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#### **ESG**

Iberdrola, S.A. commits to carrying out its best efforts to achieve its ambition of carbon neutrality for its Scope 1 and 2 in 2030. For these purposes, it will align its strategy, investments, operations and public positioning with this ambition. Additionally, Iberdrola, S.A. is also committed to undertake the energy transition in a way that creates value for its shareholders, employees, clients, suppliers and the communities where it operates. Accordingly, Iberdrola, S.A. reserves the capacity to adapt its planning to successfully face its performance in key material aspects such as the value of Iberdrola, S.A., the quality of supply or the social, labor, and fair transition conditions. The abovementioned commitments are of aspirational nature.

# **Iberdrola's Corporate Purpose**



Focused on the well-being of people and on the preservation of the planet

# Our Purpose: To continue building together each day a healthier, more accessible energy model, based on electricity

Reflects the strategy that the Group has been implementing for years and its commitment to continue fighting for:

# A real and global energy transition

- Boosting decarbonisation and electrification of the energy sector, and the economy as a whole
- Contributing to the fight against climate change
- Generating new opportunities for economic, social and environmental development

# An energy model that is more electric...

- Abandoning fossil fuels
- Generalising renewable energy sources, the efficient storage of energy, smart grids and digital transformation

# ...healthier for people and the planet

 Being aware that shortterm health and well-being of people depends on the environmental quality of their surroundings

# ...more accessible for all

 Favouring inclusion, equality, equity and social development

# ...contributing to the security of supply

 in collaboration with all agents involved and with society as a whole to ensure the availability of local energies

# Content

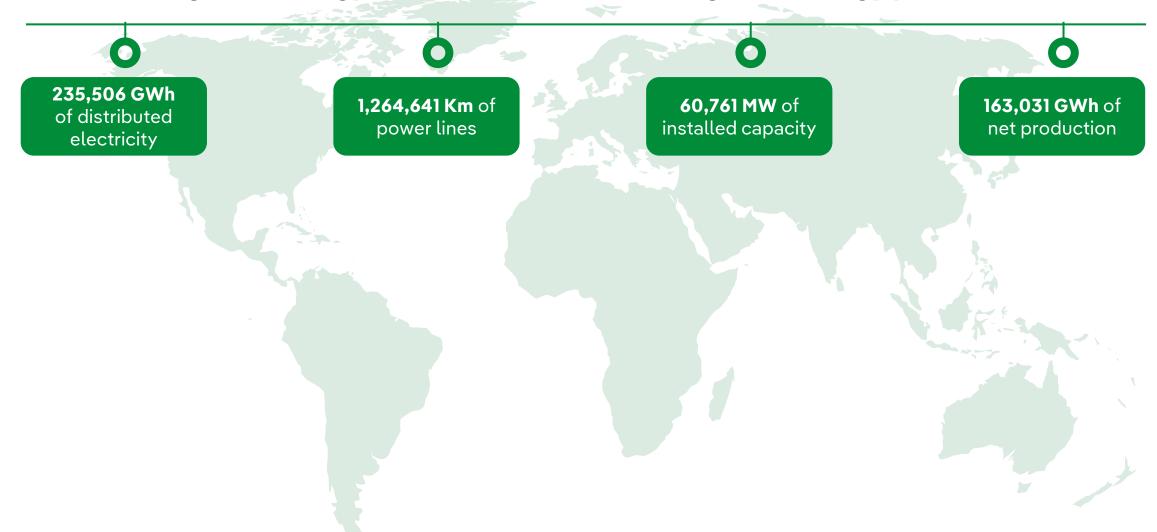


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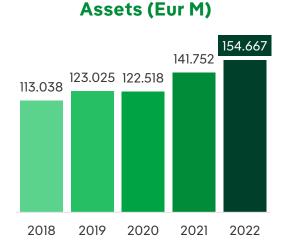


#### Iberdrola is a global energy leader, the world's leading wind energy producer...

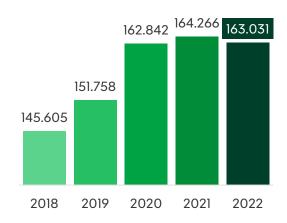




## ... and one of the world's largest electricity companies by market capitalization, ...

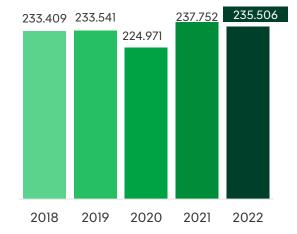


Net Production (GWh)

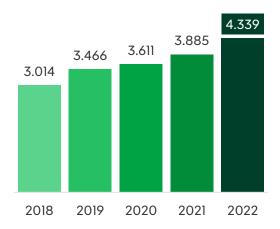


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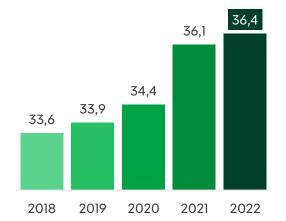
Distributed Electricity (GWh)



#### **Net Profit (Eur M)**

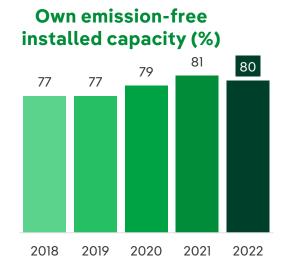


Customers (millions)



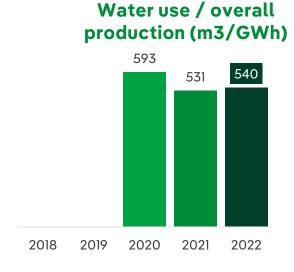


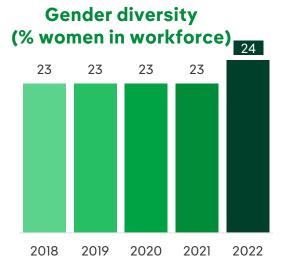
#### ...having anticipated the energy transition to combat climate change and contributing to society

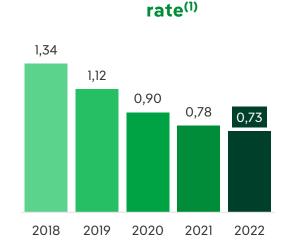




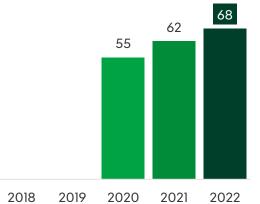
**Accident frequency** 













The group's competitive business model creates value in the places where the company operates...

## **Key performance indicators 2022<sup>(1)</sup>**



€10,730 million gross investment





€17,796 million of purchases from suppliers 1,958 MW in renewables startup



€363 million of investment in Innovation



40,721 employees

**68 hours** of training per employee



88 g CO<sub>2</sub>/kWh emissions

**80%** emission-free installed capacity



€52 million of contributions to society

36 million customers

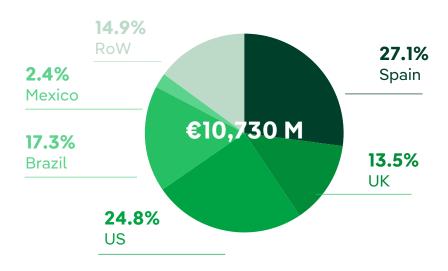


# ...through clean energy generation, smart grids and solutions and services to our customers

2022 Gross Investments by business



2022 Gross Investments by geography



International diversification ~78% in countries with credit rating ≥A<sup>(1)</sup>

# Iberdrola in Spain: Iberdrola España



#### Leading energy company



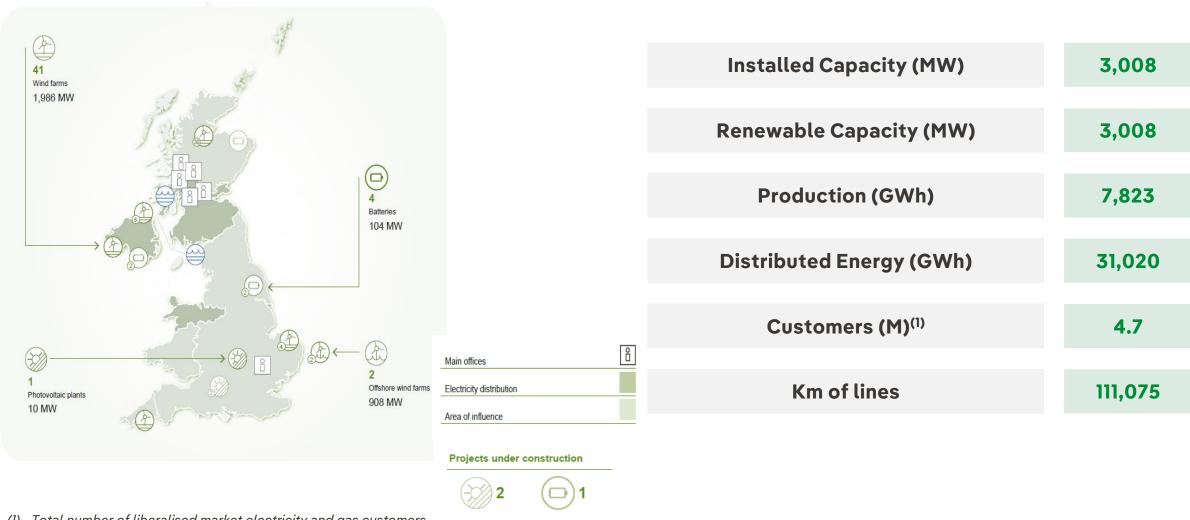
Installed Capacity (MW) <sup>(1)</sup>	29,013
Renewable Capacity (MW) <sup>(1)</sup>	19,796
Production (GWh)	56,698
Distributed Energy (GWh)	89,622
Customers (M) <sup>(3)</sup>	11.6
Km of lines	270,991

- (1) Data on hydroelectric power plants include the Daivoes, Gouvaes and Alto Tâmega power plants in Portugal, although they visually appear on the RoW map.
- (2) Includes both projects under construction and projects with a positive decision to start construction (positive FID).
- (3) Total number of liberalised market electricity and gas customers

#### **Iberdrola in UK: Scottish Power**



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

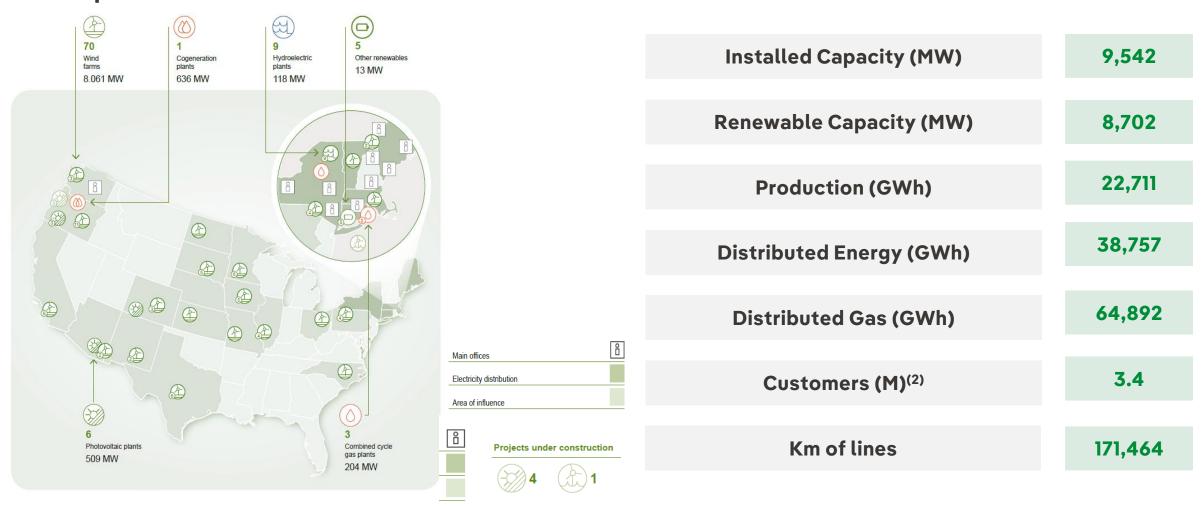


<sup>(1)</sup> Total number of liberalised market electricity and gas customers

# Iberdrola in US: Avangrid<sup>(1)</sup>



# Electricity and gas distribution in New York, Maine, Connecticut and Massachusetts. 89% of production from renewables



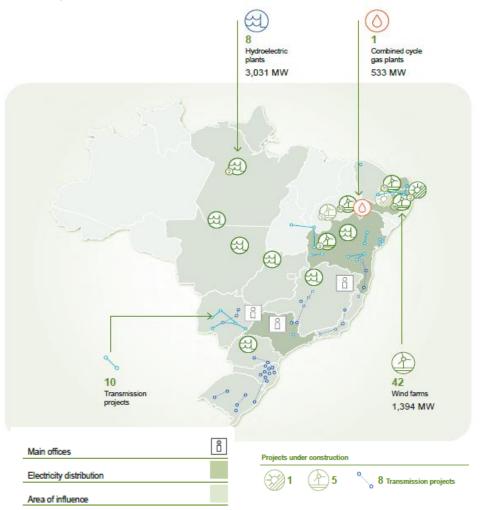
<sup>(1)</sup> Avangrid: 81.5% owned by Iberdrola

<sup>(2)</sup> Total number of electricity and gas supply points

# Iberdrola in Brazil: Neoenergia<sup>(1)</sup>



#### **Energy leader in Brazil and Latin America**



Installed Capacity (MW)	5,100
Renewable Capacity (MW)	4,568
Production (GWh)	14,751
Distributed Energy (GWh)	76,107
Customers (M) <sup>(2)</sup>	16.1
Km of lines	711,111

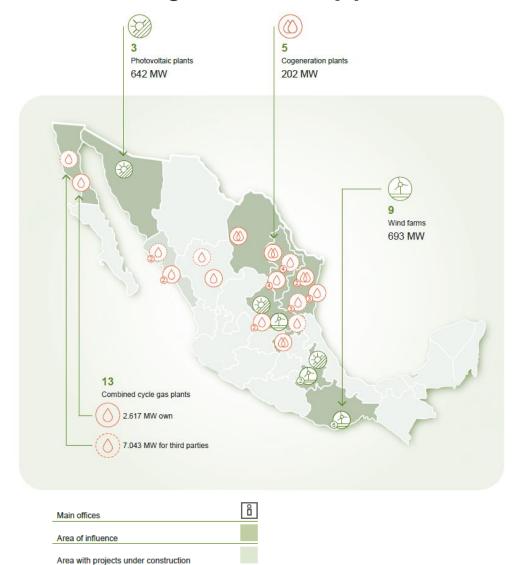
<sup>(1)</sup> Neoenergia: 53.5% owned by Iberdrola

<sup>(2)</sup> Total number of electricity supply points

# Iberdrola in Mexico: Iberdrola Mexico



#### Second-largest electricity producer



Owned Installed Capacity (MW)	4,051
Third-party Installed Capacity (MW)	7,146
Owned Renewable Capacity (GWh)	1,232
Third-party Renewable Capacity (MW)	103
Net Owned Production (GWh)	18,447
Net Third-party Production (GWh)	37,491

# Iberdrola in the Rest of the World<sup>(1):</sup> Iberdrola Energía Internacional



#### Expanding our international platform in renewables and customers



<sup>(1)</sup> Represented on this page is the activity of the group in the Rest of World, which is mainly carried out by Iberdrola Energía Internacional (IEI). However, electricity and gas customers of this segment depend on Iberdrola Clientes Internacional S.A., a subsidiary of the country subholding company Iberdrola España, S.A

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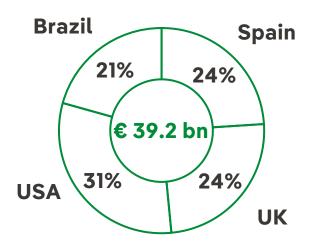
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#### **Networks**



#### 1.3 M Km power lines, over 4,500 substations and 1.6 M transformers to supply over 34 M points

#### **Asset Base**



#### Iberdrola Networks business areas

	Spain	UK	USA	Brazil
Transmission - electricity		<b>√</b>	$\checkmark$	$\checkmark$
Distribution - electricity	<b>√</b>	$\checkmark$	✓	$\checkmark$
Distribution - gas			$\checkmark$	

#### **Leaders in Smart grids**

#### **Smart meters installed:**

• <u>Spain</u>: 11.34 M

• <u>UK</u>: 2.35 M

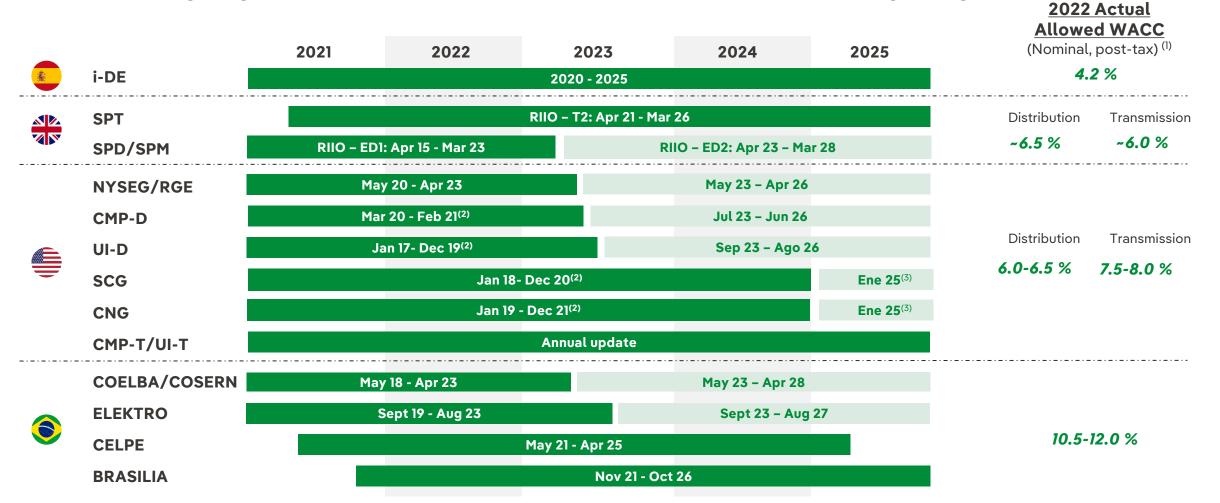
• US: 1.51 M

Brazil: 0.58 M

# **Networks: Visibility of Revenues**



# Stable and geographically diversified returns approved through regulatory frameworks



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

<sup>(1)</sup> Nominal WACC post-tax has been calculated based on each country's specific remuneration framework. <u>Distribution</u>: ESP: 5.6% Nominal WACC pre-tax; UK: 5,2% Real CoE post-tax; USA: Nominal ROE post-tax allowed for each DisCo; BRA: 8.09% / 7.02% Real WACC post-tax; <u>Transmission</u>: UK: 4,7% Real CoE post-tax; USA: 11.1% Nominal ROE post-tax <u>Inflation</u>: UK: 3% (15 years average CPIH index); BR: 3,75% (long term inflation)

<sup>(2)</sup> Rates automatically extended

<sup>(3)</sup> Filing for new rates expected in Nov'23



## As of December 2022, ~11.3 M smart meters installed and digitalization of ~100,000 transformers

	2022
RAB (Eur Bn)	9.4
Distributed energy (GWh)	89,622
Points of supply (M)	11.4
Kms of lines (M)	270,991





#### Distribution: Circular 6/2019 CNMC. Regulatory period: 2020-2025

- Remuneration calculated by WACC methodology and reviewed every 6 years (regulatory period): 6.003% (before taxes) in 2020 and 5.58% from 2021 onwards. Until 31 December 2019 the remuneration was linked to 10 Year-Treasury Bond, adding 200 bps on top of it, and reaching 6.5% of financial remuneration rate.
- The remuneration has four components:
  - i. Remuneration of net regulatory asset value (CAPEX): It maintains the regulatory asset (RAV) of investments made until 2018.
  - Remuneration of existing assets at 31 December 2014 calculated according to Royal Decree 1048/2013 (Standard Costs (SC) are the reference for calculating regulatory assets):
    - Standard Costs corrected by a coefficient per company
    - o Ceded assets are subtracted (assets prior to 1998 are estimated)
    - o Assets are remunerated during their regulatory useful life (depending on accountability by company)
  - o Assets in operation since 1 January 2015 until 31 December 2018
    - Standard Costs for those assets with standard costs while audited costs for the remaining
    - o Assets are remunerated during their useful life (40 years for network assets and 12 for control systems)
  - o New assets in operation since 1 January 2019: audited cost per installation
  - ii. Remuneration of Manageable Component (OPEX):
  - O&M and "Other assets investments" (systems not associated with digitalization, machinery, vehicles, buildings and tools): This term evolves according to the increase in remuneration for investment in electricity assets and with an adjustment factor, which takes the value of 0.97 per year, with the aim of bringing it closer to the real cost of the companies.
  - o **Efficiencies:** companies can retain 100% of the efficiency gains obtained from the OPEX additional to the previous adjustment factor
  - iii. Other regulated tasks: reading, contracting, defaults, invoicing, customer service channels, planning and structure... according to Standard Costs and public domain use tax -7% compared to the previous regulatory period

#### iv. Incentives:

- o Quality and losses reduction: Each company will have bonuses or penalties, so that the whole is a "zero-sum". In the case of the loss incentive, a 2-year moratorium is proposed to analyse a possible zoning of the networks.
- o Fight against fraud: according to detected fraud. Eliminated from 2022 onwards
- iv. Annual maximum investment limit stablished by the Government

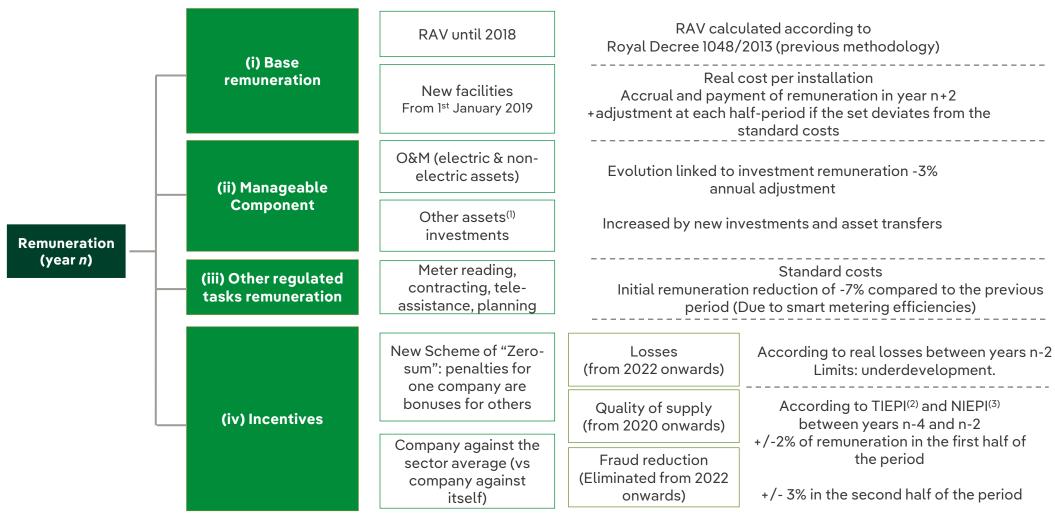


#### Distribution: annual maximum investment limit

- Royal Decree Law 23/2020 increases the investment annual limit for distribution and also recognizes the role of electrification and the need to maintain the financial balance of the sector:
  - i. Investments in grids. Increasing the annual limit for the 2020-2022 period from 0.13% to 0.14% of GDP for distribution.
  - ii. Financial balance of the sector. It addresses the economic sustainability of the sector by allowing the use of the historic surplus of the 2019 and 2020 settlements to cover the sector's costs.
- RD 1125/2021 allows to extend above the limits established in the investment plans all those investments in digitalization that are financed by Recovery,
   Transformation and Resilience Plan.
  - i. RD 1125/2021 establishes that the funding intensity for the application of funds from the Recovery, Transformation and Resilience Plan will amount to 50% of the actual annual investment volume executed and put into service in eligible assets (digitalization), the remainder being reimbursed from the electricity system tolls. Therefore, distribution companies will be able to see their volume of investment extended during the years 2021, 2022 and 2023, as the financed assets will not compute against the limit, so there will be more budget to invest in other assets.
  - ii. Also, the year following the commissioning of eligible assets, the investment limit will be increased by an amount equivalent to 100% of the expected investment volume that will be executed and put into service in eligible assets, that is, the double of the funding.
  - iii. Investments in digital that are within this framework can account to a maximum of 454 millions in 2021, 296 millions in 2022 and 300 millions in 2023 (50% of these amounts coming from EU NextGen transfers).



