assets under construction grew from €9.1bn to €15.1bn over the period. Assets under construction represent capital generating zero operating return while simultaneously incurring a financing cost, whose contribution to NOPAT will only materialise once these assets enter service.

As established in Section 4.1, not all of this delay is within Iberdrola's control. A significant share of WIP corresponds to assets pending grid connection approval, held back by the system-strength constraints and saturated connection queues documented in Chapter 2. Construction intensity is therefore the financial instrument through which the infrastructure bottleneck translates into a quantifiable drag on RNOA and, ultimately, on shareholder value.

4.2.5 SYNTHESIS: VALUE CREATION UNDER CONSTRAINT

The profitability analysis delivers a clear answer to the research question. Iberdrola is creating shareholder value. The operating spread has remained positive in every year, ROCE has improved consistently from 10.2% to 12.4%, and NOPAT has grown from €4.7bn to €7.1bn despite extraordinary fiscal headwinds and a challenging interest rate cycle. The financial architecture is sound and leverage has been value-accretive throughout.

However, the analysis also reveals a structural tension that directly reflects the infrastructure constraint at the core of this project. Margin improvement is real, but it is being systematically offset by ATO compression. Construction intensity has risen from 9.5% in 2021 to 13.3% in 2024, meaning that a growing fraction of the capital base is trapped in pre-operational assets generating no current return. This is not simply a feature of the investment cycle, it is the balance sheet expression of a grid access bottleneck that delays the conversion of invested capital into productive assets, as documented in Chapter 2.

The result is a RNOA that has remained broadly flat despite genuine operational improvements, and a spread that, while positive, has a narrower margin of safety than the trend in margins alone would suggest. Iberdrola is not destroying value, but it is leaving value on the table. The pace at which construction WIP is converted into operational capacity is therefore the single most important financial lever available to the company, and it is precisely the lever most constrained by network saturation.

5 CONSULTING RECOMMENDATIONS

5.1 SUMMARY OF KEY FINDINGS

The analysis developed across Chapters 2 and 4 can be synthesised through the following SWOT framework, which connects the sector diagnosis with the financial performance review and provides the foundation for the strategic recommendations that follow.

Strengths

- Market-leading position in regulated electricity networks across four core geographies, providing stable and predictable cash flows with limited competitive exposure.
- Consistent and growing shareholder value creation, with returns on invested capital comfortably above the cost of debt throughout the period analysed.
- Global leadership in offshore wind and smart grid technology, creating significant barriers to entry and a strong pipeline of long-term contracted revenues.
- Proven ability to recycle capital from non-core assets toward higher-growth opportunities, as demonstrated by the Mexico divestment.

Weaknesses

- A large and growing volume of capital committed to projects not yet generating revenue, creating a structural drag on operating efficiency that the company cannot fully control.
- An increasingly leveraged balance sheet, which amplifies returns when the business performs well but reduces the margin of safety if growth is delayed or returns compress.
- Vulnerability to politically-driven fiscal measures, as demonstrated by Spain's energy windfall tax, which materially impacted earnings with little ability to anticipate or offset.

Opportunities

- Surging electricity demand across all core markets driven by electrification, digital infrastructure and industrial reindustrialisation, strengthening the long-term investment case for network expansion.
- The grid saturation problem itself creates a commercial opportunity of providing the stability services that the system urgently needs, capturing new regulated and contracted revenues.
- Geographic diversification into markets with less congested grids allows capital to be deployed where it converts to revenue faster.
- Growing demand from large industrial consumers for guaranteed green energy supply, enabling long-term power purchase agreements that protect margins and improve project bankability.

Threats

- Grid connection queues and system-strength deficits across all core markets, preventing completed assets from entering service and delaying the cash flows that justify the investment programme.
- Regulatory and political instability, particularly in Spain, where changing rules and extraordinary levies introduce earnings uncertainty in the group's most important home market.
- Intensifying global competition for high-quality renewable projects and grid access capacity, as large utilities worldwide race to secure the same limited connection slots and regulated asset opportunities.

5.2 STRATEGIC RECOMMENDATIONS

R1: Monetise Network Saturation as a Business Opportunity

Rationale: Grid saturation is typically framed as a constraint on Iberdrola's growth. The first recommendation inverts that logic: Iberdrola should position itself as a provider of the system-stability services that saturation makes scarce, capturing regulated and commercial revenues from the very problem it faces.

Two complementary mechanisms:

- The regulated route: through i-DE and ScottishPower Networks, Iberdrola can offer stability services (inertia, short-circuit level, voltage support) to transmission system operators under long-term regulated contracts. In the UK, NESO's Stability Pathfinders programme already tenders exclusively for these services with multi-year revenue certainty, providing a direct template. This is structurally similar to the RAB model as it is a regulated asset generating predictable returns, without requiring new generation capacity.
- The commercial route: in nodes where grid reinforcement is technically necessary but economically marginal for the DSO alone, Iberdrola can structure co-investment agreements with large industrial anchor tenants (data centres, green hydrogen plants, electrified industrial facilities) committing them to a long-term PPA in exchange for a contribution to the reinforcement cost. Both parties unlock value. The industrial secures green energy supply and Iberdrola unlocks grid capacity that benefits its own generation pipeline at that node.

Timeline: Short to medium term (1–3 years) for regulated stability contracts where frameworks already exist (UK, US). Medium term (2–4 years) for co-investment structures, which require bilateral negotiation.

KPIs: Revenue from stability services as a percentage of network EBITDA, number of nodes unlocked through co-investment agreements and reduction in average WIP-to-commissioning time at targeted nodes.

R2: Embed Connection-Adjusted ROCE in the Investment Framework

Rationale: The profitability analysis in Chapter 4 shows that construction is the single most direct financial consequence of grid saturation, yet traditional investment metrics such as IRR and payback do not explicitly capture connection uncertainty. A project with an attractive IRR but a three-year connection queue has a materially lower expected RNOA contribution than one with secured access, but both may pass the same investment filter.

Actions: Iberdrola should introduce a connection-adjusted ROCE metric as a formal criterion in its capital allocation process. For each project, the expected RNOA contribution would be adjusted by two factors: the estimated probability of connection within a defined window, and the expected time from construction completion to commercial operation. Projects with uncertain or delayed connection are automatically deprioritised relative to those with secured grid access, regardless of their standalone IRR. The operating spread (RNOA − NBC), should also be adopted as a board-level KPI with an explicit floor, providing an early warning mechanism if the balance between operating returns and financing costs begins to deteriorate.

Timeline: Immediate. Capital allocation frameworks can be updated within a single planning cycle.

KPIs: Construction intensity ratio (target: below 10% within 3–5 years), operating spread stability and share of new CAPEX commitments with secured grid connection at approval date.

R3: Redirect CAPEX from High-Queue Markets to Fast-Conversion Geographies

Rationale: Even with improved connection management, certain markets will remain structurally constrained for years. Iberdrola should systematically redirect marginal investment from projects with long connection queues in saturated markets toward geographies where the WIP-to-operational conversion is structurally faster.

Market assessment: Three candidates were evaluated against the following key criteria: regulatory stability, grid connection speed, and Iberdrola's ability to deploy capital efficiently:

- Poland offers a well-known regulatory framework through EU membership, access to cohesion and energy transition funds, and materially shorter connection queues than Spain or the UK. Electricity demand is growing rapidly driven by industrial electrification and reindustrialisation. The absence of an existing Iberdrola platform is the main limitation as entry would require building local execution capability from scratch, implying a 3–5 year lag before meaningful capital deployment.
- Japan presents a structurally different opportunity. It is a large, stable, liberalised market with virtually no presence of Western integrated utilities and strong government commitment to renewable deployment. The connection process, however, is opaque and relationship-dependent, and the operational complexity (regulatory culture, language, permitting) makes execution risk high. It is a compelling long-term option but not suited to near-term capital redeployment.
- Australia is the preferred option: Iberdrola already has a fully operational platform there. Following the acquisition of Infigen Energy in 2020, the group currently operates more than 2,500 MW of installed renewable capacity. This eliminates the execution risk and regulatory learning curve that make Poland and Japan less immediate. The Australian electricity market is undergoing structural transformation driven by the accelerated retirement of coal-fired generation and a federal government commitment to 82% renewable electricity by 2030. Creating sustained demand for both generation and network investment. Crucially, the AER's (Australian Energy Regulator) transparent access framework and active government co-investment in transmission through the Rewiring the Nation programme

structurally reduce the connection risk that is depressing ATO in Iberdrola's European and US markets.

Actions: Iberdrola should formally reclassify Australia as a Tier 1 geography alongside the US and UK in its strategic plan, with explicit CAPEX allocation targets. The funding model is the one demonstrated by Mexico. Proceeds from asset rotation in non-strategic or low-growth markets should be channelled toward the Australian pipeline, prioritising projects with secured or near-secured grid connections.

Timeline: Medium to long term (3–7 years) for material RNOA contribution, but capital allocation and pipeline decisions are immediate.

KPIs: Australian installed capacity as a share of group total, construction intensity of Australian assets versus group average and Australian contribution to group NOPAT.

R4: Accelerate PPA Coverage to Reduce Market Exposure and Protect Margins

Rationale. As renewable penetration increases across Iberdrola's core markets, hours of near-zero or negative spot prices are becoming more frequent as generation capacity outpaces demand. Shifting toward long-term contracted revenues addresses this risk while simultaneously strengthening value creation across the metrics identified in Chapter 4:

- Fixed-price or inflation-indexed PPAs stabilise the Operating Profit Margin, insulating NOPAT from spot volatility and making the PM trend more meaningful as an indicator of underlying performance.
- Contracted cash flows reduce project financing costs as lenders price PPA-backed assets at tighter spreads than merchant assets, lowering NBC at the project level and supporting the group-level operating spread.
- With revenue certainty secured before construction begins, the time from financial close to commissioning shortens, directly reducing construction intensity and improving ATO.
- For large-scale projects, PPAs are not optional, they are a prerequisite for bankability given the scale of capital required. Iberdrola's global scale and asset diversity give it a structural advantage in offering PPAs that smaller competitors cannot match.

Actions: Iberdrola should set an explicit target for PPA coverage of new capacity, prioritising agreements with large industrial consumers whose ESG commitments create structural demand for guaranteed renewable supply. Projects entering construction without a PPA should require additional justification.

Timeline: Immediate for new pipeline projects. Existing merchant assets should be evaluated for retrospective contracting where market conditions allow.