#### Distribution: Circular 6/2019 CNMC. Regulatory period: 2020-2025



- (1) Other assets include systems and communications not associated with digitalization, machinery, furniture, vehicles, buildings and tools
- (2) TIEPI: Equivalent interruption time of the installed power at medium voltage
- (3) NIEPI: Equivalent number of interruptions of the installed power at medium voltage



# Distribution: Circular 2/2019 CNMC. Financial Remuneration Rate for the period 2020-25 (WACC Methodology)



Capital Asset Pricing Model Methodology (CAPM)

**Risk- free rate** R<sub>RF</sub>: **2.97%** (average of 2012-2017 contributions to the 10-year Treasury Bond)

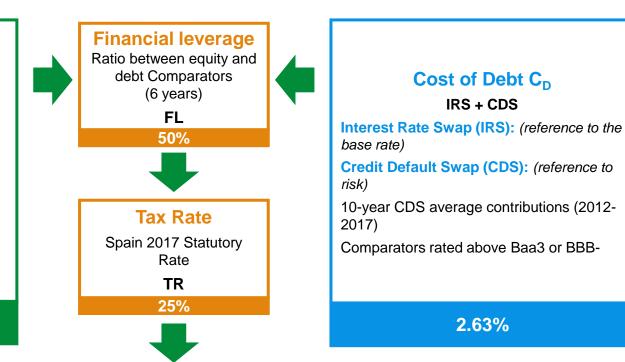
Market risk Premium MRP: 4.75%

(weighted average Europe - arithmetic and geometric average)

**Coeficient** β: **0.72** (non-diversifiable risk measure, Beta Bloomberg comparators)

 $C_E = R_{RF} + (\beta * MRP)$ 

6.40%



WACC after taxes: 4.19%

 $C_{E} * (1 - FL) + C_{D} * (1 - TR) * FL$ 

**Financial Remuneration Rate FRR: 5.58% (before taxes)** 

#### **Networks: UK**



One of the largest Distribution companies and one of the 3 companies with Transmission licenses

in the country

	2022
RAB (GBP Bn)	8.2
Scottish Power Distribution	29%
Scottish Power Manweb	32%
Scottish Power Transmission	40%
Distributed energy (GWh)	31,020
Scottish Power Distribution	54%
Scottish Power Manweb	46%
Points of supply (M)	3.6
Scottish Power Distribution	57%
Scottish Power Manweb	43%
Kms of lines	110,075
Scottish Power Distribution	53%
Scottish Power Manweb	43%
Scottish Power Transmission	4%



## **Networks: UK Regulatory Environment**



#### Form of control

- Currently regulated under Ofgem's incentive-based 'RIIO' model i.e. Revenues are earned from the delivery of incentives, innovation and outputs set against regulatory targets.
- Method: Ex-ante revenue cap. Regulator sets majority of maximum allowed revenue fixed upfront and on a real basis.
- Duty on regulator to ensure that regulated networks are able to finance their licensed activities – maintain an investment grade credit rating.

#### **Price Control Overview**

	Electricity Transmission	Electricity Distribution
Price Control	RIIO – ET2	RIIO – ED2 <sup>(1)</sup>
Period	2021 – 2026	2023 - 28
Allowed Return on RAV (CPIH- real)	3.27% (2023-24)	3.97% (2023-24)
RAV at Dec-2022	£3.2bn	SPD - £2.4bn SPM - £2.6bn

#### Incentives, Uncertainty Mechanisms and Adjustments

- Potential to increase outturn returns through financial rewards gained from spending less than expected and outperformance against measures related to defined outputs.
- TOTEX incentive mechanism shares under/overspend on allowed TOTEX between networks and customers through adjustment to allowed revenues, based on efficiency incentive rate (electricity distribution: 50%, electricity transmission: 49%).
- Provisions to manage specific cases of uncertainty risk through possible revenue changes during price control e.g. indexation, uncertainty mechanisms, volume drivers and pass-through costs.
- Revenues from incentive rewards and uncertainty mechanisms are recovered in the current year as part of updated 5-year revenues (actuals & forecast).

#### **Baseline Revenue**

- Efficient level of expected costs necessary to carrying out activities are assessed through total expenditure (TOTEX).
- Regulatory Asset Value (RAV) is a major input to the setting of Allowed Revenue. Revenue components for depreciation (effectively a capex allowance) and return allowance are calculated from RAV.
- Following the application of the TOTEX incentive mechanism, TOTEX is allocated into a "fast pot" and "slow pot" determined by the capitalisation rate (ED: 70% cap rate 1 / 85% cap rate 2, ET: 84% cap rate 1 / 85% cap rate 2). Cap rate 2 is applied to uncertainty mechanism TOTEX.
- The capitalised slow pot is added to the RAV and remunerated over time through allowances for return on capital and depreciation (Depreciation Rate: 45 years post 2013/14 investment. The "fast pot" (ED: 30% / 15%, ET: 16% / 15%) is treated as an in year 'pay-as-you-go' allowance.
- Provision for tax.

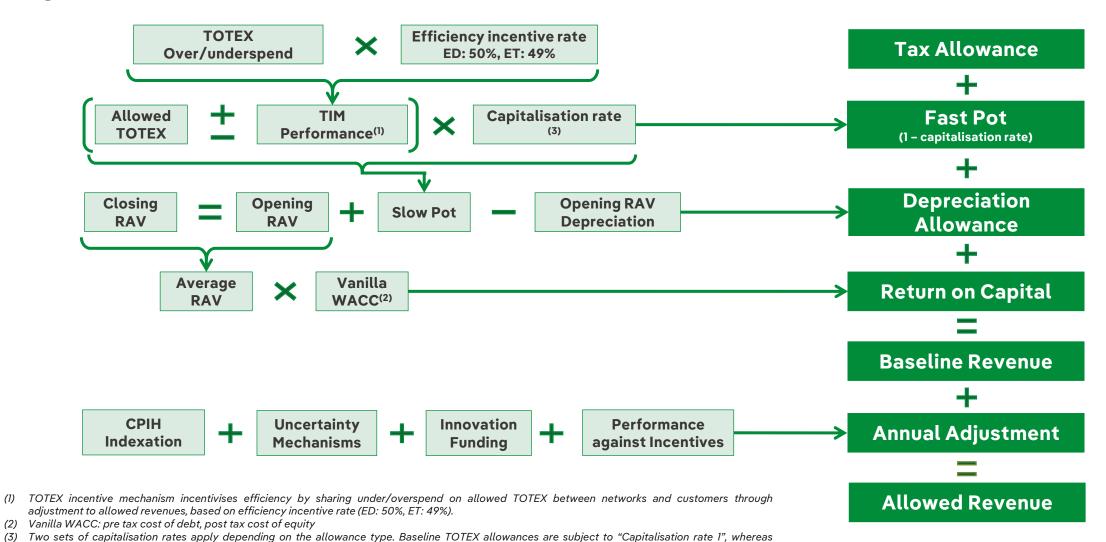
#### **Adjustments**

- Annual adjustment of allowed revenues for:
  - CPIH indexation of baseline revenues;
  - Incentive rewards/penalties;
  - Innovation funding;
  - Variance in actual TOTEX compared to allowance;
  - · Non controllable costs i.e. uncertainty mechanisms; and
  - True Ups, including for differences in actual demand versus forecast demand as network companies are not exposed to demand volatility.

# **Networks: UK Regulatory Environment**



#### High level illustration of allowed revenues derivation



Uncertainty Mechanisms allowances are subject to "Capitalisation rate 2". ED: 70% cap rate 1 / 85% cap rate 2, ET: 84% cap rate 1 / 85% cap rate 2.

<sup>27</sup> 



## 8 Regulated Utilities in New York, Connecticut, Maine and Massachusetts

RAB (USD Bn)	12.8	P
NYSEG - Electricity	3.2	El
NYSEG - Gas	0.1	
RG&E - Electricity	2.1	
RG&E - Gas	0.6	
CMP - Distribution	1.1	
CMP - Transmission	1.5	G
UI - Distribution	1.3	
UI - Transmission	0.7	
SCG	0.7	
CNG	0.6	
BGC	0.1	
MNG	0.1	

Points of supply (M)	3.3
Electricity	2.3
NYSEG	40%
RG&E	17%
CMP	29%
UI	15%
Gas	1.0
NYSEG	26%
RG&E	31%
MNG	1%
BGC	4%
CNG	18%
SCG	20%

MNG	0.1
Distributed energy (GWh)	103,649
Electricity	38,757
NYSEG	42%
RG&E	19%
CMP	25%
UI	13%
Gas	64,892
NYSEG	25%
RG&E	27%
MNG	9%
BGC.	5%

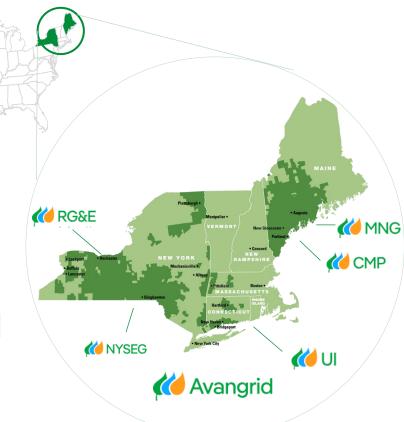
17%

17%

**CNG** 

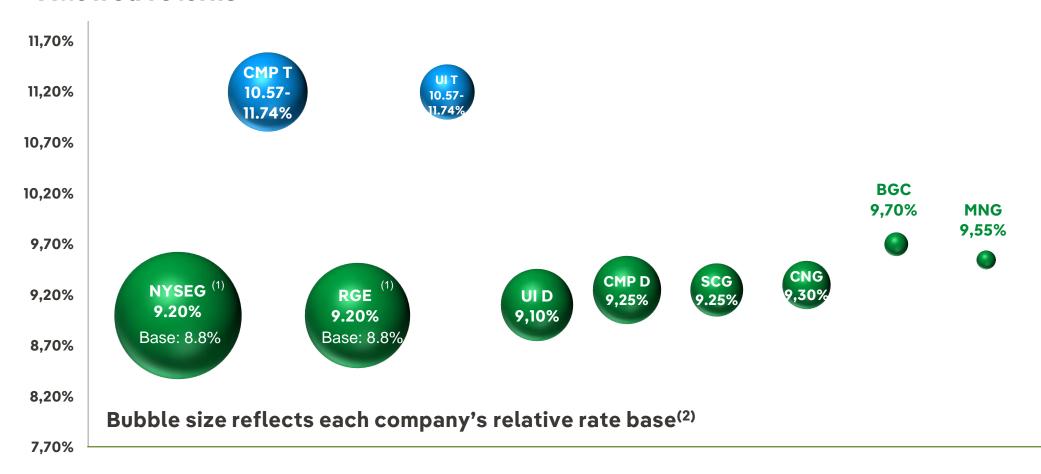
SCG

Kms of lines/pipelines	Electricity	Gas
Total	171,463	46,823
NYSEG	45%	30%
RG&E	12%	33%
CMP	34%	0%
MNG	0%	1%
UI	9%	0%
SCG	0%	16%
CNG	0%	15%
BGC	0%	4%





#### **Allowed returns**



<sup>(1)</sup> Includes 40bp allowance before sharing in Rate Year 3 beginning May 1, 2022

<sup>(2)</sup> Average 2022 Rate Base



#### **Current New York Rate Plans Ending 30th April 2023**

Jurisdiction         New York           Regulator         New York Public Service Commission (NYPSC)           Term         3-year plan (5/1/2020 - 4/30/2023) settled December 2020; tariffs increase retroactively effective April 17, 2020           Annual Rate Increases with Levelization / Shaping         Year 1 (4/17/2020 - 4/30/2021) - \$45.3M Year 2 - \$3.4M Year 2 - \$13.9M Year 2 - \$13.9M Year 3 - \$15.8M           Avg. Rate Base (2022) <sup>(1)</sup> \$3,181M         \$726M         \$2,082M           Allowed ROE / Equity Ratio         8.8% / 48%           Earnings Sharing         Earnings sharing at 50% equity: 100% up to 9.00% in Rate Year 1, up to 9.10% in Rate Year 2, and up to 9.20% in Rate Year 3           Rate Year         Forecast	Rochester Gas (RGE-G)
Term 3-year plan (5/1/2020 - 4/30/2023) settled December 2020; tariffs increase retroactively effective April 17, 2020  Annual Rate Increases with Levelization / Shaping Year 1 (4/17/2020 - 4/30/2021) - \$45.3M Year 1 - (\$0.5M) Year 1 - \$21.4M Year 2 (5/1/2021 - 4/30/2022) - \$45.6M Year 2 - \$3.4M Year 2 - \$13.9M Year 3 (5/1/2022 - 4/30/2023) - \$36.0M Year 3 - \$5.3M Year 3 - \$15.8M  Avg. Rate Base (2022)(1) \$3,181M \$726M \$2,082M  Allowed ROE / Equity Ratio 8.8% / 48%  Earnings Sharing Earnings sharing at 50% equity: 100% up to 9.00% in Rate Year 1, up to 9.10% in Rate Year 2, and up to 9.20% in Rate Year 3	
Annual Rate Increases with Levelization / Shaping  Year 1 (4/17/2020 - 4/30/2021) - \$45.3M Year 2 - \$3.4M Year 2 - \$13.9M Year 3 (5/1/2022 - 4/30/2023) - \$36.0M  Year 3 - \$5.3M  Year 3 - \$15.8M  Avg. Rate Base (2022)(1)  \$3,181M \$726M \$2,082M  Allowed ROE / Equity Ratio  8.8% / 48%  Earnings Sharing  Earnings Sharing  Earnings Sharing  Loow up to 9.00% in Rate Year 1, up to 9.10% in Rate Year 2, and up to 9.20% in Rate Year 3	
Annual Rate Increases with Levelization / Shaping  Year 2 (5/1/2021 - 4/30/2022) - \$45.6M Year 3 (5/1/2022 - 4/30/2023) - \$36.0M  Year 3 - \$5.3M  Year 2 - \$13.9M Year 3 - \$15.8M  Avg. Rate Base (2022) <sup>(1)</sup> \$3,181M  \$726M  \$2,082M  Allowed ROE / Equity Ratio  Earnings Sharing  Earnings Sharing  Earnings Sharing  100% up to 9.00% in Rate Year 1, up to 9.10% in Rate Year 2, and up to 9.20% in Rate Year 3	(with a make-whole)
Allowed ROE / Equity Ratio  8.8% / 48%  Earnings Sharing  Earnings Sharing  Earnings Sharing  100% up to 9.00% in Rate Year 1, up to 9.10% in Rate Year 2, and up to 9.20% in Rate Year 3	Year 1 - (\$1.1M) Year 2 - \$0.9M Year 3 - \$3.9M
Earnings Sharing  Earnings sharing at 50% equity:  100% up to 9.00% in Rate Year 1, up to 9.10% in Rate Year 2, and up to 9.20% in Rate Year 3	\$597M
100% up to 9.00% in Rate Year 1, up to 9.10% in Rate Year 2, and up to 9.20% in Rate Year 3	
Rate Teal Forecast	
<ul> <li>Rate Adjustment Mechanism up to \$42.8M/yr</li> <li>Trackers /</li> <li>Revenue Decoupling</li> <li>Other reconciliations: major storms, environmental expense, energy efficiency, debt cost, labor, pensions/OPEI integrity costs, economic development &amp; low-income programs, vegetation management, net plant, labor</li> </ul>	3s, property taxes, pipeline
ROE filing Annually (filed end of July)	
$g_1 \leftarrow 2021^{(2)}$ 6.9% 6.3% 7.4%	7.9%
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8.3%
2019(4)     4.0%       7.6%     8.7%	7.0%
0 <u>4 .5</u> .5 2018 <sup>(5)</sup> 6.2% 8.6% 9.9%	8.3%
9 1 0 2017 <sup>(6)</sup> 8.6% 10.0% 9.8%	9.7%
5 \$\frac{1}{4}\$ \text{ or } \frac{2016^{(7)}}{2015}\$     8.7%     9.8%     9.1%       6.0%     9.7%     6.0%	9.8%

- (1) Per SEC 10K
- (2) ROEs for rate year 5/1/2021 4/30/2022.
- (3) ROEs for rate year 5/1/2020 4/30/2021.
- (4) ROEs for rate year 5/1/2019 4/30/2020.
- 5) ROEs for the 3rd rate year (5/1/2018 4/30/2019) under 3 year rate plan settled June 2016.
- 6) Amended ROEs for the 2nd rate year (5/1/2017 4/30/2018) under 3 year rate plan settled June 2016.
- 7) Amended ROEs for the 1st rate year (5/1/2016 4/30/2017) under 3 year rate plan settled June 2016



#### New York Rate Case Filing – Key highlights

- ✓ Filed 4 cases, NYSEG electric and gas, RG&E electric and gas with requests for:
  - investments that add value to customers by increasing reliability and resiliency; and
  - technology investments necessary to enable renewables to help New York meet its climate goals
- ✓ We have supported our requests, keeping in mind customer impacts and mitigations
- ✓ We will still have among the lowest rates in New York, even with the proposed increases

#### Timing:

No gap between rate plans - new rates effective May 2023, at end of current rate plan

#### **Highlights**

- 1 year rate cases; support multi-year rate plan to mitigate customer bill impacts
- Enables NYSEG and RG&E to build a smarter, stronger and more resilient grid for NY's future:
- Resiliency investments
  - Vegetation management
  - o Requesting increases in the NYSEG SAIFI target
- Total bill increases 6.8% 16.8% (all customers), Avg residential customer increase \$10-\$18/month or 13-22% total bill. Delivery increase ~25% (all customers):



• **Multiple reconciliations** (i.e. decoupling, debt cost, labor, pensions, property taxes, vegetation management, etc., similar to prior rate plan, with additional requests for inflation and minor storms)

#### **Investments**

Provides stability for ~50% of Networks rate

**\$1.8B** 2023 investments

\$1.2B Rate Year I Plant Additions

\$8.6B multi-year (2023-2026) capital expenditure plan, including \$2.9B for NY's Climate Leadership & Community Protection Act (CLCPA)

- ROE/Equity: 10.2% / 50%
- Net Income Impact RY1: + ~\$90M
- Credit Metrics 2023: NYSEG ~17-18%;
   RG&E ~ 14-15%
- Sensitivity: ROE +/- 50 bps → CFO Pre-WC/Debt +/- 0.35%



#### **Current Connecticut Rate Plans**

	United Illuminating Distribution (UI-D)	Southern Connecticut Gas (SCG)	Connecticut Natural Gas (CNG)
Jurisdiction	Connecticut		
Regulator	Public Utilities Regulatory Authority (PURA)		
Term	3 year plan 2017-2019 Effective January 2017	3 year plan 2018-2020 Effective January 2018	3 year plan 2019-2021 Effective January 2019
Annual Rate Increases	Year 1 – \$42.9M Year 2 – \$11.5M Year 3 - \$2.9M	Year 1 - \$1.5M Year 2 - \$4.7M Year 3 - \$5.0M	Year 1 - \$9.9M Year 2 - \$4.6M Year 3 - \$5.2M
Avg. Rate Base (2022) <sup>(1)</sup>	\$1,253M	\$673M	\$559M
Allowed ROE	9.10%	9.25%	9.30%
Allowed Equity Ratio	50%	52%	54% 2019 / 54.5% 2020 / 55% 2021
Actual Equity Ratio (2022)	59%	54%	56%
Earnings Sharing	50/50 above ROE	50/50 above ROE	50/50 above ROE
Rate Year	Forecast		
Trackers / Reconciled Costs	<ul><li>Revenue Decoupling</li><li>Major Storms</li><li>Energy Supply (pass through)</li><li>Low Income</li></ul>	<ul> <li>Revenue Decoupling</li> <li>System Expansion Rate</li> <li>Energy Supply (pass through)</li> <li>Low Income</li> <li>Distribution Integrity Mgmt Program</li> </ul>	<ul> <li>Revenue Decoupling</li> <li>System Expansion Rate</li> <li>Energy Supply (pass through)</li> <li>Low Income</li> <li>Distribution Integrity Mgmt Program</li> </ul>
ROE filing	Quarterly	Quarterly	Quarterly
2022	6.3% <sup>(2)</sup>	9.3% <sup>(2)</sup>	10.2% <sup>(2)</sup>
2021	8.2% <sup>(2)</sup>	9.8% <sup>(2)</sup>	9.4% <sup>(2)</sup>
<u> </u>	9.0% <sup>(2)</sup>	7.8% <sup>(2)</sup>	9.4% <sup>(2)</sup>
2019 2019	10.1% <sup>(2)</sup>	8.7% <sup>(2)</sup>	8.0% <sup>(2)</sup>
Achieved ROEs After sharing if applicable 2012   2018   2016   20	9.6% <sup>(2)</sup>	8.4% <sup>(2)</sup>	6.7% <sup>(2)</sup>
2017 <u>2017</u>	9.3% <sup>(2)</sup>	8.1% <sup>(2)</sup>	5.9% <sup>(2)</sup>
<sup>2016</sup> 2016	6.8% <sup>(2)</sup>	8.1% <sup>(2)</sup>	8.7% <sup>(2)</sup>

<sup>(1)</sup> Per SEC 10K

<sup>(2)</sup> Based on actual equity ratios vs. allowed.



#### **UI Rate Case - Highlights**

#### ✓ Filed with PURA on September 9, 2022

- Revenue requirements based on a 2021 test year
- UI's Last Rate Case was filed in 2016 Distribution rates have not changed since 2019

#### Timing:

New rate plan would take effect ~Sept. 1, 2023

#### **Highlights**

- Enable us to continue to provide safe and reliable service while maintaining top quartile reliability and increasing the resiliency of the system to meet customers evolving expectations.
- Make important foundational investments in the system.
- Implement rates to provide support for disadvantaged communities through low-income rates.
- Provide additional investment in clean energy innovation and grid modernization efforts for customers.
- Pay for increased costs beyond our control: Property Tax increases, Inflation which impacts Labor, Benefits, Contractor Costs, and Return of and return on capital investments.

#### **Rate Plan**

- 3-year rate plan
- Levelization Proposal provides distribution rate increase of \$54M/ year for average total bill increase across all rate classes of 4.9%/year, which is lower than the current rate of inflation

#### **Investments**

**Investments** to build a smarter, stronger, more resilient grid for Connecticut clean energy future

- Reliability: system automation upgrades to minimize customers impacted by outages, enable faster restoration and replace aging infrastructure
- **Resiliency:** maintain foundational investments to meet customer expectations; upgrades needed substations
- **Grid Modernization:** meeting evolving customer expectations with enhanced EV's and battery storage programs and UConn/Avangrid Clean Earth Initiative
- **ROE/Equity Asks**: 10.2%/52%
- **Investments**: 2023-2024: \$155M; 2024-2025 \$148M; 2025-2026 \$143M



#### Maine & Massachusetts Rate Plans

	Central Maine Power Distribution (CMP-D)	Maine Natural Gas (MNG)	Berkshire Gas Company (BGC)
Jurisdiction	Maine		Massachusetts
Regulator	Maine Public Utilities Commission (MPUC)		Department of Public Utilities (DPU)
Term	1 year plan 3/1/20 – 2/28/21	10-year plan thru 4/26/16 subject to Year 7 review	2-year plan 2023-2024, effective 1/1/23
Annual Rate Increases	Year 1 - \$17.4M		Y1 - \$3.6M (~\$2.6M + up to \$0.9M step-up) Y2 – add'l step-ups up to \$1.2M, \$0.6M & \$0.3M, Stay-out until November 2025
Avg. Rate Base (2022) <sup>(1)</sup>	\$1,120M	\$82M	\$135M
Allowed ROE	9.25%	9.55%	9.7%
Allowed Equity Ratio	50%	50%	54%
Earnings Sharing	No	50/50 above 12.05%	No
Rate Year	Forecast	Forecast	Historic
Trackers / Reconciled Costs	<ul> <li>Revenue Decoupling</li> <li>Major Storms</li> <li>Greater Minor Storm recovery (\$8.1M/year vs. \$4M prev.)</li> <li>Vegetation mgmt. funding increased 25%</li> <li>Environmental</li> <li>Gas Supply (pass through)</li> </ul>	· No Revenue Decoupling · Gas Supply (pass through)	Revenue Decoupling Gas Supply (pass through) GSEP, pension, energy efficiency Recover of costs through proposed step increases associate with; 1) the hiring of incremental employees, 2) the hiring of incremental safety & reliability employees and 3) non-GSEP capital investments placed in service in 2022
ROE fili <u>ng</u>	Annually (April)	Annually	Annually (March 31)
2021	6.98%	2.49%	6.2%
ဖု <u>2020</u>	6.2%	NA	5.98%
2019 2018 2017 2016 2015 2014	6.1%	NA	10.8%
<u>2018</u>	4.2%	NA	NA
₩ <u>2017</u>	12.7%	NA	NA
. <u>é</u> <u>2016</u>	11.4%	NA	NA
<u>5</u> <u>2015</u>	7.6%	NA	NA
<sup>≪</sup> 2014	9.6%	NA	NA

(1) Per SEC 10K.



#### **FERC Jurisdiction Rate Plans**

#### Central Maine Power Transmission (CMP-T) United Illuminating Transmission (UI-T)

Regulator	Federal Energy Regulatory Commission (FERC)		
Term	Annual filing by July 31		
Avg. Rate Base (2022) <sup>(1)</sup>	\$1,520M	\$729M	
Allowed ROE	10.57-11.74%	10.57-11.74%	
Equity Ratio	Actual (~53-59%)	Actual (~53-58%)	
Earnings Sharing	No	No	
Decoupling	No	No	

# Trackers / Reconciled Costs

- Annual true-up to actual operating expenses and revenue requirement
- Capital investments not included in rate base until they are placed in service, unless a specific FERC incentive is granted allowing for the inclusion of Construction Work in Progress (CWIP) in rate base
- We are allowed to calculate an Allowance for Funds Used During Construction (AFUDC) as a non-cash carrying charge added to CWIP and recovered over the life of the asset on all other projects that do not receive the CWIP in rate base incentive

ROE filing		Annually (July)	
	2021	11.8%	11.3%
	2020	12.0%	11.3%
<b>S</b> <sup>(2)</sup>	2019	9.9%	11.3%
OE	2018	11.8%	11.3%
<u>~</u>	2017	11.4%	11.3%
Ve.	2016	11.2%	11.4%
Achie	2015	10.6%	11.4%
	2014	10.5%	12.1%
-	2013	11.3%	12.2%

- (1) Per SEC 10K.
- (2) Based on actual equity ratios vs allowed.