KPIs: Percentage of capacity under long-term PPA or regulated contract, NBC of PPA-backed versus merchant projects and construction intensity of contracted versus uncontracted pipeline.

5.3 CONCLUSIONS

The four recommendations address the construction intensity problem from complementary angles. R2 changes the internal investment logic immediately, ensuring that connection uncertainty is explicitly priced into every capital allocation decision going forward. R1 and R4 convert the constraint into a revenue opportunity and protect margins against spot price erosion, respectively. R3 is the most strategic lever, redirecting marginal CAPEX toward markets where the conversion from investment to operational capacity is structurally faster, with Australia as the preferred platform given Iberdrola's existing presence and pipeline.

Together, they do not propose a strategic pivot but a sharpening of execution. Iberdrola's model is sound, but sustaining value creation at scale requires that the financial cost of grid saturation is actively managed rather than passively absorbed.

5.4 LIMITATIONS AND NEXT STEPS

The recommendations presented in this chapter should be understood as an initial consulting proposal rather than a final deliverable. The objective throughout the project has been to demonstrate deep knowledge of Iberdrola's sector, business model, and financial performance, and to use that knowledge to identify a problem that the company is facing and quantify its financial impact using publicly available information. In this sense, the analysis serves as a first approach to the company, showcasing the analytical capabilities and sector expertise that a consulting engagement would bring.

Naturally, working exclusively with public information imposes limits on the depth of the recommendations. A full viability and impact assessment of each strategic lever would require access to internal data that Iberdrola has not disclosed publicly.

The logical next step would therefore be for Iberdrola to engage with the analysis and indicate which of the four recommendations best aligns with its current strategic priorities. That conversation would open the door to a second phase of work, in which the consulting

team would work with internal data to develop a detailed financial model of the chosen lever, a concrete implementation roadmap, and a thorough risk assessment.

6 FINAL CONCLUSIONS

This thesis set out to address a question at the intersection of financial analysis and strategic consulting: how does network saturation affect Iberdrola's capacity to sustain shareholder value creation, and what should the company do about it?

The work was structured around three sequential analytical blocks. The first combined a company and market analysis with a detailed diagnosis of the grid saturation constraint across Iberdrola's four core markets, establishing the external context in which the company operates. The second applied Penman's financial statement reformulation framework to five years of consolidated accounts, producing a rigorous internal diagnosis of value creation and its drivers. The third translated that diagnosis into concrete strategic recommendations. Together, the three blocks produced both an internal and external picture of the company's situation, and a grounded consulting deliverable directly linked to the evidence.

The financial diagnosis shows how Iberdrola is unambiguously creating shareholder value. The operating spread has remained firmly positive, leverage has contributed to value creation, and profitability has grown consistently despite extraordinary fiscal headwinds and a challenging interest rate cycle. The group's regulated network core provides structural resilience, and its geographic diversification has repeatedly absorbed single-market shocks.

However, the analysis also reveals a constraint invisible in the reported financial statements. A growing fraction of the capital base is committed to assets not yet generating any operating income, suppressing capital efficiency and narrowing the operating spread below the level that underlying business performance would otherwise support. This trapped capital is not simply a feature of an aggressive investment cycle, as a significant share corresponds to assets held back by grid connection delays and saturated connection queues, making infrastructure saturation a quantifiable financial drag and not merely an operational inconvenience.

The consulting recommendations respond directly to this diagnosis. Rather than proposing a strategic pivot, they recommend a sharpening of execution across four complementary dimensions, which are covering the monetisation of the saturation constraint itself, the reform of internal capital allocation, the reorientation of marginal investment toward geographies with faster capital conversion, and the acceleration of contracted revenues to protect margins. These recommendations do not require Iberdrola to abandon a model that is demonstrably working. They require it to evolve from one that creates value primarily through investment volume to one that creates value through the quality and speed of capital conversion.

The central insight of this thesis is a reframing. Grid saturation is not only a technical and regulatory challenge. It is a financial one, visible in the balance sheet, the income statement, and the profitability ratios of the affected companies. Managing it is therefore not the exclusive remit of engineering or regulatory affairs, but a core responsibility of capital allocation, strategic planning, and financial governance.

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ANNEXES

ESG PERSPECTIVE AND UN SDG ALIGNMENT

This appendix provides a concise ESG perspective to complement the financial and technical analysis developed in the thesis. The objective is to highlight how the consulting problem (network saturation and system-strength constraints at connection points) and Iberdrola's strategic priorities relate to the United Nations Sustainable Development Goals (SDGs). In practice, grid integration constraints affect the pace at which renewable capacity can be connected, the need for additional infrastructure investment, and the reliability of the electricity system. These elements have direct sustainability implications, as they determine whether decarbonisation can be achieved without compromising security of supply or affordability.

SDG 7 (Affordable and Clean Energy) is strongly aligned with Iberdrola's role as a major renewable electricity producer and network operator. Expanding renewable generation supports cleaner energy supply, while investment in electricity networks, digitalisation and flexibility enables the system to deliver reliable electricity at scale. Maintaining affordability is also linked to system efficiency. Better grid planning, automation and reduction of losses can contribute to limiting system costs over time. In addition, grid bottlenecks can lead to delays, curtailment and higher system costs, ultimately affecting affordability and the speed of transition.