#### ~120 MW Hydro & ~13 MW Fuel Cell / Solar; < 10 MW diesel

Operating Company	Facility Location	Facility Type	Installed Capacity (MW)	Year(s) Commissioned
NYSEG	Newcomb, NY	Diesel Turbine	4.3(2)	1967, 2017
NYSEG	Blue Mountain, NY (1)	Diesel Turbine	2.0	2019
NYSEG	Long Lake, NY (1)	Diesel Turbine	2.0	2019
NYSEG	Eastern New York (6 locations)	Hydroelectric	61.4	1921-1986
RG&E	Rochester, NY (3 locations)	Hydroelectric	57.1	1917-1960
UI (3)	Connecticut (4 locations)	Fuel cell / Solar	13.4(4)	2015 - 2016

<sup>(1)</sup> Blue Mountain and Long Lake Diesel Turbine are rented facilities

<sup>(2)</sup> Two Units totaling 4.3 MW, however, Unit 2 has a fuel mix of Kerosene & Diesel which limits output; total available capacity of 4.1 MW

<sup>(3)</sup> UI is party to a 50-50 joint venture with certain affiliates of Clearway Energy, Inc. in GCE Holding LLC, whose wholly-owned subsidiary, GenConn, operates two 200 MW (nameplate capacity) peaking generation plants in Devon and Middletown, both in Connecticut.

<sup>(4)</sup> Includes 2.2 MW of solar and UIL Distributed Resources' Glastonbury Fuel Cell & Energy Recovery Generator 3.4 MW



### How to model

# **Approach for Networks Income Calculation**



Rate Base \* Equity Ratio(1) \* Regulatory ROE (8 utilities)

### **Net Other Income (Deductions):**

- Allowance for funds used during construction (AFUDC debt and equity)
- Debt Costs not supporting debt portion of rate base
- Carrying costs on regulatory assets & liabilities not included in Rate Base
- Other Income & Deductions (eg: Charitable Donations, Shareholder-borne costs)
- Be sure to tax effect values



Joint Ventures (GenConn, NY Transco, MEPCO)



Networks "Income"

### **Networks: USA**



### **Economics**

Rate Base

- Rate Base = Gross plant in service Book depreciation Deferred income taxes +/- working capital +/- regulatory assets & liabilities (not accruing carrying costs) + prepaid + materials & supplies
- Average rate base for a 13-month period used for gas & electric distribution and transmission

AFUDC & Carrying Costs

- Utilities accrue **AFUDC** on longer-term construction projects prior to being placed in-service
- Utilities accrue Carrying Costs on certain regulatory assets & liabilities not in rate base
- This has an impact on current earnings, but there is no current cash flow impact

Joint Ventures

- 50% JV with affiliates of Clearway Energy (GenConn) in 2 regulated peaking plants with ROE of 9.85%
- 20% investment in NY Transco with 53% Equity Ratio
- Maine Electric Power Co., Inc. (MEPCO) owns a 345 kV lines between the New Brunswick border and Maine Yankee

Earned ROE

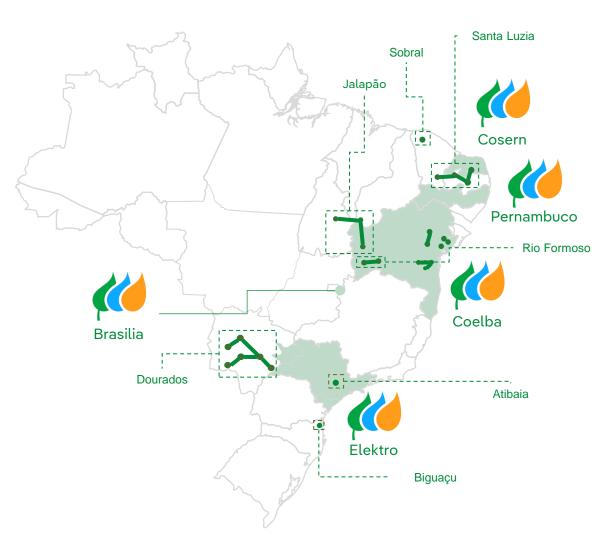
- Based on formulas approved by regulator and used in annual compliance filings
- Formulas based on operating income with certain regulatory adjustments
- Expect to earn allowed ROEs as rate plans reset

# **Networks: Brazil**



# **Energy leader in Brazil and Latam**

	2022		2022
Asset Base D&T (BRL Bn)	43.9	Kms of lines	711,110
Distribution RAB (BRL Bn)	31.5	Distribution	99.7%
Neoenergia Elektro	19%	Neoenergia Elektro	17%
Neoenergia Coelba	46%	Neoenergia Coelba	50%
Neoenergia Pernambuco	22%	Neoenergia Pernambuco	22%
Neoenergia Cosern	9%	Neoenergia Cosern	9%
Neoenergia Brasilia	4%	Neoenergia Brasilia	3%
Asset Base Transmission (BRL Bn)	12.4	Transmission	0.3%
Distributed energy (GWh)	76,107	Points of supply (M)	16.0
Neoenergia Elektro	26%	Neoenergia Elektro	18%
Neoenergia Coelba	33%	Neoenergia Coelba	40%
Neoenergia Pernambuco	23%	Neoenergia Pernambuco	25%
Neoenergia Cosern	8%	Neoenergia Cosern	10%
Neoenergia Brasilia	10%	Neoenergia Brasilia	7%





# Distribution regulatory framework

	Concession process	Concession / Authorization term	Renewal	Tariff / Revenues
Distribution	Competitive auctions	<ul> <li>30 years</li> <li>Due date: Aug 2027 to Jul -2045<sup>(1)</sup></li> </ul>	<ul> <li>Possible (+30 yrs)</li> <li>May be changed Contractual conditions</li> <li>Indemnification for non-depreciated assets</li> </ul>	<ul> <li>Tariff structured to remunerate for:         <ul> <li>Parcel A = pass-through of non-manageable costs: energy supply + transmission + sector charges</li> <li>Parcel B = incentive model for manageable costs (capex + opex). Annually adjusted by inflation + demand growth - X factor</li> </ul> </li> <li>Tariff review every 4-5 years: redefinition of Parcel B, X factor and regulatory level for energy loss and bad debt</li> </ul>
Transmission	Competitive auctions	<ul> <li>30 years</li> <li>Due date: Aug 2027 to Sept-2052<sup>(1)</sup></li> </ul>	<ul> <li>Possible, according to certain contractual clauses</li> <li>Indemnification for non-depreciated assets</li> </ul>	<ul> <li>RAP defined in the Concession Auction</li> <li>Annual revenue inflation adjustment</li> <li>Tariff review every 5 years (WACC readjustment only)</li> </ul>



### **Distribution: Tariff Review processes**



**REVIEWS** 

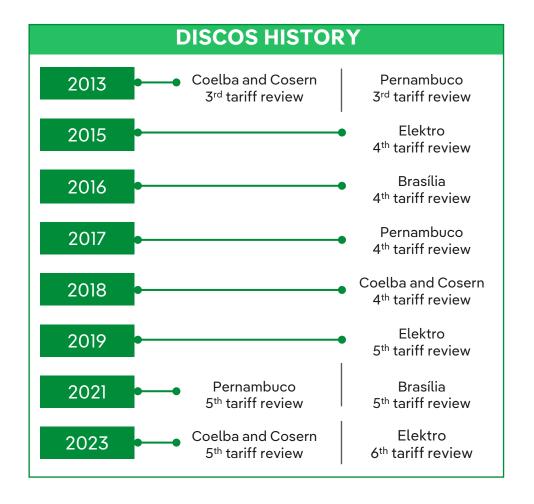
#### **EVERY 4 OR 5 YEARS**

- Costs passed directly into the tariff: energy supply + transmission + sector charges.
- Definition of Regulatory Asset Base (RAB) and OPEX.
- Establish standards for losses, quality and an efficiency factor for the distributor.



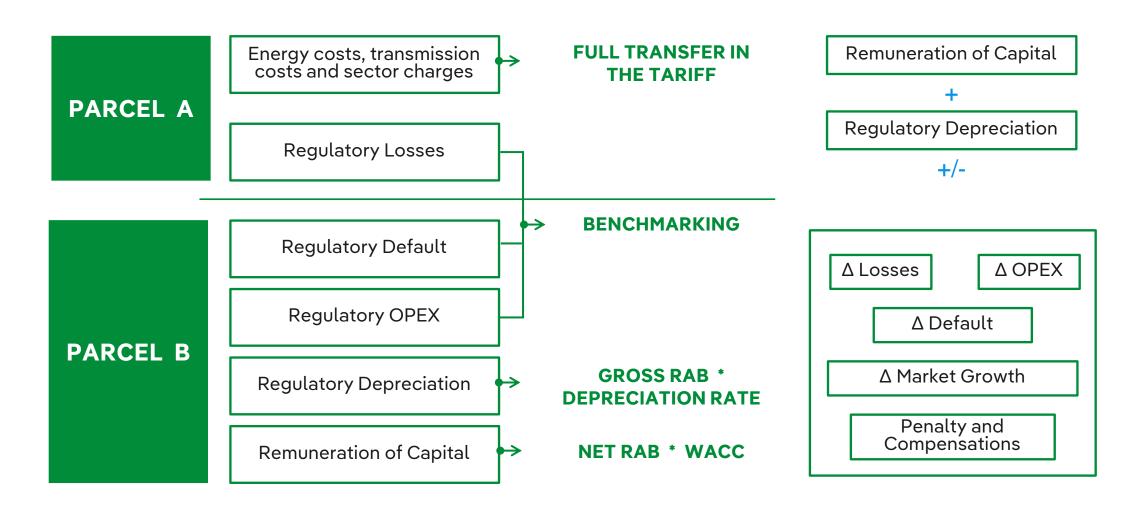
### YEARLY, EXCEPT IN YEARS OF THE TARIFF REVIEWS

- Costs passed directly into the tariff: energy supply + transmission + sector charges.
- Manageable costs (Parcel B): adjusted by inflation – X factor.





### Distribution: tariff's components





### **Distribution: regulatory parameters**

	Real Regulatory WACC post tax	Factor X <sup>(5)</sup>	QRR <sup>(6)</sup>	Gross BRR <sup>(7)</sup>	Net BRR <sup>(7)</sup>
Neoenergia Coelba	8.09%(1)	-0.85%	3.96%	22,432	14,373
Neoenergia Elektro	8.09%(2)	0.76%	3.96%	8,813	6,025
Neoenergia Pernambuco	7.15% <sup>(3)</sup>	-0.06%	3.86%	11,284	6,854
Neoenergia Cosern	8.09%(1)	-2.54%	3.96%	4,421	2,870
Neoenegia Brasília	7.15% <sup>(4)</sup>	0.25%	3.68%	2,562	1,392

Note: The real regulatory WACC post tax published by ANEEL for 2023 is 7.42%, applied to the Tariff Reviews taking place between March 2023 and February 2024

(4) Valid until October 2026

(3) Valid until April 2025

- 5) Factor X: referring to the last Tariff Adjustment: 2022 (Elektro and Brasília) and 2023 (Coelba and Cosern)
- 6) QRR (Regulatory depreciation rate): referring to the last Tariff Revision: 2023 (Coelba and Cosern); 2021 (Brasília and Pernambuco); 2019 (Elektro)
- 7) Gross BRR and Net BRR: data as of December 2022. Both refer to Regulatory Asset Base

<sup>(1)</sup> Valid until April 2023

<sup>(2)</sup> Valid until August 2023

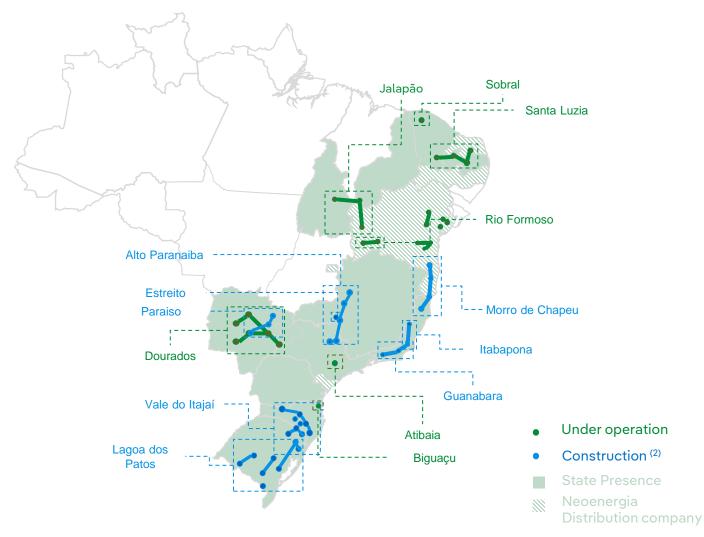
### **Networks: Brazil**



### **Transmission**

Investments of BRL ~ 17 Bn<sup>(1)</sup> already awarded in or close to our Service Areas:

- √ 2 lots in June 2022 (Lot 2 and 11)
- √ 1 lot in Dec 2021 (Lot 4)
- √ 1 lot in Dec 2020 (Lot 2)
- √ 1 lot in Dec 2019 (Lot 9)
- √ 4 lots in Dec 2018
- √ 6 lots in 2017 (April and December)



Information on auction results: <a href="https://antigo.aneel.gov.br/web/guest/resultados-de-leiloes">https://antigo.aneel.gov.br/web/guest/resultados-de-leiloes</a>

<sup>(1)</sup> CAPEX defined by Aneel as of the auction notices

# Content



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04 Generation & Customers (page 101)

05 Financing (page 136)

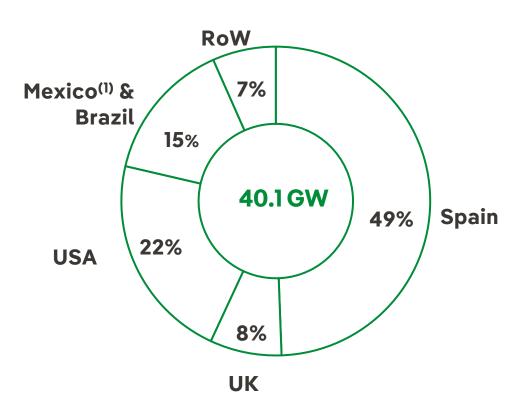
06 ESG (page 151)

07 Annex (page 216)

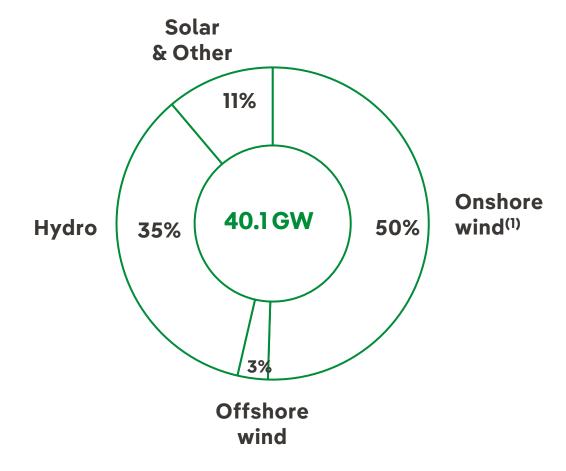


### Leading position in renewables

### **Capacity by region**



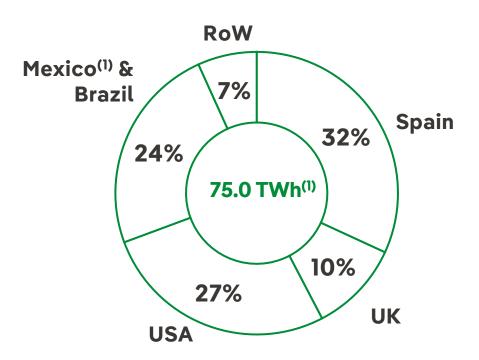
### Capacity by technology



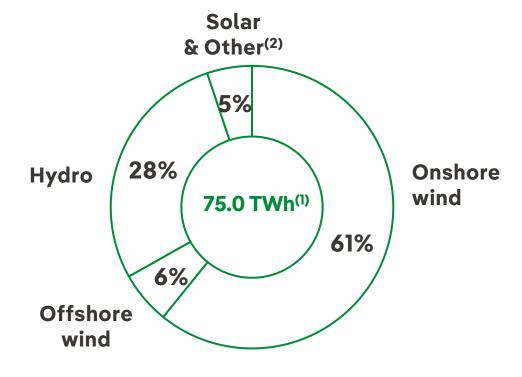


### Leading position in renewables

### **Output by region**



### **Output by technology**

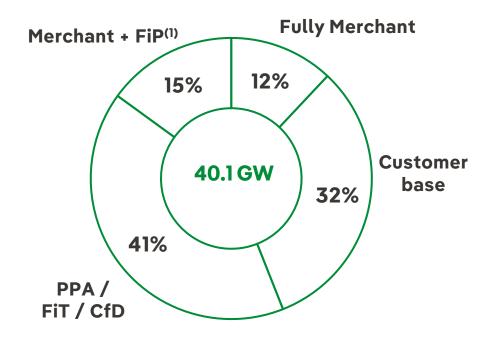


<sup>(1)</sup> Includes 222 GWh of net production for third parties

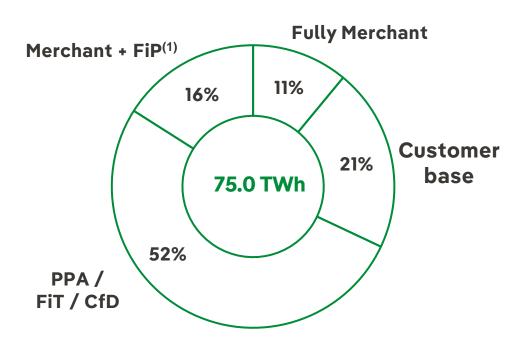


~52% of the production secured through LT contracts, with an average duration of 14 years and an additional 21% secured through our customer base...

# Route to Market by capacity



# Route to Market by production



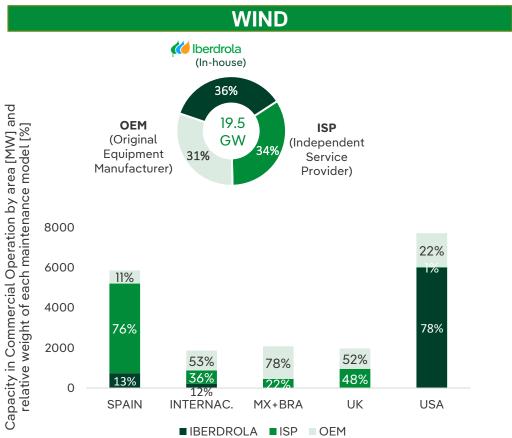
... with only 11% of production fully merchant

(1) Feed-in-Premium

# Renewables: O&M Management

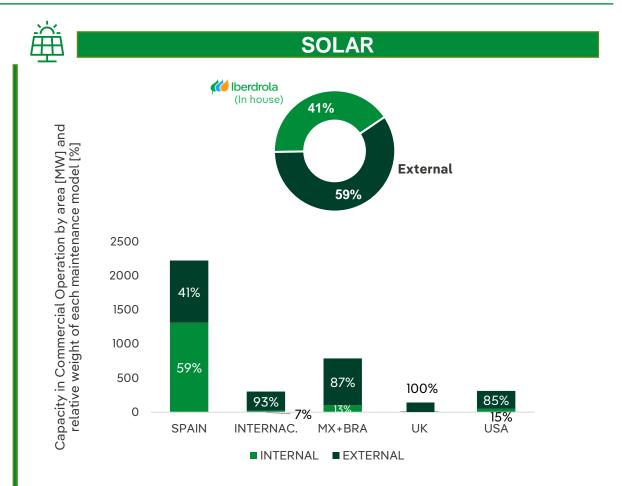






USA is the region that concentrates more in-house maintenance, while Spain concentrates the maintenance with ISP

To highlight the beginning of the in-house maintenance of the GE 2.X in USA



External maintenance model predominates, followed by a tendency to increase internal maintenance as the equipment comes out of warranty

It is worth mentioning the beginning of in-house maintenance of FIMER inverters in Spain



Capacity (MW)	Spain	UK	US	Mexico	Brazil	RoW	Total
Onshore owned	6,209	1,986	8,061	590	1,394	1,885	20,125
Onshore for third parties	-	-	-	103	-	-	103
Offshore	-	908	-	-	-	350	1,258
Hydro	10,700(1)	-	118	-	3,031	-	13,849
Mini-hydro	255	-	-	-	-	-	255
Solar	2,612	10	509	642	143	348	4,264
Others	19	104	13	-	-	75	211
Total	19,796	3,008	8,702	1,335	4,568	2,657	40,066
Production (GWh)	Spain	UK	US	Mexico	Brazil	RoW	Total
Onshore owned	11,744	4,424	19,612	1,662	3,843	3,910	45,195
Onshore for third parties	-	-	-	222	-	-	222
Offshore	-	3,392	-	-	-	1,105	4,497
Hydro	9,511 <sup>(1)</sup>	-	188	-	10,803	-	20,502
Mini-hydro	420	-	-	-	-	-	420
Solar	2,150	7	314	1,237	91	38	3,837
Others	-	-	73	-	-	-	73
Total	23,826	7,823	20,188	3,121	14,737	5,053	74,747
Load Factor (%)	Spain	UK	US	Mexico	Brazil	RoW	-
Onshore owned	21.9%	25.5%	29.2%	33.1%	38.7%	24.6%	
Onshore for third parties	-	-	-	24.6%	-	-	
Offshore	-	42.6%	-	-	-	38.6%	
Hydro <sup>(2)</sup>	10.2%(1)	-	-	-	35.9%	-	
Mini-hydro <sup>(2)</sup>	17.6%	-	-	-	-	-	
Solar	14.5%	8.2%	13.5%	22.0%	18.3%	3.1%	

<sup>(1)</sup> Includes capacity/production of Gouvaes and Daivoes, hydro assets in Portugal.

<sup>(2)</sup> Based on consolidated production and operational capacity Differences may arise due to rounding



51

## Top 1 renewable player with 19,796 MW installed

#### **Onshore Wind**

Year of Installation	MW <sup>(1)</sup>
1998	21
1999	36
2000	323
2001	308
2002	471
2003	552
2004	1,019
2005	424
2006	296
2007	683
2008	289
2009	553
2010	269
2011	130
2012	332
2018	18
2019	281
2020	287
2021	-168(2)
2022	86
Total	6,210

#### **Solar PV**

Project	Region	MW	Year of Installation	
Nuñez de Balboa	Badajoz	500	2019	
Andévalo	Huelva	50	2020	
Teruel	Teruel	50	2020	
Romeral	Cuenca	50	2020	
Olmedilla	Cuenca	50	2020	
Campo Arañuelo I	Cáceres	50	2020-2021	
Campo Arañuelo II	Cáceres	50	2020-2021	
Campo Arañuelo III	Cáceres	40	2020-2021	
Ceclavín	Cáceres	328	2020-2021	
Majada Alta	Cáceres	50	2020-2021	
San Antonio	Cáceres	50	2020-2021	
Barcience	Toledo	50	2020-2021	
Francisco Pizarro	Cáceres	553	2021-2022	
Arenales	Cáceres	150	2021	
Puertollano	Ciudad Real	100	2021	
Revilla-Vallejera	Burgos	50	2021-2022	
Almaraz 1	Cáceres	50	2022	
Almaraz 2	Cáceres	30	2022	
Cornicabra (Guillena)	Sevilla	20	2022	
Espliego (Guillena)	Sevilla	9	2022	
Poleo (Guillena)	Sevilla	8	2022	
Cespedera	Cádiz	8	2022	
Llanos Pelaos III	Fuerteventura	0.5	2022	
Tagus I	Cáceres	50.0	2022	
Tagus II	Cáceres	50.0	2022	
Tagus III	Cáceres	8.9	2022	
Tagus IV	Cáceres	50	2022	
Manantiales I	Guadalajara	27	2022	
Valbuena	Guadalajara	46	2022	
Villarino	Salamanca	50	2022	
Virgen de Areños III	Palencia	34	2022	

Total 2,612

<sup>(1) 258</sup> MW consolidated through equity method (2) Net figure of new installed capacity minus asset rotation



### Top 1 renewable player with 19,796 MW installed

Hydro

Region	Total MW	Pumping hydro MW	
Mediterranean Basin	2,347	1,317	
Duero Basin <sup>(1)(2)</sup>	4,528	2,006	
Sil Basin	1,582	348	
Tajo Basin	2,243	217	

**Total** 10,700 3,888

Mini-hydro

Total MW (1) 255

Mini-hydro

#### **Batteries**

Project	Region	MW	Year of Installation
C. Arañuelo III BESS	Cáceres	3	2021
Puertollano BESS	Ciudad Real	5	2021
Abadiño	Vizcaya	6	2021
Urkilla	Álava	5	2022

Total

19

<sup>(1)</sup> Includes capacity/production of Gouvaes and Daivoes, hydro assets in Portugal.(2) 0.93 MW of mini-hydro managed by investee companies

# Renewables: Iberia



# **Projects under construction (1/2)**

Támega         Hydro         Portugal         1,158         998         160         2023           Francisco Pizarro         Solar PV         Cáceres         590         553         37         2023           Buniel         Onshore         Burgos         104,0         104         2023           Iglesias         Onshore         Burgos         70,4         70         2023-2024           El Escudo         Onshore         Cartabria         105         105         2024           Tagus III         Solar PV         Cáceres         50         9         50         2022-2023           Cespedera (1)         Solar PV         Cáceres         50         9         50         2022-2023           Llanos Pelaos III         Solar PV         Canarias         7         0.5         6         2022-2023           Blanca Solar         Solar PV         Canarias         5         5         2024           Llanos Pelaos II         Solar PV         Canarias         1         1         2024           Llanos Pelaos II         Solar PV         Guadalajara         49         46         3         2022-2023           Valbuena         Solar PV         Guadalajara         49	Project	Туре	Region	Total MW	MW installed as of Dec´22	MW pending	Year of Installation
Buniel         Onshore         Burgos         104,0         104         2023           Iglesias         Onshore         Burgos         70,4         70         2023-2024           El Escudo         Onshore         Cantabria         105         105         2024           El Escudo         Onshore         Cantabria         105         105         2022           Tagus III         Solar PV         Cádiz         13         8         5         2022-2023           Cespedera (I)         Solar PV         Cádiz         13         8         5         2022-2023           Llanos Pelaos III         Solar PV         Canarias         7         0.5         6         2022-2023           Blanca Solar         Solar PV         Canarias         3         0.5         6         2022-2023           Blanca Solar         Solar PV         Canarias         3         2024         1         1         2024           Llanos Pelaos II         Solar PV         Canarias         3         0         5         5         2024           Llanos Pelaos II         Solar PV         Guadalajara         50         50         2023           Valbuena         Solar PV         Guadalaj	Támega	Hydro	Portugal	1,158	998	160	2023
Iglesias         Onshore         Burgos         70,4         70         2023-2024           El Escudo         Onshore         Cantabria         105         105         2024           Tagus III         Solar PV         Cáceres         50         9         50         2022-2023           Cespedera (1)         Solar PV         Cádiz         13         8         5         2022-2023           Llanos Pelaos III         Solar PV         Canarias         7         0.5         6         2022-2023           Blanca Solar         Solar PV         Canarias         5         5         6         2022-2023           Blanca Solar         Solar PV         Canarias         3         5         5         2024           Llanos Pelaos II         Solar PV         Canarias         3         3         2024           Llanos Pelaos II         Solar PV         Guadalajara         50         50         2023           Valbuena         Solar PV         Guadalajara         49         46         3         2022-2023           Manantiales I         Solar PV         Guadalajara         49         46         3         2022-2023           Peiñarrubia         Solar PV         Murcia<	Francisco Pizarro	Solar PV	Cáceres	590	553	37	2023
El Escudo         Onshore         Cantabria         105         105         2024           Tagus III         Solar PV         Cáceres         50         9         50         2022-           Cespedera (1)         Solar PV         Cáciz         13         8         5         2022-2023           Llanos Pelaos III         Solar PV         Canarias         7         0.5         6         2022-2023           Blanca Solar         Solar PV         Canarias         5         5         5         2024           Llanos Pelaos II         Solar PV         Canarias         3         3         2024           Llanos Pelaos II         Solar PV         Canarias         1         1         2024           Llanos Pelaos II         Solar PV         Guadalajara         50         50         2023           Valbuena         Solar PV         Guadalajara         49         46         3         2022-2023           Manantiales I         Solar PV         Guadalajara         30         27         3         2022-2023           Veilila         Solar PV         Murcia         50         50         2023           Veilila         Solar PV         Palencia         350	Buniel	Onshore	Burgos	104,0		104	2023
Tagus III         Solar PV         Cáceres         50         9         50         2022           Cespedera (I)         Solar PV         Cádiz         13         8         5         2022-2023           Llanos Pelaos III         Solar PV         Canarias         7         0.5         6         2022-2023           Blanca Solar         Solar PV         Canarias         5         5         2024           Llanos Pelaos II         Solar PV         Canarias         3         3         2024           Llanos Pelaos I         Solar PV         Canarias         3         1         1         2024           Llanos Pelaos II         Solar PV         Canarias         3         3         2024           Llanos Pelaos II         Solar PV         Guadalajara         50         50         2023           Yalbuena         Solar PV         Guadalajara         49         46         3         2022-2023           Manantiales I         Solar PV         Guadalajara         30         27         3         2022-2023           Peñarrubia         Solar PV         Murcia         50         50         203         2023           Veijula         Solar PV         Palencia	Iglesias	Onshore	Burgos	70,4		70	2023-2024
Cespedera (1)         Solar PV         Cádiz         13         8         5         2022-2023           Llanos Pelaos III         Solar PV         Canarias         7         0.5         6         2022-2023           Blanca Solar         Solar PV         Canarias         5         5         5         2024           Llanos Pelaos II         Solar PV         Canarias         3         3         2024           Llanos Pelaos I         Solar PV         Canarias         1         1         2024           Fuentes         Solar PV         Guadalajara         50         50         2023           Valbuena         Solar PV         Guadalajara         49         46         3         2022-2023           Manantiales I         Solar PV         Guadalajara         49         46         3         2022-2023           Peñarrubia         Solar PV         Guadalajara         49         46         3         2022-2023           Peñarrubia         Solar PV         Murcia         50         27         3         2022-2023           Peñarrubia         Solar PV         Palencia         350         350         2023           Veilla         Solar PV         Palencia	El Escudo	Onshore	Cantabria	105		105	2024
Llanos Pelaos III         Solar PV         Canarias         7         0.5         6         2022-2023           Blanca Solar         Solar PV         Canarias         5         5         2024           Llanos Pelaos II         Solar PV         Canarias         3         3         2024           Llanos Pelaos I         Solar PV         Canarias         1         1         2024           Fuentes         Solar PV         Guadalajara         50         50         2023           Fuentes         Solar PV         Guadalajara         50         50         2023           Valbuena         Solar PV         Guadalajara         30         27         3         2022-2023           Manantiales I         Solar PV         Guadalajara         30         27         3         2022-2023           Peñarrubia         Solar PV         Murcia         50         50         50         2023           Veillla         Solar PV         Palencia         350         350         2023           Virgen de Areños III         Solar PV         Palencia         50         34         16         2022-2023           Ciudad Rodrigo         Solar PV         Sevilla         50         20 </td <td>Tagus III</td> <td>Solar PV</td> <td>Cáceres</td> <td>50</td> <td>9</td> <td>50</td> <td>2022</td>	Tagus III	Solar PV	Cáceres	50	9	50	2022
Blanca Solar         Solar PV         Canarias         5         2024           Llanos Pelaos II         Solar PV         Canarias         3         3         2024           Llanos Pelaos I         Solar PV         Canarias         1         1         2024           Fuentes         Solar PV         Guadalajara         50         50         2023           Valbuena         Solar PV         Guadalajara         49         46         3         2022-2023           Manantiales I         Solar PV         Guadalajara         30         27         3         2022-2023           Peñarrubia         Solar PV         Guadalajara         50         50         2023           Velilla         Solar PV         Murcia         50         50         2023           Velilla         Solar PV         Palencia         350         350         2023           Virgen de Areños III         Solar PV         Palencia         50         34         16         2022-2023           Ciudad Rodrigo         Solar PV         Salamanca         318         318         2024           Cornicabra (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023 </td <td>Cespedera (1)</td> <td>Solar PV</td> <td>Cádiz</td> <td>13</td> <td>8</td> <td>5</td> <td>2022-2023</td>	Cespedera (1)	Solar PV	Cádiz	13	8	5	2022-2023
Llanos Pelaos II         Solar PV         Canarias         3         2024           Llanos Pelaos I         Solar PV         Canarias         1         1         2024           Fuentes         Solar PV         Guadalajara         50         50         2023           Valbuena         Solar PV         Guadalajara         49         46         3         2022-2023           Manantiales I         Solar PV         Guadalajara         30         27         3         2022-2023           Peñarrubia         Solar PV         Murcia         50         50         50         2023           Velilla         Solar PV         Palencia         350         350         2023           Virgen de Areños III         Solar PV         Palencia         50         34         16         2022-2023           Ciudad Rodrigo         Solar PV         Salamanca         318         318         2024           Cornicabra (Guillena)         Solar PV         Sevilla         50         20         30         2022-2023           Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla <t< td=""><td>Llanos Pelaos III</td><td>Solar PV</td><td>Canarias</td><td>7</td><td>0.5</td><td>6</td><td>2022-2023</td></t<>	Llanos Pelaos III	Solar PV	Canarias	7	0.5	6	2022-2023
Llanos Pelaos I         Solar PV         Canarias         1         1         2024           Fuentes         Solar PV         Guadalajara         50         50         2023           Valbuena         Solar PV         Guadalajara         49         46         3         2022-2023           Manantiales I         Solar PV         Guadalajara         30         27         3         2022-2023           Peñarrubia         Solar PV         Murcia         50         50         50         2023           Velilla         Solar PV         Palencia         350         350         2023           Virgen de Areños III         Solar PV         Palencia         50         34         16         2022-2023           Ciudad Rodrigo         Solar PV         Salamanca         318         20         318         20           Cornicabra (Guillena)         Solar PV         Sevilla         50         20         30         2022-2023           Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Salinas I	Blanca Solar	Solar PV	Canarias	5		5	2024
Fuentes         Solar PV         Guadalajara         50         2023           Valbuena         Solar PV         Guadalajara         49         46         3         2022-2023           Manantiales I         Solar PV         Guadalajara         30         27         3         2022-2023           Peñarrubia         Solar PV         Murcia         50         50         2023           Velilla         Solar PV         Palencia         350         350         2023           Virgen de Areños III         Solar PV         Palencia         50         34         16         2022-2023           Ciudad Rodrigo         Solar PV         Salamanca         318         318         2024           Cornicabra (Guillena)         Solar PV         Sevilla         50         20         30         2022-2023           Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5 <td>Llanos Pelaos II</td> <td>Solar PV</td> <td>Canarias</td> <td>3</td> <td></td> <td>3</td> <td>2024</td>	Llanos Pelaos II	Solar PV	Canarias	3		3	2024
Valbuena         Solar PV         Guadalajara         49         46         3         2022-2023           Manantiales I         Solar PV         Guadalajara         30         27         3         2022-2023           Peñarrubia         Solar PV         Murcia         50         50         2023           Velilla         Solar PV         Palencia         350         350         2023           Virgen de Areños III         Solar PV         Palencia         50         34         16         2022-2023           Ciudad Rodrigo         Solar PV         Salamanca         318         318         2024           Cornicabra (Guillena)         Solar PV         Sevilla         50         20         30         2022-2023           Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5         49         2023	Llanos Pelaos I	Solar PV	Canarias	1		1	2024
Manantiales I         Solar PV         Guadalajara         30         27         3         2022-2023           Peñarrubia         Solar PV         Murcia         50         50         2023           Velilla         Solar PV         Palencia         350         350         2023           Virgen de Areños III         Solar PV         Palencia         50         34         16         2022-2023           Ciudad Rodrigo         Solar PV         Salamanca         318         318         2024           Cornicabra (Guillena)         Solar PV         Sevilla         50         20         30         2022-2023           Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5         49         2023	Fuentes	Solar PV	Guadalajara	50		50	2023
Peñarrubia         Solar PV         Murcia         50         2023           Velilla         Solar PV         Palencia         350         350         2023           Virgen de Areños III         Solar PV         Palencia         50         34         16         2022-2023           Ciudad Rodrigo         Solar PV         Salamanca         318         318         2024           Cornicabra (Guillena)         Solar PV         Sevilla         50         20         30         2022-2023           Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5         49         2023	Valbuena	Solar PV	Guadalajara	49	46	3	2022-2023
Velilla         Solar PV         Palencia         350         2023           Virgen de Areños III         Solar PV         Palencia         50         34         16         2022-2023           Ciudad Rodrigo         Solar PV         Salamanca         318         318         2024           Cornicabra (Guillena)         Solar PV         Sevilla         50         20         30         2022-2023           Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5         49         2023	Manantiales I	Solar PV	Guadalajara	30	27	3	2022-2023
Virgen de Areños III         Solar PV         Palencia         50         34         16         2022-2023           Ciudad Rodrigo         Solar PV         Salamanca         318         318         2024           Cornicabra (Guillena)         Solar PV         Sevilla         50         20         30         2022-2023           Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5         49         2023	Peñarrubia	Solar PV	Murcia	50		50	2023
Ciudad Rodrigo         Solar PV         Salamanca         318         318         2024           Cornicabra (Guillena)         Solar PV         Sevilla         50         20         30         2022-2023           Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5         49         2023	Velilla	Solar PV	Palencia	350		350	2023
Cornicabra (Guillena)         Solar PV         Sevilla         50         20         30         2022-2023           Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5         49         2023	Virgen de Areños III	Solar PV	Palencia	50	34	16	2022-2023
Poleo (Guillena)         Solar PV         Sevilla         50         8         42         2022-2023           Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5         49         2023	Ciudad Rodrigo	Solar PV	Salamanca	318		318	2024
Espliego (Guillena)         Solar PV         Sevilla         44         9         36         2022-2023           Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5         49         2023	Cornicabra (Guillena)	Solar PV	Sevilla	50	20	30	2022-2023
Cedillo         Solar PV         Cáceres         375         375         2023           Salinas I         Solar PV         Cuenca         49.5         49         2023	Poleo (Guillena)	Solar PV	Sevilla	50	8	42	2022-2023
Salinas ISolar PVCuenca49.5492023	Espliego (Guillena)	Solar PV	Sevilla	44	9	36	2022-2023
	Cedillo	Solar PV	Cáceres	375		375	2023
Salinas II Solar PV Cuenca 49 49 2023	Salinas I	Solar PV	Cuenca	49.5		49	2023
	Salinas II	Solar PV	Cuenca	49		49	2023

# Renewables: Iberia



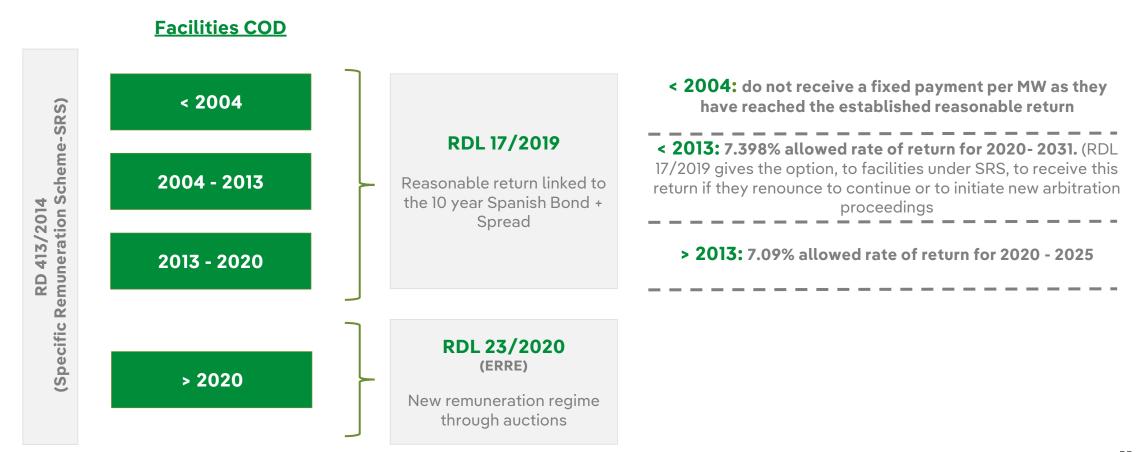
# Projects under construction (2/2)

Project	Туре	Region	Total MW	MW installed as of Dec´22	MW pending	Year of Installation
Salinas III	Solar PV	Cuenca	50		50	2023
Hyb Basllestas	Solar PV	Burgos	41.1		41	2023
Hyb Casetona	Solar PV	Burgos	33		33	2023-2024
Peñaflor	Solar PV	Zaragoza	136.5		137	2024
Sabic	Solar PV	Murcia	100		100	2023-2024
Total			3,982	1,713	2,278	



### Regulatory framework scheme for wind and solar

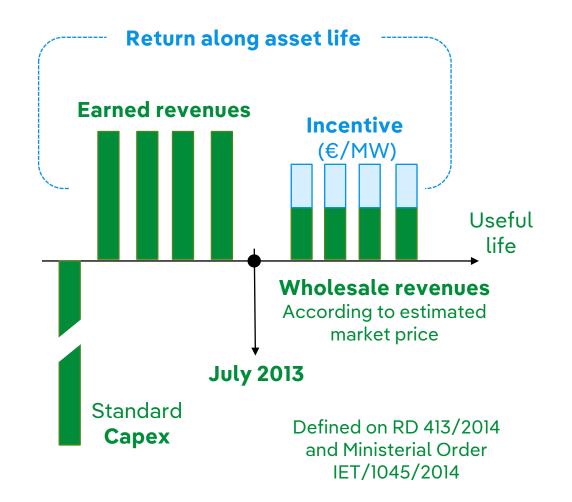
- The Specific Remuneration Scheme (SRS) established by RD 413/2014 is still in force for all renewables. In addition, in parallel, the **New Economic Regime for Renewable Energy (ERRE) through auctions has** been enabled.
- The SRS applies to all facilities installed before RDL 9/2013 and to all subsequent ones that have been awarded this SRS trough auctions.





### Renewables, cogeneration and waste: Royal Decree-Laws 9/2013 and 413/2014







# Renewables, cogeneration and waste: Law 24/2013, Royal Decree 413/2014 and Royal Decree Law 17/2019 and Royal Decree Law 6/2022

Allowed rate of return (before taxes) of 7.398% until 2031 for facilities in operation before RDL 9/2013. For facilities in operation after RDL 9/2013, allowed rate of return of 7.09% until 2025 following CNMC published WACC methodology

For those facilities in operation before RDL 9/2013 with any pending arbitration or judicial proceeding related to the modification of the Remuneration Regime after RD 661/2007, early termination of arbitration or judicial procedure or the waiver of the perception of compensation is a mandatory requirement prior to obtain the 7.398% allowed rate of return until 2031. (Royal Decree Law 17/2019)

- · Remuneration based on revenues from market participation, with a specific additional remuneration based in two terms:
  - RI: A term per unit of installed capacity (€/MW) that covers the investment costs of a standard installation that cannot be recovered by the sale of energy. Allowing the installation to achieve a reasonable return defined by the Government.
  - RO: A term for operation (€/MWh) that covers the difference between operating costs and the revenues from the market participation of such standard installation. The installation of renewable energies, cogeneration or waste will not receive such remuneration for operation as long as its income from the sale of electricity in the system is higher than its operating costs.

#### Parameter modification:

- **Every 6 years** all the parameters could be changed (including reasonable return) for the remaining useful life, except for the useful life and standard value of the initial investment of an installation;
  - Order TED/171/2020 establishes the remuneration parameters to estimate the regulated remuneration of renewables and cogeneration for the 2020-2025 regulatory period. It recognized a higher cost of CO2, a higher fuel price (which improves the RO of these plants by 14 €/MWh) and the remuneration for the cost of the System Operator (0.14 €/MWh)
- Every 3 years, and for the rest of the regulatory period, the estimation of revenues from the market will be reviewed, valuing the energy sold at market price based on market price evolution and the forecast for operating hours. Royal Decree Law 6/2022 establishes an additional exceptional review with effect from January 1, 2022. The review of parameters scheduled for 31/12/2022 was brought forward to 1/01/2022, dividing the current three-year semi-periodic remuneration period of 2020-2021-2022 into two periods: (1) 2020-2021 and (2) 2022
- At least annually, the values of remuneration for operation will be updated for those technologies whose operating costs depend essentially on the fuel price
- From 2023-26 semi-period onwards, the reference price for calculating the remuneration will be a basket of forward, daily and intraday market products prices. The forward indexation path is: 25% in 2023, 50% in 2024 and 75% from 2025 onwards). Additionally, the adjustment for price deviation in the market will no longer be applied, encouraging facilities to sell on PPA. (Royal Decree Law 6/2022 & Royal Decree Law 10/2022)



### New Economic Regime for Renewable Energy (ERRE) through auctions

• Royal Decree Law 23/2020 (24th June 2020) gave the Government the mandate to develop a new remuneration regime

In addition to the remuneration scheme established in RD-L 9/2013, the Government will develop another remuneration framework based on recognizing a long-term price for energy produced by new electricity production facilities, through auctions.

Royal Decree 960/2020 (4<sup>th</sup> November 2020) describes the new support system

This RD sets up a very flexible system to be concreted in various Ministerial Orders and Call Resolutions:

- **Product to be auctioned**: power (MW), energy (MWh) or a combination of both
- Variable to offer: participants will bid a long-term price for energy in €/MWh (10-15 years)
- Awarded price can be corrected by an exposition to the market price percentage
   [price received (h) = price awarded + % exposition \* (Daily Market Price (h) + Price Awarded)]
- Pay as bid auction with a maximum price and a possible risk price
- Participants must provide guarantees to participate
- Winners can install more capacity than the amount awarded in the auction

#### Ministerial Order TED/1161

- An indicative calendar for the next five years is published. Almost 20 GW will be auctioned in the period 2020 2025.
- Remuneration parameters are set per technology (min. and max. yearly equivalent hours)
- Auctioned product: installed power (kW)
- Facilities with storage: if they want to participate cannot charge buying electricity from the market.
- Only new facilities can participate (the earliest from start of works or first firm commitment to order equipment).
- Participation guarantees amount 60 €/kW (to be partially released if certain milestones are met)
- 50% of auctioned volume is the maximum quantity to be awarded to one company

#### There will be one Ministerial Order and Call Resolutions for each auction

- They will establish the volume to be auctioned for each technology. During 2021 and 2022 four auctions have taken place:
  - 1) January 2021: 3.043 MW awarded at the average price of 24,75 €/MWh
  - 2) October 2021: 3.123 MW awarded at the average price of 30,58 €/MWh
  - 3) October 2022: 177 MW was awarded (520 MW called for). The average price for biomass: 93,1 €/MWh and 53,9 €/MWh for PV.
  - 4) November 2022. 45.5 MW of wind power were awarded (3,300 MW called for) at the average price of 42,8 €/MWh, leaving the bidding deserted for PV sector.



# Administrative streamlining and simplification measures, which include a mechanism to speed up environmental processing for government projects

- Royal Decree-Law 14/2022 classifies hybridization with storage for metering and registration purposes under Type 3. Hydroelectric storage is also promoted by
  permitting modifications to existing hydroelectric facilities by adding electronic power stages, provided the changes allow for reversible operation of the facility,
  without the generation technology itself being considered modified and therefore without the need to obtain new access permits.
- Royal Decree-Law 17/2022, stablishes a maximum period of 15 days for the CNMC to prepare the mandatory report for the authorisation of facilities, with silence considered as approval and the possibility of a favorable report without detailed analysis if the project developer has already received another favorable report for the same technology in the last two years.
- Royal Decree-Law 18/2022 contain the following measures:
  - More than one facility may be installed in the same cadastral reference.
  - Direct lines: the obligation to belong to the same business group is waived for renewable production facilities that connect to a consumer.
  - Small power facilities: exonerates facilities of up to 500 kW (previously 100 kW in Low Voltage) from the Prior Administrative Authorisation and Construction Authorisation.
  - Free depreciation for investments in facilities for self-consumption of electricity, as well as facilities for thermal use for own consumption, provided that they use energy from renewable sources and replace facilities that used energy from non-renewable fossil fuel sources.
- Royal Decree-Law 20/2022 contain a final set of measures that simplified the procedures for renewable projects that fall within the competence of the State:
  - "New" renewable projects (that request Administrative Authorization until 12/31/2024) are subject to an environmental impact assessment procedure. It offers the possibility of issuing a favourable report by the environmental agency instead of being subject to DIA, except Red Natura, protected areas, marine environment, lines > 220 kV and > 15 km.
  - The new projects (that obtain a favourable report) are declared urgent for reasons of public interest and a simplified procedure applies to them.
  - Additionally, it extends the self-consumption limit in the proximity of 2,000 metres (previously 1,000 metres), for solar PV installations on roofs, industrial language and artificial structures (new).