SDG 9 (Industry, Innovation and Infrastructure) is also central. System-strength mitigation measures (such as synchronous condensers, grid-forming inverters, digitalised monitoring and advanced protection schemes) represent infrastructure innovation aimed at strengthening resilience and enabling industrial competitiveness through electrification.

SDG 13 (Climate Action) is addressed through decarbonisation-oriented investment and the electrification of end uses. Climate mitigation depends not only on building renewable

capacity, but also on ensuring that the electricity system can absorb and integrate that capacity in a secure and scalable manner, which makes infrastructure investment a key enabling factor.

Finally, SDG 11 (Sustainable Cities and Communities) is relevant through distributed generation, EV charging and new urban loads that require stronger and smarter distribution networks.

Overall, the SDG framework provides a structured way to present sustainability alignment alongside the project's core analysis, and to communicate how infrastructure investment and energy transition strategies connect to internationally recognised ESG objectives.

COMPLETED VERSION OF FINANCIAL STATEMENTS

BALANCE SHEET

Assets	31.12.2020	31.12.2021	31.12.2022	31.12.2023	31.12.2024
Intangible assets	**18,222.00**	**19,909.00**	**20,118.00**	**20,255.00**	**20,255.00**
Goodwill	7,613.00	8,312.00	8,189.00	8,375.00	8,618.00
Other intangible assets	10,609.00	11,597.00	11,929.00	11,880.00	11,637.00
Investment property	**301.00**	**310.00**	**307.00**	**431.00**	**420.00**
Property, plant and equipment	**71,779.00**	**79,981.00**	**86,326.00**	**87,821.00**	**94,461.00**
Property, plant and equipment in use	64,879.00	70,919.00	74,813.00	73,466.00	79,355.00
Property, plant and equipment under construction	6,900.00	9,062.00	11,513.00	14,355.00	15,106.00
Right-of-use asset	**1,974.00**	**2,260.00**	**2,370.00**	**2,488.00**	**2,630.00**
Non-current investments	**5,461.00**	**6,499.00**	**10,508.00**	**9,740.00**	**13,032.00**
Equity-accounted investees	1,145.00	1,058.00	857.00	1,306.00	4,315.00
Non-current equity investments	38.00	25.00	32.00	29.00	40.00
Other non-current financial assets	2,909.00	3,995.00	5,958.00	7,208.00	7,499.00
Derivative financial instruments	1,369.00	1,421.00	3,661.00	1,197.00	1,178.00
Non-current trade and other receivables	**3,161.00**	**3,764.00**	**4,614.00**	**3,343.00**	**3,876.00**
Current tax assets	**666.00**	**729.00**	**736.00**	**883.00**	**832.00**
Deferred tax assets	**5,982.00**	**5,917.00**	**6,321.00**	**2,009.00**	**1,952.00**
Total non-current assets	**107,546.00**	**119,369.00**	**131,300.00**	**126,970.00**	**137,458.00**
Assets held for sale	**-**	**124.00**	**308.00**	**4,720.00**	**404.00**
Nuclear fuel	**260.00**	**267.00**	**259.00**	**278.00**	**318.00**
Inventories	**2,443.00**	**2,639.00**	**2,159.00**	**2,550.00**	**2,987.00**
Current trade and other receivables	**7,664.00**	**10,956.00**	**11,220.00**	**10,039.00**	**10,777.00**
Current tax assets	564.00	367.00	453.00	351.00	692.00
Other tax receivables	623.00	2,406.00	898.00	782.00	923.00
Current trade and other receivables	6,477.00	8,183.00	9,869.00	8,906.00	9,162.00
Current financial assets	**1,178.00**	**4,364.00**	**4,813.00**	**2,457.00**	**2,267.00**
Other current financial assets	578.00	1,533.00	2,964.00	1,679.00	1,265.00
Derivative financial instruments	600.00	2,831.00	1,849.00	778.00	1,002.00
Cash and cash equivalents	**3,427.00**	**4,033.00**	**4,608.00**	**3,019.00**	**4,082.00**
Total current assets	**14,972.00**	**22,383.00**	**23,367.00**	**23,063.00**	**20,835.00**
Total assets	**122,518.00**	**141,752.00**	**154,667.00**	**150,033.00**	**158,293.00**

Equity and liabilities	31.12.2020	31.12.2021	31.12.2022	31.12.2023	31.12.2024
Parent	**35,412.00**	**40,479.00**	**41,119.00**	**43,111.00**	**47,125.00**
Subscribed capital	4,762.00	4,775.00	4,772.00	4,763.00	4,773.00
Valuation adjustments	(242.00)	547.00	(932.00)	2.00	374.00
Other reserves	34,420.00	35,911.00	36,839.00	37,699.00	39,603.00
Treasury shares	(1,985.00)	(1,860.00)	(1,756.00)	(1,465.00)	(2,318.00)
Translation differences	(5,154.00)	(2,779.00)	(2,143.00)	(2,691.00)	(919.00)
Net profit for the year	3,611.00	3,885.00	4,339.00	4,803.00	5,612.00
Non-controlling interests	**11,806.00**	**15,647.00**	**16,995.00**	**17,181.00**	**13,926.00**
Total equity	**47,218.00**	**56,126.00**	**58,114.00**	**60,292.00**	**61,051.00**
Capital grants	**1,240.00**	**1,261.00**	**1,247.00**	**1,136.00**	**1,305.00**
Facilities transferred or financed by third parties	**5,043.00**	**5,424.00**	**5,673.00**	**6,021.00**	**6,683.00**
Non-current provisions	**5,836.00**	**5,330.00**	**4,225.00**	**4,536.00**	**4,624.00**
Provision for pensions and similar obligations	2,318.00	1,592.00	1,226.00	1,456.00	1,302.00
Other provisions	3,518.00	3,738.00	2,999.00	3,080.00	3,322.00
Non-current financial liabilities	**35,096.00**	**37,175.00**	**44,216.00**	**41,775.00**	**46,094.00**
Bank borrowings, bonds or other marketable securities	30,334.00	31,179.00	36,129.00	36,319.00	40,585.00
Equity instruments having the substance of a financial liability	334.00	525.00	576.00	561.00	485.00
Derivative financial instruments	991.00	1,673.00	3,690.00	1,285.00	1,124.00
Leases	1,927.00	2,253.00	2,287.00	2,408.00	2,619.00
Other non-current financial liabilities	1,510.00	1,545.00	1,534.00	1,202.00	1,281.00
Other non-current liabilities	**262.00**	**418.00**	**309.00**	**435.00**	**434.00**
Current tax liabilities	**285.00**	**300.00**	**362.00**	**387.00**	**418.00**
Deferred tax liabilities	**9,607.00**	**11,364.00**	**11,682.00**	**7,379.00**	**7,545.00**
Total non-current liabilities	**57,369.00**	**61,272.00**	**67,714.00**	**61,669.00**	**67,103.00**
Liabilities linked to assets held for sale	**-**	**-**	**27.00**	**1,097.00**	**197.00**
Current provisions	**579.00**	**789.00**	**922.00**	**920.00**	**795.00**
Provision for pensions and similar obligations	23.00	27.00	42.00	40.00	22.00
Other provisions	556.00	762.00	880.00	880.00	773.00
Current financial liabilities	**15,470.00**	**21,297.00**	**25,079.00**	**23,120.00**	**25,528.00**
Bank borrowings, bonds or other marketable securities	7,703.00	9,984.00	10,458.00	11,959.00	13,805.00
Equity instruments having the substance of a financial liability	57.00	100.00	87.00	110.00	103.00
Derivative financial instruments	297.00	2,111.00	3,398.00	1,352.00	867.00
Leases	131.00	158.00	151.00	184.00	180.00
Trade payables	5,138.00	5,964.00	5,927.00	5,112.00	6,183.00
Other current financial liabilities	2,144.00	2,980.00	5,058.00	4,403.00	4,390.00
Other current liabilities	**1,882.00**	**2,268.00**	**2,811.00**	**2,935.00**	**3,619.00**
Current tax liabilities	178.00	227.00	156.00	332.00	1,137.00

Other tax payables	1,226.00	1,205.00	1,262.00	1,303.00	1,454.00
Other current liabilities	478.00	836.00	1,393.00	1,300.00	1,028.00
Total current liabilities	**17,931.00**	**24,354.00**	**28,839.00**	**28,072.00**	**30,139.00**
Total equity and liabilities	**122,518.00**	**141,752.00**	**154,667.00**	**150,033.00**	**158,293.00**

REFORMULATED BALANCE SHEET

Operating Assets	**31.12.2020**	**31.12.2021**	**31.12.2022**	**31.12.2023**	**31.12.2024**
Intangible assets	18,222.00	19,909.00	20,118.00	20,255.00	20,255.00
Investment property	301.00	310.00	307.00	431.00	420.00
Property, plant and equipment	71,779.00	79,981.00	86,326.00	87,821.00	94,461.00
Right-of-use asset	1,974.00	2,260.00	2,370.00	2,488.00	2,630.00
Equity-accounted investees	1,145.00	1,058.00	857.00	1,306.00	4,315.00
Non-current equity investments	38.00	25.00	32.00	29.00	40.00
Non-current trade and other receivables	3,161.00	3,764.00	4,614.00	3,343.00	3,876.00
Current tax assets	666.00	729.00	736.00	883.00	832.00
Deferred tax assets	5,982.00	5,917.00	6,321.00	2,009.00	1,952.00
Assets held for sale	-	124.00	308.00	4,720.00	404.00
Nuclear fuel	260.00	267.00	259.00	278.00	318.00
Inventories	2,443.00	2,639.00	2,159.00	2,550.00	2,987.00
Current trade and other receivables	7,664.00	10,956.00	11,220.00	10,039.00	10,777.00
Cash	1,251.00	959.00	2,192.00	922.00	1,976.00
OA	**114,886.00**	**128,898.00**	**137,819.00**	**137,074.00**	**145,243.00**
Operating Liabilities:					
Capital grants	1,240.00	1,261.00	1,247.00	1,136.00	1,305.00
Facilities transferred or financed by third parties	5,043.00	5,424.00	5,673.00	6,021.00	6,683.00
Non-current provisions	5,836.00	5,330.00	4,225.00	4,536.00	4,624.00
Other non-current liabilities	262.00	418.00	309.00	435.00	434.00
Current tax liabilities	285.00	300.00	362.00	387.00	418.00
Deferred tax liabilities	9,607.00	11,364.00	11,682.00	7,379.00	7,545.00
Liabilities linked to assets held for sale	-	-	27.00	1,097.00	197.00
Current provisions	579.00	789.00	922.00	920.00	795.00
Trade payables	5,138.00	5,964.00	5,927.00	5,112.00	6,183.00
Other current liabilities	1,882.00	2,268.00	2,811.00	2,935.00	3,619.00
OL	**29,872.00**	**33,118.00**	**33,185.00**	**29,958.00**	**31,803.00**
NOA	**85,014.00**	**95,780.00**	**104,634.00**	**107,116.00**	**113,440.00**