### Renewables: Iberia



### Flagship projects: Alto Tâmega giga battery

### Largest hydroelectric project in the history of Portugal

- The project will give Iberdrola a 15% market share in Portugal
- 3 reservoirs: Gouvões (880 MW), Daivões (118 MW) and Alto Tâmega (160 MW)



**Location:** North Portugal

Installed capacity: 1,158 MW

Expected output: 1,800 GWh / year

Storage capacity: 20 GWh

Investment: EUR 1,500 M

COD: 998 MW in 2021 (Gouvões and Daivões)

160 MW in 2023 (Alto Tâmega)



Daivões concrete arch-dam, ALTO TÂMEGA / Portugal



# Top 1 renewable player

Onshore (I)	Region	MW	Year of Installation	Support Regime
Carland Cross Rep	England	20	1992	1.0 ROC/MWh
Coldham	England	16	2005	1.0 ROC/MWh
Lynemouth	England	26	2011	1.0 ROC/MWh
Coal Clough Repowering	England	16	2014	0.9 ROC/MWh
Corkey	Northern Ireland	5	1994	1.0 ROC/MWh
Rigged Hill	Northern Ireland	5	1994	1.0 ROC/MWh
Elliots Hill	Northern Ireland	5	1995	1.0 ROC/MWh
Callagheen	Northern Ireland	17	2006	1.0 ROC/MWh
Wolf Bog	Northern Ireland	10	2007	1.0 ROC/MWh
Barnesmore	Rep. of Ireland	15	1997	PPA (Expired)
Hagshaw Hill	Scotland	16	1995	1.0 ROC/MWh
Dun Law	Scotland	17	2000	1.0 ROC/MWh
Hare Hill	Scotland	13	2000	1.0 ROC/MWh
Beinn an Tuirc	Scotland	30	2002	1.0 ROC/MWh
Cruach Mhor	Scotland	30	2004	1.0 ROC/MWh
Black Law I	Scotland	97	2005	1.0 ROC/MWh
Beinn Tharsuinn	Scotland	30	2006	1.0 ROC/MWh
Black Law II	Scotland	28	2006	1.0 ROC/MWh
Wether Hill	Scotland	18	2007	1.0 ROC/MWh
Greenknowes	Scotland	27	2008	1.0 ROC/MWh
Hagshaw Hill Extension	Scotland	26	2008	1.0 ROC/MWh
Whitelee	Scotland	322	2008	1.0 ROC/MWh
Clachan Flats	Scotland	15	2009	1.0 ROC/MWh



## Top 1 renewable player

Onshore (II)	Region	MW <sup>(1)</sup>	Year of Installation	Support Regime
Dun Law Extension	Scotland	30	2009	1.0 ROC/MWh
Arecleoch	Scotland	120	2011	1.0 ROC/MWh
Mark Hill	Scotland	56	2011	1.0 ROC/MWh
Whitelee Extension	Scotland	217	2011	1.0 ROC/MWh
Beinn an Tuirc Ext	Scotland	44	2012	1.0 ROC/MWh
1iddleton	Scotland	12	2012	1.0 ROC/MWh
larestanes	Scotland	136	2013	1.0 ROC/MWh
Black Law Ext I	Scotland	45	2016	0.9 ROC/MWh
Black Law Ext II	Scotland	18	2016	0.9 ROC/MWh
Dersalloch	Scotland	69	2016	0.9 ROC/MWh
Ewe Hill	Scotland	14	2016	0.9 ROC/MWh
Ewe Hill Phase 2	Scotland	37	2017	0.9 ROC/MWh
Glen App	Scotland	22	2017	0.9 ROC/MWh
Hare Hill Extension	Scotland	30	2017	0.9 ROC/MWh
Kilgallioch	Scotland	239	2017	0.9 ROC/MWh
Beinn an Tuirc 3	Scotland	50	2020-2021	Corporate PPA
lalsary	Scotland	30	2020-2021	Corporate PPA
0&L (1)	Wales	31	1992	1.0 ROC/MWh

Total 1,986

<sup>(1) 15</sup> MW consolidated through equity method



### Top 1 renewable player

Offshore	MW	Year of Installation	Support Regime	Support Regime	
West of Duddon Sands	194 <sup>(1)</sup>	2014	ROC	2.0 ROC/MWh	
East Anglia I	714 <sup>(2)</sup>	2019	CfD	119.89 £/MWh (real 2012+CPI)/15 yrs	
Total	908				

Solar PV	Region	MW	Year of Installation	Support Regime		
Carland Cross (Hybrid)	England	10	2021	Corporate PPA		

Batteries	Region	MW	Year of Installation	Support Regime		
Carland Cross LEM	England	1	2020	Merchant/Ancillary Services		
Whitelee BESS	England	50	2020-2021	Merchant/Ancillary Services		
Barnesmore BESS	Rep. of Ireland	3	2021	DS3 (Volume Uncapped) (3)		
Gormans BESS	Rep. of Ireland	50	2021	DS3 (Volume Capped) (3)		
Total		104				

<sup>(1) 50%</sup> of total 389 MW. Full consolidation 194 MW.

<sup>(2) 100%</sup> of total 714 MW. Minority stake (40%) sold to Green Investment Group (GIG, Macquarie Group) in August 2019

<sup>(3)</sup> Delivering a Secure Sustainable Electricity System



# **Projects under construction**

Project	Туре	Type Region T		Year of Installation	Income Regime		
Coldham (Hybrid)	Solar (Hybrid)	England	9	2023	Corporate PPA		
Coal Clough (Hybrid)	Solar (Hybrid)	England	10	2024	Corporate PPA		
Harestanes BESS	Batteries	Scotland	50	2024	Merchant/ Ancilliary Services / 15 years Capacity Market		
Total			69				



#### **Renewables Obligation**

#### **Form of Control**

- Legacy scheme for incentivising investment in renewables across the UK.
- Demand-led scheme.
- Renewable Obligation Certificates (ROCs<sup>(1)</sup>) are issued to accredited generating stations for ~20 years depending on the station's accreditation date.

#### Remuneration

- Generators receive wholesale market plus ROC based on metered output.
- ROC level of support (banding) set by technology type and commissioning date:
  - Onshore wind 0.9 1 ROCs / MWh
  - o Offshore wind 1.8 2 ROCs / MWh
- The value of a ROC is based on buyout + recycle price. Buyout price is indexed annually to RPI<sup>(2)</sup> and is set at £59.01 for 2023/24. The recycle price is variable and is dependent on the level of ROC qualifying generation compared to demand from electricity suppliers. The recycle price can never be negative.

#### **Timing**

 Closed to onshore wind on 31 March 2016 and all other technologies on 31 March 2017.

#### **Contracts for Difference**

#### **Form of Control**

- Current mechanism for incentivising investment in renewables in GB.
- Allocated via annual competitive auctions.
- 15 year contract stabilising revenues at a price set in the auction (the Strike Price) linked to CPI<sup>(3)</sup>.

#### Remuneration

- Generator receives wholesale market plus the difference between the Strike Price and the market reference price (a measure of the average GB electricity market price) based on metered output.
- Generator pays back if the market reference price is higher than the Strike Price.
- AR4 (2022 auction) Strike Price for onshore wind £42.47/MWh, solar PV £45.99/MWh and offshore wind £37.35/MWh (2012 prices)

#### **Timing**

- CfD auctions held in 2014, 2017 and 2019 and 2022.
- Held annually from 2023 with AR5 commencing in March 2023.
- Open to onshore wind, solar PV, offshore wind and less-established technologies.

#### Offshore Transmission Regime

- Generators build the transmission assets and then transfer them to transmission operator at construction completion.
- Licences to operate new offshore transmission assets are allocated via competitive tender process.

<sup>(1)</sup> Operators can trade ROCs with other parties. ROCs are used by suppliers to demonstrate they have met their obligation to source an increasing proportion of the electricity they supply from renewable sources. Normally, a renewable generator will transfer the related ROCs through Ofgem's electronic registry when it sells power to an electricity supplier.

<sup>(2)</sup> Retail Price Index measures the change in the cost of a representative sample of retail goods and services, including the cost of housing. The measure has now generally superseded by CPI.

<sup>(3)</sup> Consumer Price Index is the official measure of inflation of consumer prices of the United Kingdom, based on 700 different goods and services excluding the cost of housing.



#### **Electricity System Operation**

#### **Form of Control**

- National Grid Electricity System Operator (NGESO) is the System Operator (SO) for the electricity transmission network in Great Britain. It is responsible (overseen by the regulator, Ofgem) for the day to day operation of the system, including system stability and balancing.
- The UK power markets are bilaterally traded markets. If a market participant generates or consumes more or less electricity than they have contracted for, they are exposed to the imbalance price, or 'cash-out', for the difference.

#### Renewables Can Participate in the Following Markets to Manage Grid Stability and Security of Supply

- **Balancing Market**: Market participants can provide offers and bids to the SO to help balance the system at very short notice. The balancing market is settled on a payas-bid basis.
- Ancillary Service Markets: Ancillary services are competitively tendered by the SO to support the continuous stable flow of electricity. The SO will contract a variety of services that are required to maintain grid stability and security, including fast frequency response, short term operating reserve and black start.
- Capacity Market: The Capacity Market is a market-wide pay-as-clear (£/kW/year) capacity auction. Auctions are held ahead of delivery (T-1 years and T-4 years) to procure sufficient capacity (interconnection, demand side response, generation) to meet a reliability standard of three hours loss of load expectation per year. For the T-4 auctions only, the clearing price is adjusted annually for CPI until the delivery year.

#### **Electricity Generator Levy**

- 45% levy on RO (Renewable Obligation) and corporate PPA backed sites from January 2023 until March 2028.
- Tax applies to revenues above £75MWh. Taxable revenues are net of trading and delivery costs with a £10M tax free allowance on top of net revenue.
- CfD backed assets, ROCs and other additional renewable incomes are excluded.

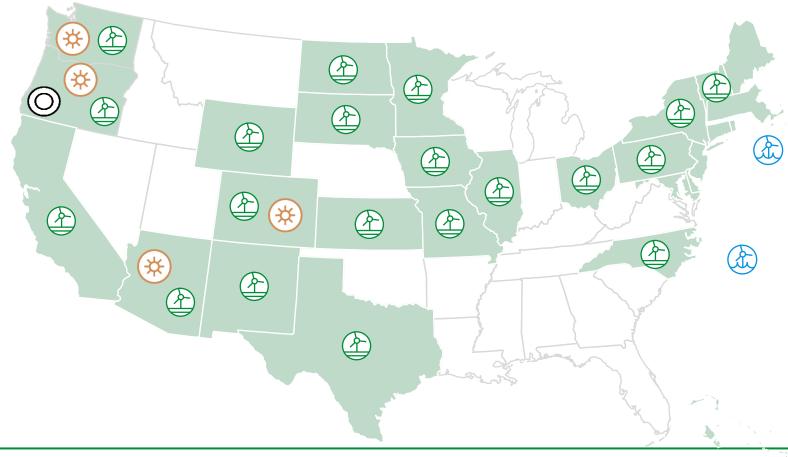
#### **UK Emissions Trading Scheme**

- The cost of carbon impacts on wholesale price of energy and therefore the achieved price of the renewables assets that receive ROCs.
- With effect from 1 January 2021, the UK Emissions Trading Scheme ("UK ETS") replaced the UK's participation in the equivalent EU Emissions Trading Scheme ("EU ETS").
- The cap for Phase I of the UK ETS was initially set at 5% below the UK's expected notional share of the EU ETS cap for Phase IV of the EU ETS (2021-2030). Over time, the cap will be reduced so the total emissions from each industry will fall.
- Participants buy and sell emissions allowances through auctions or secondary markets: the price of traded allowances was £69.15/tCO2 on 19 December 2022.

### Renewables: USA



3rd largest wind & solar operator in the U.S. with ~8.6 GW<sup>(1)</sup> installed; leading the development of large-scale offshore wind in the U.S.



<sup>~ 1.4</sup> GW<sup>(2)</sup> onshore & offshore under construction

Wind

Solar

**Thermal** 

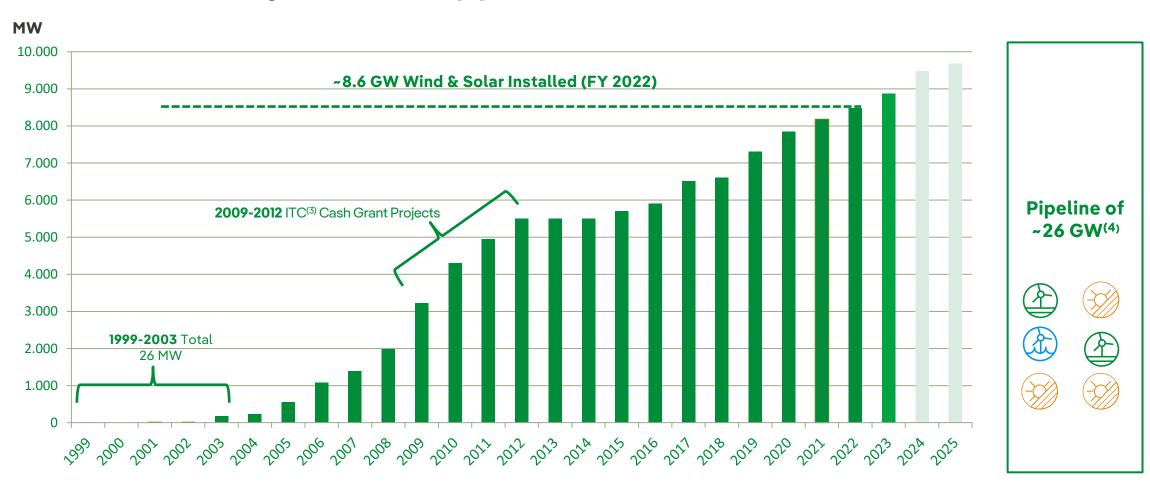
**Offshore Wind** 

<sup>(1)</sup> Includes joint ventures.

<sup>67</sup> 



### Renewables historical growth & future pipeline(1)(2)



- (1) Avangrid Renewables also owns 536 MW Cogeneration (2001), 100 MW Peaking (2009). Not included in this chart.
- (2) 2023-2025 estimates as of September 2022 LTO Update. 2025 includes 50% VWI.
- (3) 2009-2012 Projects funded with Section 1603 ITC cash grants (Renewables received ~\$2B in cash for ~\$6B investment; no PTCs).
- (4) Onshore Wind ~3.8 GW, Solar ~15.9 GW (including ~1.8 GW of batteries), & Offshore Wind ~5.9 GW

### Renewables: USA



### **Portfolio characteristics**

- ✓ Installed capacity of 9.5 GW<sup>(1)</sup> in 22 states & 8 electric power markets
- √ ~69% of installed capacity under long-term contract
- √ ~9.7 years average remaining PPA life
- √ Target 80-85% capacity under contract and/or hedged
- ✓ Weighted Average PPA price realized to date = \$45.9/MWh
- **✓** Escalators on ~42% of PPAs, some tied to inflation
- ✓ Offshore wind PPAs contain 2.5% fixed price escalators
- ✓ Production tax credits<sup>(2)</sup> are inflation adjusted
- ✓ Industry-leading energy management capabilities
- √ 24/7 operations, maintenance, dispatch, & load balancing for 72 operating wind & solar assets

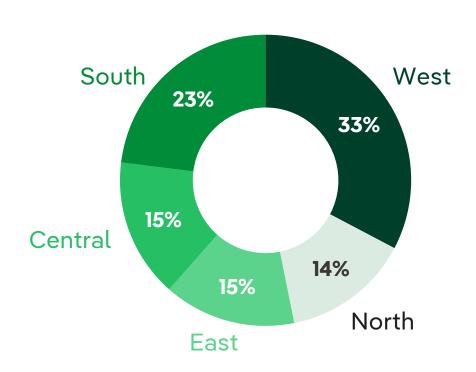
<sup>(1)</sup> Includes Wind & Solar (owned, JV & managed), GenConn 204 MW and Klamath 636 MW

<sup>(2)</sup> Rate for wind PTCs generated in 2022 is 2.6 cents/kWh. Previous year's PTC was 2.5 cents/kWh.

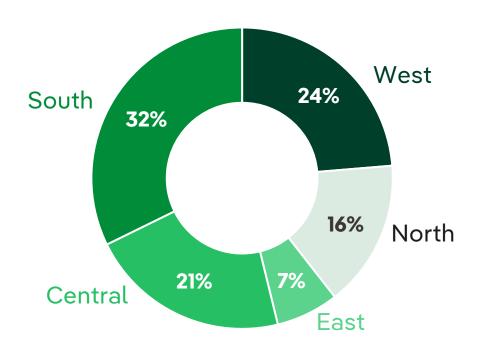


### **Portfolio characteristics**

Contracted = ~ 72%



### **Merchant = ~ 28%**



# Renewables: USA



### Wind facilities (1/3)

Location	Wind Project	Turbines	MW	COD	NERC Region	Contracted/Merchant	PTC/ITC	Tax Equity
Arizona	Dry Lake I	30 (Suzlon, S88, 2.1 MW)	63	2009	WECC	Contracted	ITC Cash Grant	
Arizona	Dry Lake II <sup>(1)</sup>	31 (Suzlon, S88, 2.1 MW)	33	2010	WECC	Contracted	ITC Cash Grant	
California	Dillon	45 (Mitsubishi, MWT62, 1.0 MW)	45	2008	CAISO	Contracted	PTC Expired	
California	Manzana	126 (GE, 1.5 SLE, 1.5 MW)	189	2012	CAISO	Contracted	ITC Cash Grant	
California	Mountain View III	34 (Vestas, V47, 0.66 MW)	22	2003	CAISO	Contracted	PTC	Tax Equity
California	Phoenix Wind Power	3 (NMicon-Vestas, NM48, 0.7 MW)	2	1999	CAISO	Merchant	PTC Expired	
California	Shiloh	100 (GE, 1.5 SLE, 1.5 MW)	150	2006	CAISO	Contracted	PTC Expired	
California	Tule	57 (GE, GE 2.3, 2.3 MW)	131	2018	CAISO	Contracted	PTC	
Colorado	Colorado Green	108 (GE, 1.5sle RP1.62, 1.62 MW)	162	2020	WECC	Contracted	PTC	
Colorado	Twin Buttes	50 (GE, 1.5 SLE, 1.5 MW)	75	2007	WECC	Contracted	PTC Expired	
Colorado		30 (Gamesa, G114, 2.1 MW)						
Colorado	Twin Buttes II	6 (Gamesa, 2 MW)	75	2017	WECC	Contracted	PTC	
		38 (Vestas, V136, 3.8 MW)						
Illinois	Otter Creek	4 (Vestas, V126, 3.4 MW)	158	2020	PJM	Contracted	PTC	Tax Equity
Illinois	Providence Heights	36 (Gamesa, G87, 2.0 MW)	72	2008	PJM	Merchant	PTC Expired	
Illinois	Streator Cayuga Ridge South	150 (Gamesa, G87, 2.0 MW)	300	2010	PJM	Merchant	ITC Cash Grant	
lowa	Barton	79 (Gamesa, G87, 2.0 MW)	158	2009	MISO	Partially Contracted	ITC Cash Grant	
lowa	Flying Cloud	29 (GE, 1.5S, 1.5 MW)	44	2003	MISO	Contracted	PTC Expired	
lowa	New Harvest	50 (Gamesa, G87, 2.0 MW)	100	2012	MISO	Contracted	ITC Cash Grant	
lowa	Top of Iowa II	40 (Gamesa, G87, 2.0 MW)	80	2007	MISO	Contracted	PTC Expired	
lowa	Winnebago I	10 (Gamesa, G83, 2.0 MW)	20	2008	MISO	Contracted	PTC Expired	
Kansas	Elk River	100 (GE, 1.5 SLE, 1.5 MW)	150	2005	SPP	Contracted	PTC Expired	
Massachusetts	Hoosac	19 (GE, 1.5 SLE, 1.5 MW)	29	2012	ISO-NE	Merchant	ITC Cash Grant	
Minnesota	Elm Creek I	66 (GE, 1.5 SLE, 1.5 MW)	99	2008	MISO	Contracted	PTC Expired	

# Renewables: USA



## Wind facilities (2/3)

Location	Wind Project	Turbines	MW	COD	NERC Region	Contracted/ Merchant	PTC/ITC	Tax Equity
Minnesota	MinnDakota	100 (GE, 1.5sle, 1.5 MW)	150	2008	MISO	Contracted	PTC Expired	
Minnesota	Trimont	67 (GE, 1.5sle RP1.62, 1.6 MW)	107	2020	MISO	Contracted	PTC	
Minnesota	Elm Creek II	62 (Mitsubishi, MWT95, 2.4 MW)	149	2010	MISO	Merchant	ITC Cash Grant	
Minnesota	Moraine I	34 (GE, 1.5 S, 1.5 MW)	51	2003	MISO	Merchant	PTC Expired	
Minnesota	Moraine II	33 (GE, 1.5 SLE, 1.5 MW)	50	2009	MISO	Contracted	ITC Cash Grant	
Missouri	Farmers City	73 (Gamesa, G87, 2.0 MW)	144	2009	MISO	Merchant	ITC Cash Grant	
New Hampshire	Groton	24 (Gamesa, G87, 2.0 MW)	48	2012	ISO-NE	Merchant	ITC Cash Grant	
New Hampshire	Lempster	12 (Gamesa, G87, 2.0 MW)	24	2008	ISO-NE	Contracted	PTC Expired	
New Mexico	El Cabo	149 (Gamesa, G114, 2.1/2 MW)	298	2017	CAISO	Contracted	PTC	Tax Equity
New Mexico	La Joya	35 (Gamesa, G114, 2.6 MW) 76 (GE, GE127, 2.82 MW)	306	2021	WECC	Contracted	PTC	
New York	Hardscrabble	37 (Gamesa, G90, 2.0 MW)	74	2011	NYISO	Merchant	ITC Cash Grant	
New York	Maple Ridge I <sup>(1)</sup>	70 (Vestas, V82, 1.65 MW)	116	2006	NYISO	Merchant	PTC Expired	
New York	Maple Ridge II <sup>(1)</sup>	27 (Vestas, V82, 1.65 MW)	45	2006	NYISO	Merchant	PTC Expired	
New York	Roaring Brook	20 (Gamesa, 5-G114/15-SG145, 2.625/4.2/4.5 MW)	80	2021	NYISO	Contracted	PTC	
North Carolina	Amazon Wind Farm U.S. East	104 (Gamesa, G114, 2.0 MW)	208	2017	PJM	Contracted	PTC	
North Dakota	Rugby	71 (Suzlon, S88, 2.1 MW)	149	2009	MISO	Partially Contracted	ITC Cash Grant	
Ohio	Blue Creek	152 (Gamesa, G90, 2.0 MW)	304	2012	PJM	Contracted	ITC Cash Grant	
		41 (Vestas, V150, 4.3 MW)						
Oregon	Golden Hills	10 (GE, GE116, 2.5 MW)	201	2022	WECC	Contracted	PTC	Tax Equity
Oregon	Hay Canyon	48 (Suzlon, S88, 2.1 MW)	101	2009	WECC	Contracted	ITC	
Oregon	Klondike I	16 (GE, 1.5 S, 1.5 MW)	24	2001	WECC	Merchant	PTC Expired	
Oregon	Klondike II	50 (GE, 1.5 SLE RP1.62, 1.62 MW)	81	2005	WECC	Partially Contracted	PTC	
Oregon		44 (Siemens, 2.3 MW) 80 (GE, 1.5 SLE, 1.5 MW)	224	2007	WECC	Partially Contracted	DTO E	
	Klondike III	1 (Mitsubishi, 2.4 MW)	-				PTC Expired	

<sup>(1)</sup> Jointly owned; capacity amounts represent only Renewables' share of the facility



### Wind facilities (3/3)

Location	Wind Project	Turbines	MW	COD	NERC Region	Contracted/ Merchant	PTC/ITC	Tax Equity
Oregon	Klondike IIIa	51 (GE, 1.5 SLE, 1.5 MW)	76,5	2008	WECC	Merchant	PTC Expired	
Oregon	Leaning Juniper II	74 (GE, 1.5 MW); 42 (97812, S88, 2.1 MW)	199	2010	WECC	Partially Contracted	ITC Cash Grant	
Oregon	Montague	56 (Vestas, V136/V126, 3.6/3.45 MW)	201	2019	WECC	Contracted	PTC	Tax Equity
Oregon	Pebble Springs	47 (Suzlon, S88, 2.1 MW)	99	2009	WECC	Contracted	ITC Cash Grant	
Oregon	Star Point	47 (Suzlon, S88, 2.1 MW)	99	2010	WECC	Contracted	ITC Cash Grant	
Pennsylvania	Casselman	23 (GE, 1.5sle, 1.5 MW)	35	2007	PJM	Contracted	PTC Expired	
Pennsylvania	Locust Ridge I	13 (Gamesa, G87, 2.0 MW)	26	2007	PJM	Contracted	PTC Expired	
Pennsylvania	Locust Ridge II	50 (Gamesa, G83, 2.0 MW)	100	2009	PJM	Contracted	ITC Cash Grant	
Pennsylvania	South Chestnut	22 (Gamesa, G90, 2.0 MW)	44	2012	PJM	Contracted	ITC Cash Grant	
South Dakota	Buffalo Ridge I	24 (Suzlon, S88, 2.1 MW)	50	2009	MISO	Contracted	PTC Expired	
South Dakota	Buffalo Ridge II	105 (Gamesa, G87, 2.0 MW)	210	2010	MISO	Merchant	ITC Cash Grant	
South Dakota	Coyote Ridge <sup>(1)</sup>	35 (GE, 2.52 MW); 4 (GE, 2.3 MW)	19	2019	MISO	Contracted	PTC	
South Dakota	Tatanka <sup>(1)</sup>	50 (GE, GE127, 2.82 MW); 6 (GE, GE116, 2.3 MW)	23	2021	MISO	Partially Contracted	PTC	
Texas	Baffin	101 (Gamesa, G97, 2.0 MW)	202	2016	ERCOT	Merchant	PTC	
Texas	Barton Chapel	60 (Gamesa, G87, 2.0 MW)	120	2009	ERCOT	Merchant	ITC Cash Grant	
Texas	Karankawa	22 (GE, 2.3 MW); 9 (GE, 2.5 MW); 93 (GE, 2.52 MW)	307	2019	ERCOT	Contracted	PTC	Tax Equity
Texas	Patriot	58 (Vestas, V136, 3.6 MW); 5 (Vestas, V126, 3.45 MW)	226	2019	ERCOT	Merchant	PTC	Tax Equity
Texas	Peñascal	84 (Mitsubishi, MWT92, 2.4 MW)	202	2009	ERCOT	Partially Contracted	ITC Cash Grant	
Texas	Peñascal II	83 (Mitsubishi, MWT93, 2.4 MW)	199	2010	ERCOT	Partially Contracted	ITC Cash Grant	
Vermont	Deerfield	15 (Gamesa, G87/G97, 2.0 MW)	30	2017	ISO-NE	Contracted	PTC	
Washington	Big Horn I	133 (GE, 1.5sle, 1.5 MW)	200	2006	WECC	Contracted	PTC Expired	
Washington	Big Horn II	25 (Gamesa, G90, 2.0 MW)	50	2010	WECC	Contracted	ITC Cash Grant	
Washington	Juniper Canyon	63 (Mitsubishi, MWT95/2.4, 2.4 MW)	149	2011	WECC	Merchant	ITC Cash Grant	

Total 8,061



### **Solar & Thermal facilities**

Location
Pinal County, Arizona
Alamosa County, Colorado
Prineville, Oregon
Sherman County, Oregon
Klickitat, Washington
Oregon
Klamath Falls, Oregon
Klamath Falls, Oregon

Project	Туре	MW	COD	NERC Region	Contracted/ Merchant	PTC/ITC
Copper Crossing Solar Ranch <sup>(1)</sup>	Solar	12	2011	WECC	Contracted	ITC Cash Grant
San Luis Valley Solar Ranch	Solar	35	2012	WECC	Contracted	ITC Cash Grant
Gala Solar	Solar	70	2017	WECC	Contracted	ITC Cash Grant
Wy'East Solar	Solar	13	2018	WECC	Contracted	ITC Cash Grant
Lundhill Solar	Solar	194	2022	WECC	Contracted	TBD
Montague Solar (2)	Solar	185	2023	WECC	Contracted	ITC
Klamath Cogeneration	Thermal	536	2001	WECC	Merchant	n/a
Klamath Peakers	Thermal	100	2002	WECC	Merchant	n/a

Total 1,145

<sup>(1)</sup> Jointly owned; capacity amounts represent only Renewables' share of the facility
(2) MW installed as of December 2022, corresponding to a project under construction with COD in 2023 (211 MW)



### **Projects under construction**

Project	Туре	State	Total MW	MW installed as of Dec´22	MW pending	COD	Income Regime
Midland	Onshore	Illinois	106	106	0	2023	PPA
Bakeoven Solar	Solar PV	Oregon	80		80	2023	PPA
Daybreak solar	Solar PV	Oregon	189		189	2023	PPA
Montague Solar	Solar PV	Oregon	211	185	26	2023	PPA
Vineyard Wind(1)	Offshore	Massachusetts	806		806	2024	PPA + Recs
Great Bear	Solar PV	Ohio	64		64	2024	PPA
Total			1,456	291	1,165		



### Renewables P&L Components

- + Wind & Solar (~90% of Renewable Gross Margin in 2021)
  - ✓ Installed Capacity (MW) \* Capacity Factor \* Sale Price
  - ✓ Assumptions in Long Term Outlook 2023-2025 as of September 2022:
    - Installed Capacity:
      - Increases by 1.1 GW up to 9.7 GW at year-end 2025
    - Average Net Capacity Factor:
      - Onshore Wind Existing ~29%
      - Onshore Wind New ~41%
      - Solar Existing ~20%
      - Solar New ~20%
      - Offshore Wind ~51%
    - Average Sale Price
      - Wind Existing PPA ~\$42/MWh
      - Wind New PPA ~\$34/MWh
      - Solar Existing PPA ~\$86/MWh
      - Solar New PPA ~\$44/MWh
      - Merchant ~\$37/MWh
    - Growth financed with tax equity (5-year recapture)
- + Thermal & other [includes biomass contract revenues, transmission sales and limited proprietary trading] (~10% of Renewable Gross Margin in 2021)
  - ✓ Include Klamath (used to firm & balance loads for certain PPA contracts in the Northwest), biomass (contractual purchase of energy & resale from biomass facility owned by third party), transmission sales & limited proprietary power trading

Gross Margin



### Renewables P&L Components

O&M Expenses

• 1/3 related to non-wind operational aspects (growth, thermal, corporate costs ...)

Depreciation

• ~28 year weighted average investment life for windfarms on a straight-line basis, net of ITC amortization

Other Taxes Expense

Property, Franchise, and Payroll Taxes

Other Income & Deduction

• Consists of: Finance income (primarily capitalized interest) combined with gains on non-current assets, offset by other deductions (non-service pension costs & charitable giving)

Interest Expense

Financial expenses on intercompany debt and any other borrowings;
 excludes TEI financing costs, included within Minority interest under HLBV accounting

Income Tax

- MACRs tax treatment allows wind & solar assets to be **depreciated over 5 years**, recorded in the tax line and captured through deferred tax assets
- ITC & PTC can only be utilized at consolidated level & after NOLs are monetized
  - ✓ PTCs generated over 10 years and can be used over 20 years
  - ✓ AGR is considered one taxpayer. After the NOLs are monetized, annual PTC utilization is limited to 75% of the consolidated tax liability

Minority Interest • Minority Interest driven by HLBV accounting for tax equity structures; the HLBV method allocates earnings to the noncontrolling interest, which considers the cash & tax benefits provided to the tax equity investors



### **Accounting criteria**



#### P&L

- ✓ GAAP (10Q,10K): For periods after 1/1/2018, PTCs with Tax Equity are indirectly included in Net income/(loss) attributable to non-controlling interests and retained PTCs are booked in the income tax line. Prior to that, PTCs with Tax Equity were booked in revenues and retained PTCs in the income tax line.
- ✓ IFRS (projections): All PTCs are booked in revenues.

#### Balance Sheet

- ✓ For periods after 1/1/2018, PTCs with Tax Equity reduce 'Non-controlling interests' in the Equity section. In prior periods, PTCs with Tax Equity reduced 'Tax equity financing arrangements VIEs' in the Non-current Liabilities section.
- ✓ Retained PTCs reduce deferred income taxes.

#### Cash Flow

- ✓ Retained PTCs hit the 'Deferred taxes' line in Cash Flow from Operating Activities.
- ✓ For periods after 1/1/2018, PTCs with TEI impact the 'Distributions to noncontrolling interests' line under Cash Flow from Financing Activities. For prior periods, PTCs with TEI impacted 'Payments on tax equity financing arrangements'. These lines include payments of PTCs and remaining debt/equity.

ITC

#### · P&L

- ✓ GAAP (10Q,10K): Booked on D&A (they lower D&A), below EBITDA
- ✓ IFRS (projections): Booked as Other Operating Income, above EBITDA

#### Cash Flow

✓ ITCs provide an initial deferred tax benefit equal to 50% of the total ITC, recognized in year one

Tax Equity

- Wind farms under tax equity structures are fully consolidated in the consolidated balance sheet & the results of their
  operations (including depreciation) are reported in the consolidated statement of operations. Investors share is reported as
  Minority Interest
- Recorded as a **financing obligation** & amortized with the allocation to the tax equity investor of its share of cash distributions, MACRS, PTCs, & the tax impact of taxable income

### Renewables: Mexico



### **Facilities**

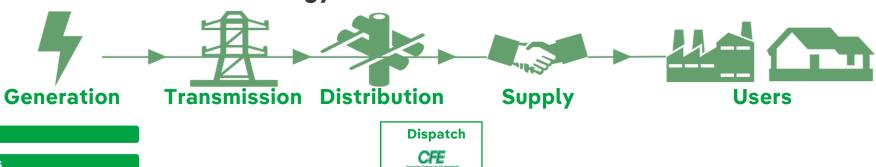
Onshore	State	MW	Year of Installation	Income Regime
La Ventosa	Oaxaca	80	2008	Commercial PPA (Self-supply)
Bee Ni Stipa	Oaxaca	26	2010	Commercial PPA (Self-supply)
La Venta III (1)	Oaxaca	103	2011	PPA (Independent Power Producer)
La Ventosa (ampliación)	Oaxaca	22	2013	Commercial PPA (Self-supply)
Dos Arbolitos	Oaxaca	70	2015	Commercial PPA (Self-supply)
Pier II	Puebla	66	2015	Commercial PPA (Self-supply)
Santiago Eólico	Guanajuato	105	2021	Commercial PPA (Self-supply)
Pier	Puebla	221	2021	Commercial PPA (Self-supply)

Solar PV	State	MW	Year of Installation	Income Regime
Santiago	San Luis de Potosí	232	2018	Commercial PPA
ermosillo	Sonora	137	2018	Commercial PPA
Cuyoaco	Puebla	274	2020	Commercial PPA

### Renewables: Mexico



### Regulatory framework: before the Energy Reform of 2013



CFE

**Private Generators** 

**Independent Energy Producer** 

**Self Supply** 

Cogeneration

**Exports** 

**Imports** 

#### **Applicable laws**

Ley de Servicio Público de Energía Eléctrica (LSPEE)

Sustainability and renewable generation

**Regulatory bodies** 



Private generation for self supply or supply to CFE

According to this law, reformed in 1992, private companies were allowed to participate in the following ways:

- Independent Power Production (sale to CFE through PPAs)
- Small production, self-supply (autoabasto) and cogeneration (sale to private customers)

The Law for the Use of Renewable Energies and the Financing of Energy Transition, which allows the participation of renewables and efficient cogeneration through the mechanism of self-supply.

The Energy Regulatory Commission (CRE) granted permits for electricity generation under the allowed schemes.

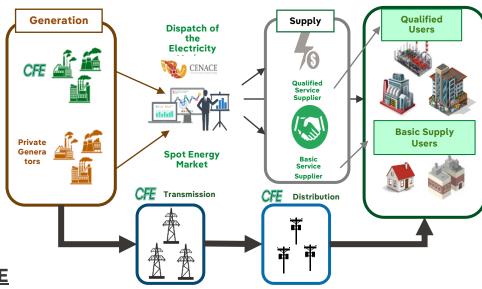
# Regulatory framework: after the Energy Reform of 2013 <u>Applicable laws</u>

**Constitutional Reform**: Allows private participation in generation and supply activities. Transmission and distribution continue to be a public service provided by CFE.

**Ley Industria Eléctrica (LIE)**: Establishes a new model for the electricity sector based on free competition in generation services and supply to qualified users (industrials). CFE exclusively provides transmission and distribution services and generation and supply to retail users (domestic). It defines the structure of the new Wholesale Electricity Market (*MEM - Mercado Eléctrico Mayorista*). An Amendment to the LIE was published. Currently, the Reform is Definitely Suspended with general effects until several *Amparos* are granted (Next slide).

**Ley de Transición Energética:** Defines the legal basis to promote a transformation towards a sustainable energy and economic model in the long term.

#### **Wholesale Electricity Market Structure**



#### **Basics of the LIE**

Respect the rights of Legacy Permits (LSPEE)

Liberalisation of the electricity supply

**Green Energy Certificates (CEL)** 

Wholesale Electricity Market (MEM)

Permits granted under the LSPEE will be respected in all its terms and conditions. In any case, these permits may voluntarily migrate to the Wholesale Electricity Market (MEM).

Private companies are allowed to provide supply services to qualified users (industrials). The Amendment to the LIE of 2021 establishes new criteria for the issuance and repeal of permits, introducing broad discretion by submitting it to planning criteria.

Main instrument together with auctions to promote investments in clean energy.

Allows the system to reach the target of having 35% of clean energy generation by 2024. The Amendment to the LIE of 2021 modifies the criteria for the issuance of CEL.

Market that operates through Market Bases. The Amendment to the LIE of 2021 modifies the order of dispatch of power plants in the 8 Market withouth considering economic criteria.

### Renewables: Mexico



### Regulatory framework: recent regulatory developments

Electricity Industry Law (LIE) reform

**March 2021** 

Modifies the electricity dispatch order

Issuance of CELs to CFE plants in operation before the 2013 Reform.

Reviews IPP (PIE) contracts

Abolishes self supply permits

Reform currently suspended due to the judicial processes brought by individuals and the precautionary measures granted by Courts, since the proposed amendments distort free competition and slow the growth of renewable energies.

#### T-MEC Consultations regarding Mexico Energy Policy July 2022

In July 2022, the US and Canada initiated consultations with Mexico under the USMCA regarding potential energy commitment violations. Results of ongoing consultations are anticipated in 2023.

#### Mexico announces new climate commitments in the COP 27 November - 2022

In November 2022, Mexico modified its Nationally Determined Contribution. The government of Mexico has committed to reduce CO<sub>2</sub> emissions by 35% in 2030.

#### SENER and CRE have resumed processes and procedures suspended due to COVID-19 - March 2023

SENER and CRE have resumed legal schedules regarding regulatory procedures suspended due to the COVID-19 pandemic, March 2020 and January 2021, respectively.

Self-supply

### **Regulatory framework**

•

- Supply of energy and capacity to self-supply partner (industrial clients) under different criteria, depending on each client:
  - o Discount over regulated tariff (Suministro Básico)
  - o PPA Fixed price for contracted capacity, etc.
- On May 2020, CRE approved an increase on renewable transmission tariffs (porteo estampilla). Iberdrola is still waiting for the resolution of the *Amparo* filed against the regulation. Meanwhile, Iberdrola is protected by the precautionary measures granted by Court to paralyze the application of the regulation.

• Generation to satisfy the needs of Iberdrola Clientes (qualified supplier) with hedging energy contract of the wholesale market products (*Mercado Eléctrico Mayorista - MEM*):

Energy

**Ancillary services** 

**Green certificates (CELs)** 

Capacity

Clean Energy

• These products can be sold through bilateral contracts or in the market

Clean Energy certificates (CEL)



1MWh = 1CEL

- In 2019, the rules were modified so that Legacy Power Plants of CFE can receive CEL
- The Amendment to the LIE changes the criteria for granting the CEL, regardless of property or COD.
- Suppliers, Qualified Suppliers participating in the MEM, who are isolated self-supplied and *Centros de Carga* are obliged to acquire them to comply with a percentage of clean energy supplied
- The CEL target of 2023 is the same as in 2022 due to a judicial suspension related to changes to the electricity industry law.

CEL requirement	Targets
2018: 5%	2018: 25%
2019: 5.8%	2021: 30%
2020: 7.4%	2024: 35%
2021: 10.9%	2033: 39.9%
2022: 13.9%	2050: 50%
2023: 13.9%	2050: 50%



### **Onshore facilities**

Onshore
Caetité I
Caetité II
Caetité III
Canoas
Lagoa 1
Lagoa 2
Rio do Fogo
Mel II
Arizona I
Calango I
Calango II
Calango III
Calango IV
Calango V
Calango VI
Santana I
Santana II
Complejo eólico de Chafariz
Complejo eólico de Oitis

State	MW IBE	COD	Income Regime
Bahia	30	2012	Commercial PPA
Bahia	30	2012	Regulated PPA 2010/A-3
Bahia	30	2012	Regulated PPA 2010/A-3
Paraíba	32	2017	Regulated PPA 2014/A-5
Paraíba	32	2017	Regulated PPA 2014/A-5
Paraíba	32	2017	Regulated PPA 2014/A-5
Rio Grande do Norte	49	2006	Regulated PPA PROINFA
Rio Grande do Norte	20	2012	Regulated PPA 2010/A-3
Rio Grande do Norte	28	2013	Regulated PPA 2010/A-3
Rio Grande do Norte	30	2013	Regulated PPA 2010/A-3
Rio Grande do Norte	30	2013	Regulated PPA 2010/A-3
Rio Grande do Norte	30	2013	Regulated PPA 2010/A-3
Rio Grande do Norte	30	2013	Regulated PPA 2010/A-3
Rio Grande do Norte	30	2013	Regulated PPA 2010/A-3
Rio Grande do Norte	30	2016	Regulated PPA 2014/A-3
Rio Grande do Norte	30	2016	Regulated PPA 2014/A-3
Rio Grande do Norte	24	2016	Regulated PPA 2014/A-3
Paraíba	471	2021	Regulated & Commercial PPAs
Piauí	407	2022-2023	Regulated & Commercial PPAs

Total

1,394

	Solar PV	
Luzia 3		
Luzia 2		

State	COD	Income Regime
Paraiba	2022	Regulated & Commercial PPAs
Paraiba	2023	Regulated & Commercial PPAs

**Total** 



### **Hydro facilities**

Hydro	State	Total MW	MW attributable to IBE <sup>(1)</sup>	COD	Income Regime
Itapebi	Bahia	462	462	2003	Commercial PPA
Corumba III	Goias	96	68	2009	Regulated PPA
Baguari	Minas Gerais	140	71	2009	Regulated PPA
Dardanelos	Mato Grosso	261	133	2011	Regulated PPA
Telespires	Pará / Mato Grosso	1,820	928	2016	Regulated & Commercial PPAs
Belo Monte	Pará	11,233	1,123	2019	Regulated & Commercial PPAs
Baixo Iguazú	Paraná	350	245	2019	Regulated & Commercial PPAs
Total		14,362	3,031		



### **Projects under construction**

Project	Туре	State	Total MW	MW installed as of Dec´22	MW pending	COD	Income Regime
Complejo eólico de Oitis	Onshore	Piauí	567	407	160	2022-2023	Regulated & Commercial PPAs
Luzia	Solar PV	Paraiba	75	69	6	2023	Regulated & Commercial PPAs
Total			641	476	166		



### Regulatory framework

# Wind

# Concession process

- Authorization request within ANEEL
- Competitive auctions

# Concession/ authorization term

- 30 35 years
- Expiry date:
  December 2031
  until December
  2054(1)

#### Renewal

 Possible renewal at the discretion of the Granting Authority (ANEEL)

#### Revenue

- 20-year PPAs to DisCos through competitive auctions with fixed prices yearly adjusted by inflation
- Bilateral contracts at free market

#### Hydro

 Competitive auctions

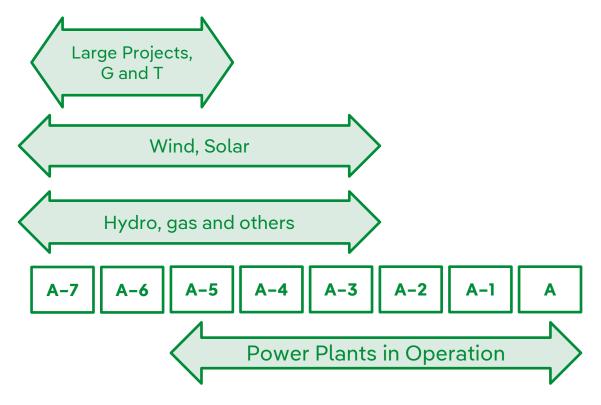
- 35 years
- Expiry date: May 2039 until December 2049<sup>(1)</sup>
- Possible renewal at the discretion of the Granting Authority (ANEEL)<sup>(2)</sup>
- Possible indemnity after the end of the concession.
   Depending on the Hydro Plant, the Basic Project may or may not be included
- 30-year PPAs to DisCos through competitive auctions with fixed prices yearly adjusted by inflation
- Bilateral contracts at free market

Note: Information on auction results: <a href="https://www.gov.br/aneel/pt-br/centrais-de-conteudos/relatorios-e-indicadores/leiloes">https://www.gov.br/aneel/pt-br/centrais-de-conteudos/relatorios-e-indicadores/leiloes</a>

- (1) Refers to the first and last asset to have its authorization expired, considering operating and pre-operating assets (under construction)
- (2) Exception to Belo Monte, Teles Pires and Baixo Iguaçu without contractual provision



### **Energy Auctions for Regulated Market (ACR)**



- Previous Environmental License obtained by the Government (1)
- Long-Term Contracts with Distributors
- Price set at auction and yearly adjusted by inflation

### **Neoenergia's Strategy**

- Do not participate on new structuring projects
- ✓ Be the controlling shareholder: operate and consolidate the business

**Total** 



### Facilities (1/2)

Onshore	MW	Year of Installation	Support Regime
Australia	880	2005 - 2021	Market + PPA
Cyprus	20	2011	FiT
Greece	403	1998-2022	Merchant/FiT/FiP
France	118	2007 - 2019	FiT + CfD + Merchant
Hungary	158	2008-2011	FiT
Portugal	92	2005-2009	FiT cap/floor
Romania	80	2011	PPA+ Green Cert.
Poland	134	2021-2022	PPA+ Green Cert.

1,885

Solar	MW	Year of Installation	Support Regime
Greece	6	2006-2012	FiT
Australia	232	2021-2022	C&I / PPA and LGCs
Italy	23	2021-2022	Merchant + PPA
Portugal	86	2021-2022	Merchant - Toll (15 yr. duration)
Total	348		



### Facilities (2/2)

Offshore	Country	MW	Year of Installation	Support Regime	Support level
Wikinger	Germany	350 <sup>(1)</sup>	2017	Compressed tariff	194 €/MWh / 8yrs + 154€/MWh / c.4 yrs (flat)

Batteries	MW	Year of Installation	Support Regime
Australia	75	2019-2021	Merchant + Firming



### **Projects under construction**

Project	Туре	Country	Total MW	MW installed as of Dec´22	MW pending	COD	Income Regime
Rokani	Onshore	Greece	18	18	0	2023	FiP
Askio II	Onshore	Greece	38	25	13	2023	FiP
Flyers Creek	Onshore	Australia	146	-	146	2023	PPA + Merchant
Korytnica II	Onshore	Poland	50	22	29	2023	PPA + CfD + Merchant
							Merchant - Toll (15 yr.
Algarve y Setúbal	Solar PV	Portugal	187	86	101	2022-2023	duration)
Avonlie	Solar PV	Australia	245	125	120	2023	C&I / PPA and LGCs
Taquinia	Solar PV	Italia	33	-	33	2024	Merchant + PPA
Montefiascone	Solar PV	Italia	7	-	7	2023	Merchant + PPA
Total			724		447		



### Regulatory support framework

#### Romania

#### Merchant

PPA signed Alive Capital (Jan-Jun 2023, possibility for extension)

#### **Green Certificates**

- Defined by Law No. 220/2008 with subsequent amendments.
- Wind farms receive 1 GC per MWh produced during 15 years, with a GC floor price of 29.4€ and a cap price of 35€.

#### Hungary

#### Feed-in-Tariff (FiT)

- Defined by Decree No. 389/2007 with subsequent amendments.
- Electricity sold at fixed tariff during maximum 15 years, at fixed price updated annually with inflation. No possibility to exit the support scheme (may move to Cfd scheme)

#### France

#### **Contract for Difference (CfD)**

- Since 2016, defined by the Energy Code, articles L314-18 and following
- The duration of the contract is 20 years
- CfD attributed through auctions (via an open desk only for smallest onshore wind projects ≤ 6 turbines)

#### Feed-in-Tariff (FiT)

- Previous FiT defined under Arrêté 17/06/2014 and the Energy Code, benefits to onshore wind projects commissioned until 2016
- Support duration of 15 years
- Tariff is indexed, updated annually in November.

#### Cyprus

#### Feed-in-Tariff (FiT)

 Defined under Law No. 112/2013 (later modified by 212/2015 and 157/2015). The feed-in tariff is limited to 20 years but it may be extended for 5+5 years under some conditions.

#### Greece

#### Feed-in-Tariff (FiT)

- Defined by Law No. 3468/2006 (currently under Law No. 4254/2014).
   This scheme expired on 31 December 2015.
- The FiT agreement is limited to 20 years and the FiT price depends on project details (technology, size, capex subsidy, installation on mainland or isolated islands, etc.). Due to reduction of FiT, under some conditions, it may be extended by additional 7 years with a revision on FiT price and a cap of NEHs. Projects have no market participation obligations

#### Feed-in-Premium (FiP)

- Defined by Law No. 4414/2016.
- Windfarms >6MW and PV projects ≥ 500kW enter into 20y FiP PPAs, awarded through neutral competitive tenders.
- Windfarms ≤6MW and PV projects <500kW enter into 20 year FiP PPAS with administrative defined prices till 31.12.2024.



### Regulatory support framework

#### **Portugal**

#### Feed-in-Tariff (FiT)

- Defined by DL 339-C/2001 and DL 35/2013
- FiT under DL 339-C/2001 limited to 15 years. Under Option B of DL 35/2013 (reinterpreted by order 6304/2021), wind farms opt to receive a FiT extension for 7 years with floor of 66,03€/MWh and cap of 87,44€/MWh (June 2020 prices).