Financial Obligations:					
Non-current financial liabilities	35,096.00	37,175.00	44,216.00	41,775.00	46,094.00
Bank borrowings, bonds or other marketable securities	7,703.00	9,984.00	10,458.00	11,959.00	13,805.00
Equity instruments having the substance of a financial liability	57.00	100.00	87.00	110.00	103.00
Derivative financial instruments	297.00	2,111.00	3,398.00	1,352.00	867.00
Leases	131.00	158.00	151.00	184.00	180.00
Other current financial liabilities	2,144.00	2,980.00	5,058.00	4,403.00	4,390.00
FO	**45,428.00**	**52,508.00**	**63,368.00**	**59,783.00**	**65,439.00**
Financial Assets:					
Other non-current financial assets	2,909.00	3,995.00	5,958.00	7,208.00	7,499.00
Derivative financial instruments	1,369.00	1,421.00	3,661.00	1,197.00	1,178.00
Current financial assets	1,178.00	4,364.00	4,813.00	2,457.00	2,267.00
Other equivalent liquid assets	2,176.00	3,074.00	2,416.00	2,097.00	2,106.00
FA	**7,632.00**	**12,854.00**	**16,848.00**	**12,959.00**	**13,050.00**
NFO	**37,796.00**	**39,654.00**	**46,520.00**	**46,824.00**	**52,389.00**
Common Shareholders' Equity					
Parent	35,412.00	40,479.00	41,119.00	43,111.00	47,125.00
CSE	**35,412.00**	**40,479.00**	**41,119.00**	**43,111.00**	**47,125.00**
Minority (noncontrolling) interest					
Non-controlling interests	11,806.00	15,647.00	16,995.00	17,181.00	13,926.00
NCI	**11,806.00**	**15,647.00**	**16,995.00**	**17,181.00**	**13,926.00**
NOA-NFO	**47,218.00**	**56,126.00**	**58,114.00**	**60,292.00**	**61,051.00**
CSE+NCI	**47,218.00**	**56,126.00**	**58,114.00**	**60,292.00**	**61,051.00**

INCOME STATEMENT

Income statement	2020	2021	2022	2023	2024
Revenue	33,145.00	39,114.00	53,949.00	49,335.00	44,739.00
Supplies	(17,000.00)	(22,052.00)	(33,750.00)	(26,033.00)	(20,863.00)
Gross income	16,145.00	17,062.00	20,199.00	23,302.00	23,876.00
Personnel expenses	(2,810.00)	(3,002.00)	(3,365.00)	(3,824.00)	(3,941.00)
Capitalised personnel expenses	661.00	716.00	847.00	864.00	947.00
External services	(2,841.00)	(2,936.00)	(3,602.00)	(4,000.00)	(4,159.00)
Other operating income	704.00	995.00	911.00	824.00	2,691.00
Net operating expenses	(4,286.00)	(4,227.00)	(5,209.00)	(6,136.00)	(4,462.00)
Taxes	(1,821.00)	(829.00)	(1,762.00)	(2,749.00)	(2,566.00)
Gross operating profit - EBITDA	10,038.00	12,006.00	13,228.00	14,417.00	16,848.00
Impairment losses, trade and other receivables	(381.00)	(369.00)	(470.00)	(618.00)	(471.00)
Amortisation, depreciation and provisions	(4,093.00)	(4,294.00)	(4,774.00)	(4,826.00)	(6,648.00)
Operating profit - EBIT	5,564.00	7,343.00	7,984.00	8,973.00	9,729.00
Result of equity-accounted investees	480.00	(39.00)	146.00	239.00	(37.00)
Finance income	1,038.00	1,265.00	1,204.00	1,535.00	2,377.00
Finance expense	(2,029.00)	(2,268.00)	(3,042.00)	(3,722.00)	(3,952.00)
Net finance income/(expense)	(991.00)	(1,003.00)	(1,838.00)	(2,187.00)	(1,575.00)
Profit before tax	5,053.00	6,301.00	6,292.00	7,025.00	8,117.00
Income tax	(1,083.00)	(1,914.00)	(1,161.00)	(1,610.00)	(2,150.00)
Net profit for the year from continuing operations	3,970.00	4,387.00	5,131.00	5,415.00	5,967.00
Net profit/(loss) for the year from discontinued operations (net of taxes)	(18.00)	(35.00)	(71.00)	(21.00)	(19.00)
Non-controlling interests	(341.00)	(467.00)	(721.00)	(591.00)	(336.00)
Net profit for the period attributable to the parent	3,611.00	3,885.00	4,339.00	4,803.00	5,612.00