#### Merchant + fee (Solar plants)

- Defined by Leilão 2019 rules
- Merchant (wholesale market or PPA) and payment of a fee (€/MWh)
  offered in the auction during 15 years
- By DL 15/2022 test period up to one year (delaying the start of fee payment)
- By DL72/2022 extension of test period one year more

#### **Australia**

#### **Green Certificates (GC)**

- Defined by Renewable Energy (Electricity) Act 2000 with subsequent amendments.
- Wind farms receive 1 GC per MWh produced out to 2030. Utilities must purchase GCs for ~20% of load, up to an effective cap price of AUD\$92/GC.

#### Long-Term Energy Service Agreement (LTESA) contracts

- Defined by Electricity Infrastructure Investment Act 2020
- Renewables can bid for "LTESA" contracts, comprising series of 2-year options for CFDs at a price sufficient to underwrite a portion of the project cost.

#### **Poland**

#### **Green Certificates**

- In 2005, Poland introduced this support scheme, which is regulated by amendments to the 1997 Energy Law with a RES quota set for each year. These put in place a green certificate system, with obligations for distribution system operators to hold an annually determined percentage of certificates.
- Certificates are issued to green electricity generators and can be sold by them. This issue is produced for a maximum period of 15 years.

#### **Contract for Difference (CfD)**

- In February 2015, Poland adopted the so-called "Renewable Energy Law". The law stablish a technology neutral auction system with a Contracts for Differences for projects above 1 MW.
- This system has a maximum duration of 15 years and is indexed annually to the Polish CPI. The is a maximum offer price each year.



### **Projects in operation**





**Project** 

WoDS

Wikinger

East Anglia 1

Location

Irish Sea

Baltic Sea

North Sea

**Cost of seabed** 

0

0

0

Capacity (MW)

194 MW<sup>(1)</sup>

350 MW

714 MW

COD

2014

2017

2020

PPA/CFD

Market Price + 2.0 ROC

194€/MWh / 8yrs + 154€/MWh / c.4 yrs CfD 119.89 £/MWh (real 2012+CPI)/15 yrs

Capex

GBP 0.6 Bn excl. transmission (2)

Eur 1.4 Bn

GBP 2.6 Bn incl. transmission

**Number of turbines** 

108 Siemens-Gamesa turbines (3.6 MW) 70 Siemens-Gamesa turbines (5 MW)

102 Siemens-Gamesa turbines (7 MW)

<sup>(1) 50%</sup> of total 389 MW. Full consolidation 194 MW.

<sup>(2)</sup> Total capex for 389 MW GBP ~1.3 Bn including transmission line (OFTO)



### Projects under construction and awarded

	In o	peration by 20 ~1,800 MW	)25	Secured & advanced pipeline~5,400 MW					
Project	St. Brieuc	Baltic Eagle	Vineyard Wind 1 <sup>(1)</sup>	Windanker	East Anglia 3	Park City Wind <sup>(1)</sup>	Commonwealth <sup>(1)</sup>	East Anglia 1N&2	
Country									
Location	Atlantic Ocean	Baltic Sea	Atlantic Ocean	Baltic Sea	North Sea	Atlantic Ocean	Atlantic Ocean	North Sea	
Cost of seabed	0	0	0	0	0	0	0	0	
Capacity (MW)	496 MW	476 MW	806 MW	309 MW	1,396 MW	804 MW	1,232 MW	1,600 MW	
COD	2023	2024	2024	2026	2026	TBD	TBD	2028-29	
PPA/CFD	155 €/MWh (real   2012) / 18yrs - indexed	Market+vble premium (min~65€/MWh)/20yrs	88.77 \$/MWh on average / 20 yrs	РРА	CfD 37.35 £/MWh (real 2012+CPI)/15 yrs	PPA (not disclosed)	PPA (not disclosed)	ТВС	
Capex	Eur 2.4 Bn	Eur 1.3 Bn	~ USD 4 Bn	~ Eur 0.8 Bn	~ GBP 3 Bn (exc. GBP 1 Bn OFTO)	ТВС	ТВС	ТВС	
Number of turbines	62 Siemens-Gamesa turbines (8 MW)	50-52 Vestas turbines (9.5 MW)	62 GE Haliade-X turbines (13 MW)	N/A	95 Siemens-Gamesa turbines(14.7MW)	N/A	N/A	N/A	



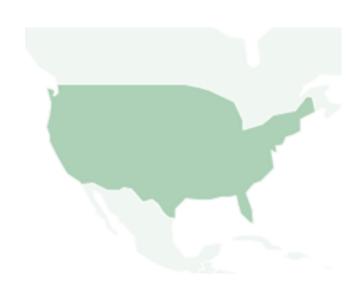
### Flagship projects: United States' first large-scale offshore wind farm, VW1

State	Massachusetts			
Project Size	806 MW			
Project Ownership	50% Avangrid Renewables / 50% CIP			
Lease Area, Acreage	OCS-A 0501, 65,296 fully utilized			
First Power/Exp. COD, contract term	2023/2024, 20 years			
Contract Price	(400 MW): \$74/MWh in Y1 (400 MW): \$65/MWh in Y1 Pricing escalates 2.5% annually PPA + Recs			
NCF	~50%			
Permitting& Construction Highlights	<ul> <li>Received BOEM Record of Decision</li> <li>Onshore construction commenced 2021</li> <li>Horizontal directional drilling &amp; beach landfall connection completed</li> <li>Onshore substation steel structure erection 95% complete</li> <li>Offshore cable installation began in October 2022</li> <li>Operations starting 2H 2023</li> </ul>			
Capex	100% Capex secured (~\$4B)			
Other	<ul> <li>Point of interconnection (POI) at Barnstable at 345KW HVAC. Right of Way secured for onshore transmission. Construction on-going.</li> <li>Executed PLA with unions</li> <li>Executed lease agreement for O&amp;M port</li> <li>Jones Act ship secured</li> <li>ITC 30%</li> <li>Project finance closed in September 2021</li> <li>Notice to proceed issued to all major suppliers/contractors</li> <li>AGR reached an agreement to oversee the operations and management post-COD</li> </ul>			





### Offshore strategy focused on developing operational hubs in key regions...



#### **US East Coast**

- First large-scale offshore wind project
- Large offshore pipeline on East coast at minimum cost
- Leveraging on integrated utility experience



**EU & Baltic Sea** 

- 5 projects operational or under construction
- Large Baltic Sea portfolios with high synergies
- Established presence in UK, Germany & France



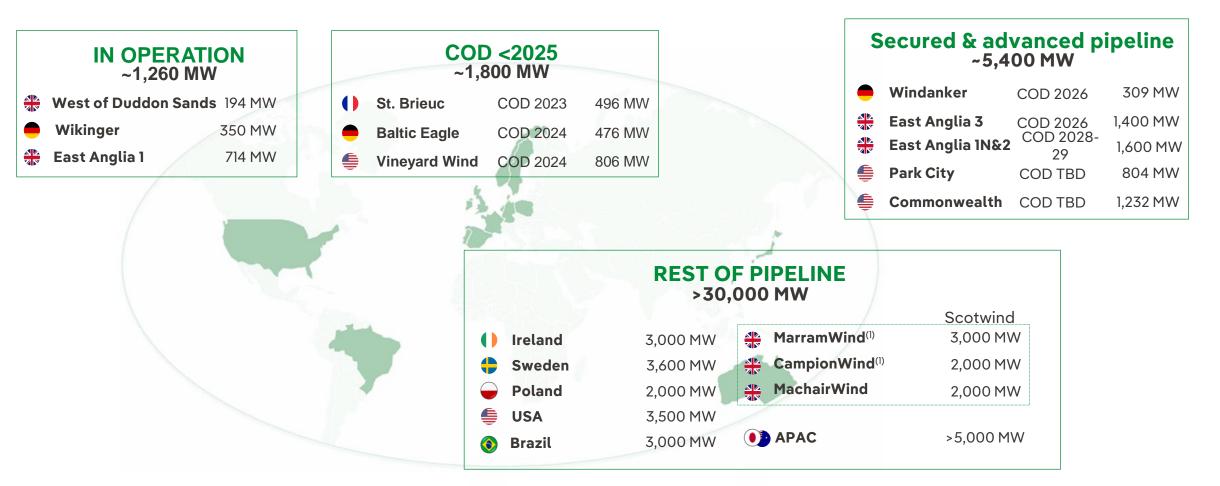
#### **Asia-Pacific**

- Foothold to develop Asia-Pacific industry
- Large floating pipeline
- Stable regulatory environment and high offshore ambitions

... with early development of pipeline at minimum cost



### Well positioned to capture new opportunities in Europe, UK, US and APAC...



... with new and attractive markets ready to deliver growth beyond 2025...



### ...through established support mechanisms

		Country targets (GW)	Support Mechanisms
	USA	30 GW by 2030	Utility or Corporate PPA
	UK	50 GW by 2030	CfD
$\times$	Scotland	11 GW by 2030	CfD
	Germany	30 GW by 2030, 40 GW by 2035	Variable premium/ Corporate PPA
	Netherlands	21 GW by 2030	Corporate PPA
	Belgium	5.8 GW by 2029	TBD
	Denmark	12.9 GW by 2030	Corporate PPA
	Poland	5.9 GW by 2030	CfD
	Norway	30 GW by 2040	CfD or Corporate PPA
effici	Spain	1-3 GW by 2030	Regulations still to be defined
	Portugal	10 GW by 2030	Regulations still to be defined
	Ireland	5 GW by 2030	Feed in Premium (FIP) similar to CfD
	France	5.2-6.2 GW by 2028	CfD
	Japan	10 GW by 2030, 30-45 GW by 2040	FIT but moving to Feed in Premium
*	Taiwan	15 GW by 2035	Utility or Corporate PPA
* ,	Australia	Victoria 2GW by 2032, 9 GW by 2040	Regulations still to be determined

# Content



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### **Generation**



Capacity (MW)	Spain	UK	US	Mexico	Brazil	RoW	Total
Nuclear	3,177	-	-	-	-	_	3,177
Gas Combined Cycle owned capacity	5,695	-	204	2,617	533	243	9,291
Gas Combined Cycle capacity for third parties	-	-	-	7,043	-	-	7,043
Cogeneration	347	-	636	202	-	-	1,185
Total	9,218	-	840	9,862	533	243	20,696
Output (GWh)	Spain	UK	US	Mexico	Brazil	RoW	Total
Nuclear	23,886	-	-	-	-	-	23,886
Gas Combined Cycle owned production	7,082	-	7	14,145	14	58	21,306
Gas Combined Cycle production for third parties	-	-	-	37,269	-	-	37,269
Cogeneration	1,904	-	2,516	1,403	-	-	5,823
Total	32,872	-	2,523	52,818	14	58	88,285

### **Generation**



### Average thermal efficiency at generation facilities(1)

	Spain		USA		Brazil		Mexico		RoW	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
СССТ	50.99	51.05	N/A	N/A	42.11	54.74	53.05	53.81	N/A	N/A
Cogeneration	69.01	71.37	48.07	46.87	N/A	N/A	58.13	59.79	N/A	N/A

	Report boundary				
	2022	2021			
ссет	52.80	53.41			
Cogeneration	57.91	56.89			

<sup>(1)</sup> Average of efficiencies weighted by the annual production of each thermal power plant



### Facilities (1/2)

Nuclear	Region	Total MW	% IBE	MW attributable to IBE	COD
Almaraz I	Cáceres	1,049	53%	553	1983
Almaraz II	Cáceres	1,044	53%	550	1984
Ascó II	Tarragona	1,027	15%	154	1986
Cofrentes	Valencia	1,092	100%	1,092	1985
Trillo	Guadalajara	1,066	49%	523	1988
Vandellós II	Tarragona	1,087	28%	304	1988
Total		6,365		3,177	

Gas Combined Cycle	Region	Total MW	<b>COD</b> 2002	
Castellón III	Castellón	793		
Castejón	Navarra	386	2003	
Tarragona Power	Tarragona	424	2004	
Aceca III	Toledo	392	2005	
Arcos I	Cádiz	396	2005	
Arcos II	Cádiz	379	2005	
Santurce	Vizcaya	403	2005	
Arcos III	Cádiz	837	2006	
Escombreras	Murcia	831	2006	
Castellón IV	Castellón	854	2008	

Total 5,695



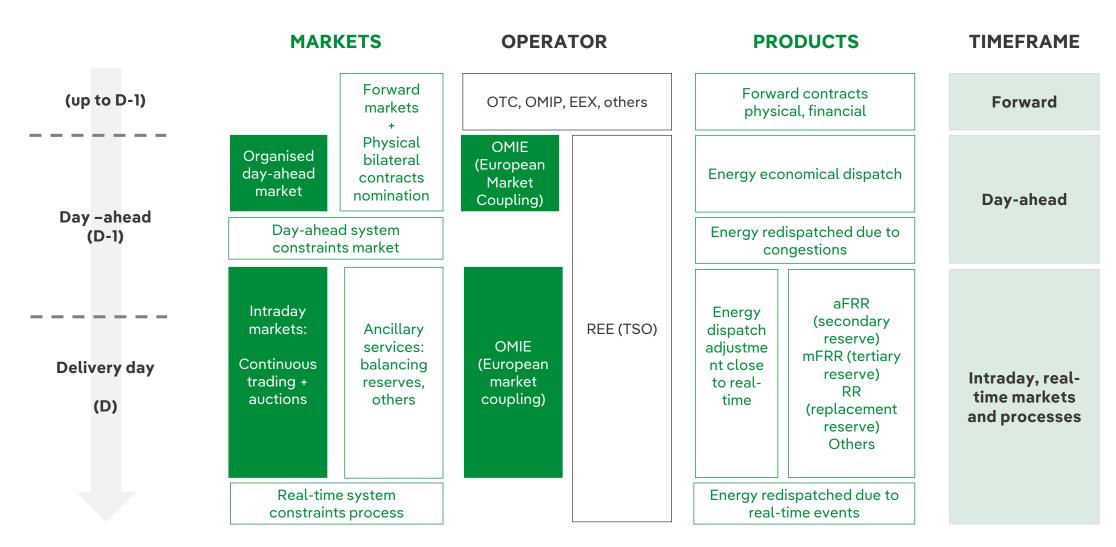
### Facilities (2/2)

Cogeneration	Region	Total MW	MW attributable to IBE	COD	
Energyworks Villarrobledo	Albacete	18	18	1995	
Energyworks Carballo	La Coruña	13	13	1998	
Peninsular Cogeneración SA	Madrid	39	19	2001	
Energyworks Cartagena	Murcia	95	95	2002	
Investee companies	n.a.	69	38	1990-2006	
<b>Energyworks Michelin (Vitoria, Valladolid y Aranda)</b>	n.a.	126	126	2001-2002	
Pig slurry treatment plants (4 plants)	n.a.	37	37	2003-2007	
Total		397	347		

### **Generation:** Spain (1)



### Basis for remuneration model: Law 24/2013



(1) Applicable to all technologies



### Temporary regulatory measures: Gas Clawback (1)

#### **Summary:**

- Temporary measure in place until 31st December 2023.
- Revenues from energy sold **at spot price** are reduced by 90% of the excess in the gas price above €20/MWh (RDL 17/2021). Revenues from energy contracted at fixed price are exempted (RDL 23/2021).
- Revenues from energy sold **at fixed price** in long term contracts signed after 31st of March 2022 are subject to a 90% reduction of the electricity price over €67/MWh, except for integrated companies, in which the price for final customers will be considered: €67/MWh + losses + average supply margin of the last 5 years published by the CNMC (RDL 6/2022).

#### **Royal Decree Law details:**

- Royal Decree Law 17/2021: Regulates urgent measures to mitigate the impact of the increase in natural gas prices in the retail gas and electricity markets:
  - Decrease the remuneration of non-emitting plants (nuclear, hydro & merchant exposed renewables) for an amount equivalent to the excess in the gas price above €20/MWh until March 30<sup>th</sup>, 2022.
  - Extraordinary reduction of charges (96%) until 31st December 2022
- Royal Decree Law 23/2021: Reviews the scope of application of the reduction for gas prices included in RDL 17/2021, exempting from the reduction the energy sold by non-emitting installations on a fixed-term basis.
- Royal Decree Law 6/2022:
  - Remuneration decrease of non-emitting plants extended until 30<sup>th</sup> June 2022.
  - Energy contracted at a fixed price above €67/MWh included in the clawback. In the case of hedges between companies of the same Group, the final price applied will be as follows:
    - €67/MWh + losses + average marketing margin of the last 5 years published by the CNMC
- Royal Decree Law 18/2023:
  - Gas clawback was extended until 31st December 2023.



### Temporary regulatory measures: Gas Cap or Iberian Exception

Royal Decree Law 10/2022: introduces the so-called "Iberian exception" which subsidizes gas to reduce the spot price, temporarily until 31st May 2023:

- CCGTs, Coal and Cogeneration power plants without regulated remuneration will receive a subsidy for the difference between the MIBGAS gas price and a reference price.
- The gas reference price will begin at a level of €40/MWh during the first 6 months, being increased by 5€/MWh per month in the following 6 months, reaching a final level of €70/MWh.
- Subsidized plants shall bid as if their gas cost were equal to the reference price, receiving in addition all of them the same subsidy (in €/MWh terms), in order not to distort the merit order. The amount is calculated each day as follows:

 $\frac{P_{NG} - P_{NGR}}{0.55}$ 

P<sub>NG</sub>: natural gas price

P<sub>NGR</sub>: natural gas reference price

0.55: CCGT efficiency

- Funded by:
  - o Congestion rents from increased exports to France (50% of these rents are kept by Spain)
  - Iberian demand: all existing contracts with spot-indexed prices and all new fixed-price contracts, including renewals, price revisions and extensions made after 26<sup>th</sup> April 2022
- Royal Decree-Law 17/2022: allowed cogeneration power plants to waive the regulated remuneration so that the subsidized gas could be applied to them.
- Royal Decree-Law 3/2023 extended the Iberian exception until 31st December 2023, with reference prices for gas increasing from €55/MWh gas (value in force in March 2023) to €65/MWh gas (December 2023)



### Taxes on generation: Law 15/2012

#### **Green cent**

• Fuel consumption in power plants

# Tax on electricity production<sup>(1)</sup>

• 7% tax on total revenues

#### **Nuclear tax**

- Spent nuclear fuel (2,190 €/Kg)
- Nuclear waste (6,000 €/m³ waste)

### Hydro canon (2)

- 25.5% on total revenues
- 2.5% plants up to  $50MW^{(3)}$
- 2.5% pumping<sup>(3)</sup>

### Temporary levy set on revenues: Law 38/2022

- Temporary levy for **companies in the electricity, gas and oil sectors** with main operator status.
- Set at 1.2% of their revenues, on a temporary basis for the years 2023 and 2024.
- Revenues from regulated activities and permanent abroad establishments are excluded from this tax.

<sup>(1)</sup> Suspended for 6 months from 7<sup>th</sup> October 2018 (Q4 2018 and Q1 2019). Additionally, it has been suspended since the Q3 2021 until Q4 2023

<sup>(2)</sup> In 2021 the Hydro canon was annulled by the Supreme Court and re-established with the same parameters in the new Law 7/2022, on waste and contaminated soil for a circular economy. According to Law 7/2022, there is a 92% and 90% reduction for hydroelectric power plants up to 50 MW and pumping facilities, respectively

<sup>(3)</sup> According to Law 7 2022 there is a 92 and 90 reduction for hydroelectric power plants up to 50 MW and pumping facilities, respectively



## **Capacity payments**

- Investment incentive: € 10,000/ MW per year during 20 years
  - For installations built from 1998 to 2015, which did not have any subsidized regime.
  - Received by generation facilities under the ordinary regime of the peninsular system with installed power capacity greater than or equal to 50 MW.
  - Initially it was established as a payment of € 20,000 /MW per year during the first 10 years of the plant life, but it was modified under the Royal Decree-Law 9/2013 that determined the current parameters. Under this new regulation, the remaining number of years entitled to receive this capacity payment were calculated for each installation, doubling the period and reducing the amount to the above mentioned €10,000. For this reason, the end of the incentive depends on the outstanding years from 2013 on. Moreover, the Royal Decree-Law 9/2013 limited the right of awarding the incentive for new plants with Commercial Operation Date up to 1 January 2016.



# Cogeneration: Law 24/2013, Royal Decree 413/2014, Royal Decree Law 17/2019 and Royal Decree Law 6/2022

• Allowed rate of return (before taxes) of 7.398% until 2031 for facilities in operation before RDL 9/2013. For facilities in operation after RDL 9/2013, allowed rate of return of 7.09% until 2025 following CNMC published WACC methodology

For those facilities in operation before RDL 9/2013 with any pending arbitration or judicial proceeding related to the modification of the Remuneration Regime after RD 661/2007, early termination of arbitration or judicial procedure or the waiver of the perception of compensation is a mandatory requirement prior to obtain the 7.398% allowed rate of return until 2031. (Royal Decree Law 17/2019)

- Remuneration based on revenues from market participation, with a specific additional remuneration based in two terms:
  - RI: A term per unit of installed capacity (€/MW) that covers the investment costs of a standard installation that cannot be recovered by the sale of energy. Allowing the installation to achieve a reasonable return defined by the Government.
  - RO: A term for operation (€/MWh) that covers the difference between operating costs and the revenues from the market participation of such standard installation. The installation of renewable energies, cogeneration or waste will not receive such remuneration for operation as long as its income from the sale of electricity in the system is higher than its operating costs.

#### · Parameter modification:

- Every 6 years all the parameters could be changed (including reasonable return) for the remaining useful life, except for the useful life and standard value of the initial investment of an installation;
  - Order TED/171/2020 establishes the remuneration parameters to estimate the regulated remuneration of renewables and cogeneration for the 2020-2025 regulatory period. It recognized a higher cost of CO2, a higher fuel price (which improves the RO of these plants by 14 €/MWh) and the remuneration for the cost of the System Operator (0.14 €/MWh)
- Every 3 years, and for the rest of the regulatory period, the estimation of revenues from the market will be reviewed, valuing the energy sold at market price based on market price evolution and the forecast for operating hours. Royal Decree Law 6/2022 establishes an additional exceptional review with effect from January 1, 2022. The review of parameters scheduled for 31/12/2022 was brought forward to 1/01/2022, dividing the current three-year semi-periodic remuneration period of 2020-2021-2022 into two periods: (1) 2020-2021 and (2) 2022
- At least annually, the values of remuneration for operation will be updated for those technologies whose operating costs depend essentially on the fuel price
- From 2023-26 semi-period onwards, the reference price for calculating the remuneration will be a basket of forward, daily and intraday market products prices. The forward indexation path is: 25% in 2023, 50% in 2024 and 75% from 2025 onwards). Additionally, the adjustment for price deviation in the market will no longer be applied, encouraging facilities to sell on PPA. (Royal Decree Law 6/2022 & Royal Decree Law 10/2022)



## Cogeneration: Royal Decree-Law 17/2022 and 20/2022

- Royal Decree-Law 17/2022 allows mainland cogeneration plants to temporarily receive the generation market adjustment mechanism (gas cap) in exchange for waiving the regulated remuneration. It applies only to facilities under the specific remuneration regime, from the time they apply for registration under the adjustment mechanism (starting on the first day of the following month) until they apply for de-registration or the mechanism is discontinued. Thereafter, they will return to their previous regulated remuneration.
- For cogeneration, Royal Decree-Law 20/2022 establishes that until the new calculation methodology is published, the regulated Operating Remuneration (OR) will be updated based on half-yearly variations in raw material and gas tariffs.
- A series of Ministerial Orders stablished:
  - i. The remuneration corresponding to the second calendar half-year of 2020 and the first calendar half-year of 2021 (Order TED/989/2022 of 11 October).
  - ii. The values of the operating remuneration corresponding to the first calendar half-year of 2019 (Order TED/990/2022 of 11 October).
  - iii. The operating remuneration for the second half of 2021 for facilities whose operating costs depend essentially on fuel prices (Order TED/995/2022 of 14 October).
  - iv. As envisaged in Royal Decree Law 6/2022, the values for the extraordinary review of the remuneration parameters as of 1 January 2022 were also published (Order TED/1232/2022, of 2 December).
  - v. Lastly, the operating remuneration (OR) for cogeneration and waste in the second half of 2022 was published (Order TED/1295/2022 of 22 December).



### Cogeneration: basis for remuneration - Royal Decree-Laws 9/2013 and 413/2014

**Market price** 



Specific remuneration RI+RO

RI: remuneration to investment (€/MW)

Additional to market revenues to obtain the reasonable return on investment (7.398%)

RO: remuneration to operation (€/MWh)

For technologies that don't cover their operating costs with market revenues

RI + RO only if the plant has not reached yet the reasonable return

Once reasonable return is reached, only RO will be received



#### **Nuclear**

- The Spanish National Energy and Climate Plan (PNIEC) considers that 4,200 MW of nuclear generation plants will shut down in the period 2025 2030.
- The nuclear operators, together with ENRESA, has agreed on a schedule for closure of Spanish nuclear power plants. This closure schedule complies with all safety, technical, ageing, waste and decommissioning resources criteria.

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

- Almaraz I&II, Vandellós II, Cofrentes and Asco I&II nuclear power plants have already obtained the approval for Operating License Renewal (up to the closing dates agreed in the protocol signed with ENRESA for all plants except Vandellos II (until 26<sup>th</sup> July 2030) and Ascó II (until 1<sup>st</sup> October 2031).
- Royal Decree 750/2019 has risen the waste fee charged by ENRESA to 7.98 €/MWh as of 1st January 2020 (+19% vs. previous rate of € 6.69 / MWh).