REFORMULATED INCOME STATEMENT

Income statement	2020	2021	2022	2023	2024
Operating revenues	**33,145.00**	**39,114.00**	**53,949.00**	**49,335.00**	**44,739.00**
Supplies	(17,000.00)	(22,052.00)	(33,750.00)	(26,033.00)	(20,863.00)
Personnel expenses	(2,810.00)	(3,002.00)	(3,365.00)	(3,824.00)	(3,941.00)
Capitalised personnel expenses	661.00	716.00	847.00	864.00	947.00
External services	(2,841.00)	(2,936.00)	(3,602.00)	(4,000.00)	(4,159.00)
Taxes	(1,821.00)	(829.00)	(1,762.00)	(2,749.00)	(2,566.00)
Impairment losses, trade and other receivables	(381.00)	(369.00)	(470.00)	(618.00)	(471.00)
Amortisation, depreciation and provisions	(4,093.00)	(4,294.00)	(4,774.00)	(4,826.00)	(6,648.00)
Operating income from sales (before tax)	**4,860.00**	**6,348.00**	**7,073.00**	**8,149.00**	**7,038.00**
Tax on operating income from sales	**(1,034.75)**	**(1,925.75)**	**(1,356.25)**	**(1,891.00)**	**(1,880.25)**
Tax as reporded	(1,083.00)	(1,914.00)	(1,161.00)	(1,610.00)	(2,150.00)
Tax allocated to other operating income	(296.00)	(239.00)	(264.25)	(265.75)	(663.50)
Tax benefit (expenses) allocated to financing income	247.75	250.75	459.50	546.75	393.75
Operating income from sales (after tax)	**3,825.25**	**4,422.25**	**5,716.75**	**6,258.00**	**5,157.75**
Other operating income	704.00	995.00	911.00	824.00	2,691.00
Result of equity-accounted investees	480.00	(39.00)	146.00	239.00	(37.00)
Other Operating income (before tax)	**1,184.00**	**956.00**	**1,057.00**	**1,063.00**	**2,654.00**
Tax on other Operating Income	(296.00)	(239.00)	(264.25)	(265.75)	(663.50)
Other Operating income (after tax)	**888.00**	**717.00**	**792.75**	**797.25**	**1,990.50**
Finance income	1,038.00	1,265.00	1,204.00	1,535.00	2,377.00
Finance expense	(2,029.00)	(2,268.00)	(3,042.00)	(3,722.00)	(3,952.00)
Net finance income/(expense)	**(991.00)**	**(1,003.00)**	**(1,838.00)**	**(2,187.00)**	**(1,575.00)**
Tax allocated to financing	247.75	250.75	459.50	546.75	393.75
Net financial income/(expense) after tax	**(743.25)**	**(752.25)**	**(1,378.50)**	**(1,640.25)**	**(1,181.25)**
Net profit for the year from continuing operations	**3,970.00**	**4,387.00**	**5,131.00**	**5,415.00**	**5,967.00**
Net profit/(loss) for the year from discontinued operations (net of taxes)	**(18.00)**	**(35.00)**	**(71.00)**	**(21.00)**	**(19.00)**
Non-controlling interests	**(341.00)**	**(467.00)**	**(721.00)**	**(591.00)**	**(336.00)**
Net profit for the period attributable to the parent	**3,611.00**	**3,885.00**	**4,339.00**	**4,803.00**	**5,612.00**

CASH FLOW STATEMENT

Cash flow statement	2020	2021	2022	2023	2024
Profit before tax from continuing activities	5,053.00	6,301.00	6,292.00	7,025.00	8,117.00
Loss before tax from discontinued operations	(25.00)	(45.00)	(96.00)	(28.00)	(24.00)
Adjustments for					
Amortisation, depreciation, provisions, valuation adjustments of financial assets and personnel expenses for pensions	4,651.00	5,088.00	5,491.00	5,810.00	7,412.00
Net profit/loss from investments in associates and joint ventures	(480.00)	39.00	(146.00)	(239.00)	37.00
Capital grants applied and other deferred income	(278.00)	(282.00)	(304.00)	(310.00)	(337.00)
Finance income and finance expense	1,006.00	975.00	1,842.00	2,197.00	1,589.00
Profit/(loss) from the disposal of non-current assets	0.00	0.00	0.00	0.00	(1,717.00)
Changes in working capital					
Change in trade and other receivables	(696.00)	(4,707.00)	(1,701.00)	314.00	(1,760.00)
Change in inventories	46.00	52.00	521.00	(168.00)	(620.00)
Change in trade payables and other liabilities	394.00	1,927.00	44.00	(517.00)	1,262.00
Provisions paid	(538.00)	(459.00)	(512.00)	(534.00)	(430.00)
Income tax paid	(843.00)	(832.00)	(1,055.00)	(1,492.00)	(1,665.00)
Dividends received	57.00	49.00	67.00	72.00	61.00
Net cash flows from operating activities	8,347.00	8,106.00	10,443.00	12,130.00	11,925.00
Acquisition of subsidiaries	(391.00)	(536.00)	0.00	(53.00)	0.00
Proceeds from disposal of subsidiaries	0.00	0.00	0.00	206.00	5,680.00
Change in cash due to modification of the consolidation scope	114.00	21.00	0.00	33.00	(243.00)
Acquisition of intangible assets	(446.00)	(591.00)	(510.00)	(541.00)	(710.00)
Acquisition of associates	(59.00)	(203.00)	(65.00)	(330.00)	(3,123.00)
Acquisition of investment property	(2.00)	(3.00)	(1.00)	(3.00)	(8.00)
Acquisition of property, plant and equipment	(5,405.00)	(6,327.00)	(6,277.00)	(7,336.00)	(7,665.00)
Capitalised interest paid	(149.00)	(145.00)	(189.00)	(381.00)	(544.00)
Capitalised personnel expenses paid	(661.00)	(716.00)	(847.00)	(863.00)	(947.00)
Capital grants and other deferred income	8.00	8.00	1.00	9.00	87.00
Proceeds/(payments) for securities portfolio	(1.00)	0.00	(7.00)	0.00	(10.00)
Proceeds/(payments) for other investments	(930.00)	(1,103.00)	(1,631.00)	(1,513.00)	(1,667.00)
Proceeds/(payments) for current financial assets	(104.00)	(364.00)	(834.00)	785.00	460.00
Interest received	25.00	33.00	172.00	201.00	334.00
Income taxes	0.00	0.00	0.00	0.00	(275.00)

Proceeds from disposal of non-financial assets	235.00	305.00	23.00	93.00	234.00
Proceeds from disposal of financial assets	1,122.00	133.00	11.00	0.00	0.00
Net cash flows used in investing activities	(6,644.00)	(9,488.00)	(10,154.00)	(9,693.00)	(8,397.00)
Dividends paid	(562.00)	(570.00)	(890.00)	(949.00)	(1,166.00)
Dividends paid to non-controlling interests	(150.00)	(229.00)	(419.00)	(930.00)	(459.00)
Perpetual subordinated bonds					
Instruments issued	2,990.00	2,740.00	0.00	1,000.00	1,500.00
Redemption	0.00	0.00	0.00	(1,000.00)	(700.00)
Interest paid	(63.00)	(94.00)	(169.00)	(193.00)	(207.00)
Bank borrowings, bonds or other marketable securities					
Issues and disposals	11,655.00	9,748.00	14,826.00	10,662.00	17,541.00
Redemption	(10,480.00)	(7,641.00)	(10,272.00)	(8,197.00)	(12,418.00)
Interest paid excluding capitalised interest	(740.00)	(741.00)	(1,495.00)	(1,988.00)	(1,614.00)
Financial liabilities from leases					
Payment of principal	(159.00)	(154.00)	(175.00)	(163.00)	(182.00)
Interest paid excluding capitalised interest	(39.00)	(49.00)	(61.00)	(85.00)	(96.00)
Equity instruments having the substance of a financial liability					
Instruments issued	267.00	272.00	130.00	184.00	19.00
Payments	(86.00)	(110.00)	(177.00)	(195.00)	(186.00)
Acquisition of treasury shares	(2,710.00)	(1,897.00)	(1,885.00)	(2,787.00)	(2,076.00)
Proceeds from disposal of treasury shares	127.00	73.00	91.00	110.00	79.00
Payments for transactions with non-controlling interests	(327.00)	(94.00)	(51.00)	(19.00)	(2,517.00)
Proceeds from transactions with non-controlling interests	206.00	615.00	698.00	462.00	215.00
Net cash flows used in financing activities	(71.00)	1,869.00	11.00	(4,088.00)	(2,267.00)
Effect of exchange rate fluctuations on cash and cash equivalents	(318.00)	119.00	135.00	62.00	(198.00)
Net increase/(decrease) in cash and cash equivalents	1,314.00	606.00	575.00	(1,589.00)	1,063.00
Cash and cash equivalents at beginning of year	2,113.00	3,427.00	4,033.00	4,608.00	3,019.00
Cash and cash equivalents at end of year	3,427.00	4,033.00	4,608.00	3,019.00	4,082.00

REFORMULATED CASH FLOW STATEMENT

	2021	2022	2023	2024
C	**8,106.00**	**10,443.00**	**12,130.00**	**11,925.00**
I	**8,187.00**	**7,865.00**	**9,166.00**	**7,514.00**
C-I	**(81.00)**	**2,578.00**	**2,964.00**	**4,411.00**
	2021	**2022**	**2023**	**2024**
Dividends	570.00	890.00	949.00	1,166.00
Acquisition of treasury shares	1,897.00	1,885.00	2,787.00	2,076.00
Proceeds from disposal of treasury shares	73.00	91.00	110.00	79.00
d	**2,394.00**	**2,684.00**	**3,626.00**	**3,163.00**
Net issue of debt	4,855.00	4,332.00	2,291.00	5,574.00
Interest on debt	884.00	1,725.00	2,266.00	1,917.00
Net purchase of financial assets	1,334.00	2,461.00	728.00	1,217.00
Net increase/(decrease) in cash and cash equivalents	606.00	575.00	(1,589.00)	1,063.00
Effect of exchange rate fluctuations on cash and cash equivalents	119.00	135.00	62.00	(198.00)
Interest received	33.00	172.00	201.00	334.00
F	**(2,183.00)**	**122.00**	**(1,149.00)**	**(1,513.00)**
Dividends to NCI	229.00	419.00	930.00	459.00
Payments to NCI	94.00	51.00	19.00	2,517.00
Proceeds from NCI	615.00	698.00	462.00	215.00
NCI	**(292.00)**	**(228.00)**	**487.00**	**2,761.00**
d+F+NCI	**(81.00)**	**2,578.00**	**2,964.00**	**4,411.00**