## **Green H2: Real Projects**



## Iberdrola has built two hydrogen projects in 2022 that are already under operation

## 1st H2 project for mobility in Spain with capacity for fleets supply



**Heavy mobility - Capacity 2.5 MW** (up to 100 buses/day) Under <u>normal operation</u> since January 2022

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#### Co-financed by the Connecting Europe Facility of the European Union

#### Europe's largest electrolyser plant built



Fertiliser Industry - Capacity 20 MW (up to 3,000 tons/yr)
Operating under commissioning process

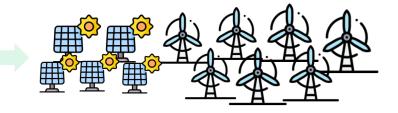
## Green H2: Development of the Hydrogen Value Chain



## Iberdrola supports the development of the full value chain to boost Green H2 and Derivatives

Increase in additional renewable energy for the production of Green H2 & Derivatives

When we talk about Green H2 and Green Derivatives we talk about Renewable Energy



Support for the creation of new manufacturers of electrolyzers and other equipment & services



H<sub>2</sub>

Value

Chain





















Development of long-term industrial alliances with leading companies

























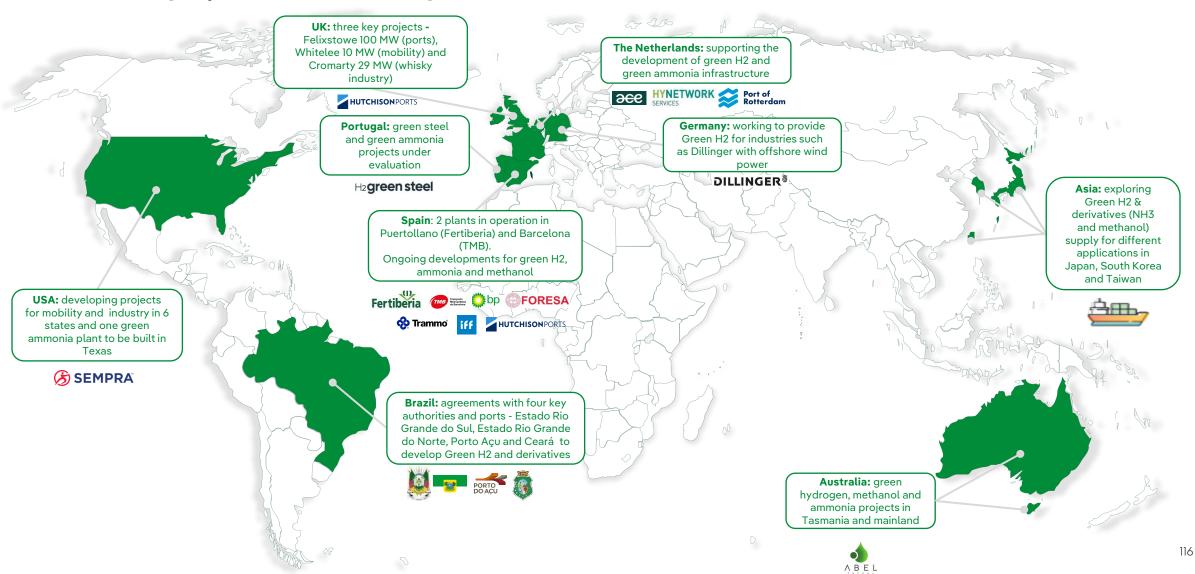




## **Green H2: Pipeline**



## More than 60 projects under development in 8 countries



## **Generation: Mexico**



## **Facilities**

Gas Combined Cycle <sup>(1)</sup>	State	MW	COD	Income Regime
Dulces Nombres (Monterrey) (2)	Nuevo León	1,008	2002	PPA (Independent Power Producer)
Altamira III & IV (2)	Tamaulipas	1,077	2003	PPA (Independent Power Producer)
La Laguna II (2)	Durango	537	2005	PPA (Independent Power Producer)
Altamira V (2)	Tamaulipas	1,143	2006	PPA (Independent Power Producer)
Tamazunchale (2)	San Luis Potosí	1,179	2007	PPA (Independent Power Producer)
Dulces Nombres II (Monterrey V)	Nuevo León	300	2016	Commercial PPA (Self-supply)
Baja California III (2)	Baja California	324	2017	PPA (Independent Power Producer) / LIE <sup>(3)</sup>
Escobedo (2)	Nuevo León	878	2018	PPA (Independent Power Producer)
El Carmen	Nuevo León	866	2019	Commercial PPA (LIE)
Topolobampo II <sup>(2)</sup>	Sinaloa	911	2019	PPA (Independent Power Producer)
Enertek (2)	Tamaulipas	144	1998	Commercial PPA (LIE) - previously CHP
Topolobampo III <sup>(2)</sup>	Sinaloa	779	2020	PPA (Independent Power Producer)
Tamazunchale II <sup>(2)</sup>	San Luis Potosí	514	2022	Commercial PPA (Self-supply)
Total		9,660		
Cogeneration	State	MW	COD	Income Regime
Monterrey	Nuevo León	41	2003	Commercial PPA (Self-supply)
Ramos	Coahuila	52	2016	Commercial PPA (Self-supply)
Altamira	Tamaulipas	57	2017	Commercial PPA (Self-supply)
Bajío	Querétaro	52	2018	Commercial PPA (Self-supply)
Total		202		

<sup>(1)</sup> Including 7,043 MW of installed capacity for third parties

<sup>(2)</sup> Plants included in the perimeter to be sold to the Mexican Government

<sup>(3)</sup> LIE – Power Industry Law (2014)

## **Generation: Mexico**







CFE

**Private Generators** 

**Independent Energy Producer** 

**Self Supply** 

Cogeneration

**Exports** 

**Imports** 

#### **Applicable laws**

Ley de Servicio Público de Energía Eléctrica (LSPEE)

Sustainability and renewable generation

**Regulatory bodies** 



Vertically integrated entity with public service monopoly

Private generation for self supply or supply to CFE

According to this law, reformed in 1992, private companies were allowed to participate in the following ways:

- Independent Power Production (sale to CFE through PPAs)
- Small production, self-supply (autoabasto) and cogeneration (sale to private customers)

The Law for the Use of Renewable Energies and the Financing of Energy Transition, which allows the participation of renewables and efficient cogeneration through the mechanism of self-supply.

The Energy Regulatory Commission (CRE) granted permits for electricity generation under the allowed schemes.

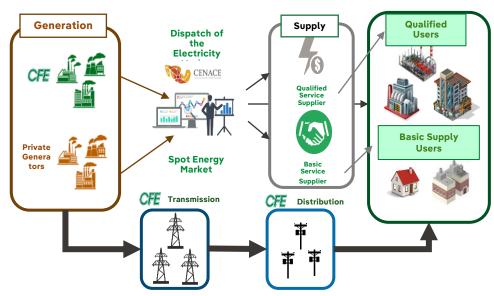
## Regulatory framework: after the Energy Reform of 2013 <u>Applicable laws</u>

**Constitutional Reform**: Allows private participation in generation and supply activities. Transmission and distribution continue to be a public service provided by CFE.

**Ley Industria Eléctrica (LIE)**: Establishes a new model for the electricity sector based on free competition in generation services and supply to qualified users (industrials). CFE exclusively provides transmission and distribution services and generation and supply to retail users (domestic). It defines the structure of the new Wholesale Electricity Market (*MEM - Mercado Eléctrico Mayorista*). An Amendment to the LIE was published. Currently, the Reform is Definitely Suspended with general effects until several *Amparos* are granted (Next slide).

**Ley de Transición Energética:** Defines the legal basis to promote a transformation towards a sustainable energy and economic model in the long term.

#### **Wholesale Electricity Market Structure**



#### **Basics of the LIE**

Respect the rights of Legacy Permits (LSPEE)

Permits granted under the LSPEE will be respected in all its terms and conditions. In any case, these permits may voluntarily migrate to the Wholesale Electricity Market (MEM).

Liberalisation of the electricity supply

Private companies are allowed to provide supply services to qualified users (industrials). The Amendment to the LIE of 2021 establishes new criteria for the issuance and repeal of permits, introducing broad discretion by submitting it to planning criteria.

**Green Energy Certificates (CEL)** 

Main instrument together with auctions to promote investments in clean energy.

Allows the system to reach the target of having 35% of clean energy generation by 2024. The Amendment to the LIE of 2021 modifies the criteria for the issuance of CEL.

Wholesale Electricity Market (MEM)

Market that operates through Market Bases. The Amendment to the LIE of 2021 modifies the order of dispatch of power plants in the Market withouth considering economic criteria.

## **Generation: Mexico**



### Regulatory framework: recent regulatory developments

Electricity Industry Law (LIE) reform

**March 2021** 

Modifies the electricity dispatch order

Issuance of CELs to CFE plants in operation before the 2013 Reform.

Reviews IPP (PIE) contracts

Abolishes self supply permits

Reform currently suspended due to the judicial processes brought by individuals and the precautionary measures granted by Courts, since the proposed amendments distort free competition and slow the growth of renewable energies.

#### T-MEC Consultations regarding Mexico Energy Policy - July 2022

In July 2022, the US and Canada initiated consultations with Mexico under the USMCA regarding potential energy commitment violations. Results of ongoing consultations are anticipated in 2023.

#### Mexico announces new climate commitments in the COP - 27 November 2022

In November 2022, Mexico modified its Nationally Determined Contribution. The government of Mexico has committed to reduce CO<sub>2</sub> emissions by 35% in 2030.

#### SENER and CRE have resumed processes and procedures suspended due to COVID-19 - March 2023

SENER and CRE have resumed legal schedules regarding regulatory procedures suspended due to the COVID-19 pandemic, March 2020 and January 2021, respectively.



## Regulatory framework

#### **Independent Power Producer (IPP)**

- 25 year PPA after auctions held by Comisión Federal de Electricidad (CFE). Asset owned by Iberdrola when PPA expires
- Predictable revenues:

Fixed	Capacity	~19%
payments	O&M	~7%
(\$/kW)	Reserve capacity for fuel	~6%
Variable costs	Fuel (pass-through)	~67%
(\$/kWh)	O&M	~1%

#### Self-supply (Autoabasto)

- Supply of energy and capacity to self-supply partners (industrial clients) under different criteria, depending on each client:
  - o Discount over regulated tariff (Suministro Básico)
  - o PPA Fixed price for contracted capacity, etc.
- In May 2020, CRE approved an increase on conventional transmission tariffs (porteo convencional). The amparo filed by Iberdrola against the regulation was dismissed in the first instance and appealed in the second instance, pending the outcome. Since June 2020, the new increased rates are being paid.
- Generation to satisfy the needs of Iberdrola Clientes (qualified supplier) with hedging energy contract of the wholesale market products (Mercado Eléctrico Mayorista MEM):

Energy

**Ancillary services** 

Capacity

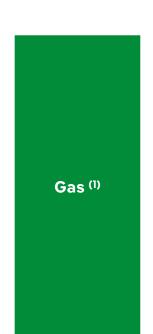
• These products can be sold through bilateral contracts or in the market

## **Generation: Brazil**



## Facilities and regulatory framework

Facilities	State	Туре	MW
Termopernambuco	Pernambuco	CCGT	533



#### **Concession process**

Concession/ authorization term

#### Renewal

#### Revenue

 Authorization request within ANEEL

Expiry date: 2041

On December 21st, 2021,
Termopernambuco won the
Capacity Reserve Auction, in
which has sold its entire
available capacity at a power
price of R\$ 487,412.70/MW
year, beginning the supply on
July 1st, 2026, ensuring a fixed
power revenue of R\$207
million per year. The declared
CVU price was R\$ 600/MWh.

- 20-year PPAs to Neoenergia Pernambuco (390 MW) and Neoenergia Coelba (65 MW) -Thermoelectricity Priority Program (PPT) until May 2024;
- Revenue from the Capacity Reserve Auction beginning on July 1<sup>st</sup>, 2026, and ending June 30<sup>th</sup>, 2041.

## **Generation: Rest of the World**



## **Facilities**

Gas Combined Cycle	Country	MW	COD	Income Regime
Smithfield OCGT	Australia	123	1996	Merchant
South Australian Gas Turbines	Australia	120	2017 <sup>(1)</sup>	Merchant

243

## **Customers**



## Retail & Smart Solutions: Key figures 2022

## Retait & Siliait Sototions. Rey rigores 2022

#### **MEXICO**

5k services to customers57 TWh energy sales

#### **BRAZIL**

**453k** services to customers **16 TWh** energy sales



#### UK

7 M services to customers18 TWh energy sales

#### **SPAIN & CE**

22 M services to customers74 TWh energy sales

## **Customers**



## **Services to customers: >29 M contracts**

Thousand contracts			
	2022	2021	Var. (%)
Spain & CE	22.154	20.813	6,4%
Liberalised	19.374	17.629	9,9%
Electricity	8.105	7.580	6,9%
Gas	1.351	1.437	-6,0%
Smart solutions	9.919	8.612	15,2%
Last resort tariff	2.780	3.184	-12,7%
UK	7.256	6.990	3,8%
Electricity	2.831	2.844	-0,5%
Gas	1.915	1.923	-0,4%
Smart Solutions	316	363	-13,0%
Smart Meters	2.194	1.859	18,0%
Mexico	5	4	1,1%
Brazil	453	263	72,0%
Electricity	1,1	0,8	37,2%
Smart Solutions	451	262	72,2%
TOTAL	29.866	28.070	6,4%

## **Customers**



## Solving customer needs with smart solutions

- Comprehensive solutions that meet our customer needs
- Strengthen customer relationship with Iberdrola
- Accelerate electrification of demand
- Promote sustainable technologies

#### **SMART HOME**

VALUE-ADDED SERVICES

- Reached 10.7M services in the global value-added services portfolio
- Wide offer of added value services and energy management that provide peace of mind and comfort and enable customers to save and optimize their energy consumption.
- Launching of new solutions to drive demand electrification and allow a customized home energy management

#### **SMART MOBILITY**

ELECTRIFICATION OF TRANSPORT

- Solutions for in-home and out-of-home charging; as well as electric bus and truck charging solutions
- Joint venture with BP for infrastructure deployment in Spain and Portugal
- Already signed flagship projects for electric bus recharging and heavy transport
- Installation of the largest ultra-fast charging hub for electric vehicles in Southern Europe



#### **SMART SOLAR**

SELF-SUPPLY SOLUTIONS

- Leading self-consumption in Spain and consolidating presence in other countries
- We offer comprehensive solutions for all customers: single-family homes, solar communities, companies and industrial customers.
- Start-up of the first Solar Community in the Giner de los Ríos school (Cáceres), giving access to green energy to neighbours in the vicinity.



#### SMART CLIMA

ELECTRIFICATION OF HEAT

- Promotion of heat electrification and energy rehabilitation in homes
- Integrated turnkey solutions: installation, maintenance and electricity tariffs adapted to each client.
- Development of the business line of integral energy refurbishment of residential buildings.





## High electricity prices since the end of 2021 due to gas price increase

The climate of high and volatile gas prices continued throughout 2022, aggravated by the effects of the war in Ukraine, which has increased prices in daily wholesale electricity markets across Europe. In Spain, consumers subject to the regulated price (Voluntary Price for Small Consumers – PVPC), pegged to market and not yet adjusted, and consumers who purchase their energy directly on the wholesale market or at prices referenced to it, were particularly affected by electricity price increases in the first quarter of the year, which led the government to adopt various market intervention measures (already explained in the 'Generation' section), in addition to others focused on protecting vulnerable consumers:

- Several Royal Decree-Laws have extended the protection measures of the social shield, which include the prohibition of electricity and natural gas supply cutoffs for vulnerable consumers, VAT and special tax on electricity reductions, suspension of the tax on electricity generation (7% levy), Social Bonus discounts for vulnerable consumers (65%-80%), a 15% increase in subsidized energy and a new category with a 40% discount.
- Several Royal Decree-Laws approved tax reductions in order to reduce the electricity price for the final consumer:
  - Royal Decree Law 12/2021: reduces VAT from 21% to 10% to customers up to 10 KW from the 25<sup>th</sup> of June until the end of 2021, suspending at the same time the tax on Electricity Production (7%) during the Q3 2021.
  - Royal Decree Law 17/2021: reduces Electricity Tax from 5.11% to 0.5% (from 16<sup>th</sup> of September until the end of 2021) and extends Electricity Production Tax (7%) suspension until the end of 2021.
  - Royal Decree Law 29/2021: extends the VAT and the Electricity Tax reductions (at 10% and 0.5%, respectively) until 30<sup>th</sup> April 2022, and Tax on Electricity Production (7%) suspension until 31<sup>st</sup> March 2022.
  - Royal Decree Law 6/2022: extends the VAT and the Electricity Tax reductions (at 10% and 0.5%, respectively) and Tax on Electricity Production (7%) suspension until 30<sup>th</sup> June 2022.
  - Royal Decree Law 11/2022: reduces VAT from 10% to 5% and extends VAT and Electricity Tax (at 5% and 0.5%, respectively) and Tax on Electricity Production (7%) suspension until 31st December 2022.
  - Royal Decree Law 20/2022: extends VAT and Electricity Tax (at 5% and 0.5%, respectively) and Tax on Electricity Production (7%) suspension until 31st December 2023.
- RD-Law 17/2021 created the "minimum vital supply". Also, it extended the number of months (to a total of six) that must elapse from the moment of the first non-payment of the electricity bill, until the retail company can request the electricity distributor to cut off the supply. During these 6 months the maximum power will be limited to 3.5 kW.
- Royal Decree-Law 10/2022 establishes a mandate to review the formula for calculating the voluntary price for small consumers (PVPC) from 1 January 2023 (pending). This RDL also revises the indexation of the regulated regime for renewables and cogeneration, including a basket of prices between the spot market and the annual and quarterly futures markets. Indexation to futures markets will be gradual, reaching 75% by 2025.



## Regulated tariff (PVPC)

#### PVPC - Royal Decree 216/2014

- Regulated tariff. Entitled consumers with capacity contracted < 10 kW</li>
- · Components:
  - Hourly prices in wholesale market, published by Red Eléctrica
  - Access tariff and fees, published in the Official Spanish Gazette (BOE)
  - Supply margin, published in the Official Spanish Gazette (BOE)
  - Taxes (VAT 21% / Electricity tax around 5%)

#### New PVPC price - Royal Decree 446/2023

- PVPC redesigned to be partially indexed to forward instead of just spot prices, according to the European Commission requirement
- It enters into force on January 1st, 2024, and is limited to domestic costumers and microenterprises with contracted power below 10 kW
- RD gives suppliers six months to purchase energy indexed to futures.

#### Weight of the forward market

2024: 25% 2025: 40% 2026: 55%

#### The forward market consists of:

Annual forward market: 54%
Semiannual forward market: 36%
Monthly forward market: 10%

#### **PVPC** hourly price formula:

% of forward basket price for the month (constant) +% of daily hourly market price including Adjustment Services

- The forward price varies each month.
- The volume of forward energy to be purchased shall be calculated and published ex-ante by the system operator.
- · The regulated suppliers buy the energy in the forward market during the six months prior to the delivery period.
- The difference to the actual hourly demand is bought in the Spot at the corresponding hourly market price.
- The price will therefore follow the behavioral curve of the hourly market price (damped by the effect of the forward market).
- The cost of financing the social bonus charged to the regulated suppliers is recognized in the calculation of the PVPC.
- This RD contemplates a transitional period for regulated suppliers to recover the cost of the social bonus they have been paying since March 2022 (when the new financing system for the social bonus began with RDL 6/2022).



#### **Social Bonus**

#### Royal Decree 897/2017 (Social Bonus regime prior to Royal Decree-Law 6/2022)

- Discount applied to electricity bill (25% vulnerable customers / 40% severe vulnerable customers), according to:
  - · Income criteria
  - Limits to consumption
- Two types of vulnerable consumers and groups with special conditions

Royal Decree Law 23/2021: increased the discounts up to 60% and 70%, respectively.

#### Royal Decree Law 6/2022

• Under Royal Decree-Law 6/2022, a new system for financing the Social Bonus has been established, which is binding on all companies engaged in electricity activities, (production, transmission, distribution, supplying and direct consumers), recognizing the cost for all companies engaged in regulated activities

• The parameters for 2022 are the following (Orden TED/733/2022)

• Energy producers: 1.294768 Eur/MWh

Transmission company: 0.005716 Eur/Remunerated Eur

Distribution companies: 1.151582 Eur/Supply Point
Suppliers: 13.401931 Eur/Supply Point

• Direct costumers in the market: 1.282647 Eur/MWh

#### Royal Decree Law 18/2022:

- Increased the discounts up to 65%-80%, respectively, until 31st December 2023
- Increased 15% in subsidized energy.
- Created a new transitional reduced tariff with a 40% discount for low income households, until 31st December 2023.
- Created a new transitional gas LRT (Last Resort Tariff) for residential communities with communal boilers, and extends the restriction on the increase in the LRT for gas, both until 31st December 2023. The possible deficit is covered by a EUR 3,000 million budget item in the General State Budget. The budget for the thermal bonus is also increased by EUR 225 million.
- Included the prohibition of electricity and natural gas supply cutoffs for vulnerable consumers until 31st December 2023



## **Electricity access fees**

- Royal Decree-law 1/2019 assigned the CNMC the competence to develop the methodology to establish electricity network tariffs, while the Government has kept the competence to regulate other charges related to the electricity sector. This way, new third party access tariffs are disaggregated into charges (Ministry competence, designed to collect policy costs) and network tariffs (CNMC competence, designed to collect costs associated to networks use).
- The new network tariffs and the new electricity system charges entered into force on 1st June 2021

## CNMC methodology for electricity network tariffs. Circular 3/2020

- Distinction of fixed (€/kW) variable (c€/kWh) structure is maintained.
- Domestic customers (P≤15KW) are unified in a single tariff group (2.0TD), which replaces the 6 current domestic tariffs (2.0A, 2.0DHA, 2.0DHS, 2.1A, 2.1DHA y 2.1DHS).
- The tariff periods are modified: 3 periods for domestic customers and 6 periods for SMEs and industrial customers.
- An optional tariff for public electric vehicle charging points is incorporated, which is attractive for low-use points

## Royal Decree 148/2021 on the methodology for calculating electricity system charges

(Renewable incentives, historical tariff deficits and costs for non-mainland regulated generation)

- The RD establishes a structure of charges similar to electricity networks tariffs
- The new charges scheme aimed to preserve an amount equivalent to the one obtained with the previous prices for each tariff segment.

## Joint effect: electricity network tariffs + electricity system charges

Voltage level contracted	Previous network tariffs and charges	New network tariffs and charges
< 15 kW (Low voltage)	60% fixed term 40% variable term	50% fixed term 50% variable term
>15 kW (High voltage)	80% fixed term 20% variable term	60% fixed term 40% variable term

Note: Low voltage tariffs: They will apply to supplies made to voltages not exceeding 1 kV

- 2.0TD tariff: simple rate for low voltage, power under 15 kW. Three periods of energy and two of power.
- 3.0TD tariff: general rate for low voltage, power over 15 kW. Six periods of energy and power.

## **Customers: UK**



#### **Form of Control**

- Operates in the liberalised UK energy market for gas and electricity under the energy regulator Ofgem with a regulatory framework of both prescriptive and principles based obligations.
- As of January 2023, the UK domestic energy market consists of approximately 24.2m gas and 29.3m electricity accounts (1).

#### **Supplier Exits**

• Since January 2021, 30 suppliers have exited the market through the Ofgem Supplier of Last Resort (SoLR) process, while Bulb Energy entered into Special Administration Regime and was acquired by Octopus Energy. With very limited new entrants over the same period, the UK market is now composed of ~22 domestic suppliers.

#### **Price Regulation**

- Price regulation exists for certain customer groups on default tariffs (including standard variable tariffs) through the Default Tariff Cap, which came into effect 1 January 2019 and was extended to include prepayment meter customers from 1 January 2021, following the expiry of the prepayment meter cap (which was in force from April 2017).
- Ofgem estimates that the default tariff impacts around 27 million households significantly higher than in previous years with increased wholesale price volatility resulting in more customers defaulting to the cap rather than choosing a new competitive tariff.
- From October 2022, the level of the default tariff is reviewed every 3 months (as opposed to every 6 months), however from the same date, the Government supported Energy Price Guarantee (EPG) scheme provided a discount on the default tariff price to consumers. The EPG is in place until end March 2024, however support is expected to largely disappear from July 2023 as wholesale prices fall. The default tariff cap has now been extended beyond its original end 2023 with the Secretary of State having powers to remove the cap on notice.
- During October 2022 to March 2023, domestic customers also received an additional £400 support from Government passed to them via their electricity supplier under the Energy Bill Support Scheme (EBSS), while non-domestic customers have received support via a discount over the same period with some non-domestic customers continuing to receive support until end March 2024

#### Obligated support for low income and fuel poor customers

- Warm Home Discount is a government scheme aimed at addressing fuel poverty and takes the form of a one-off discount on energy bills. This programme is in place with legislation until at least March 2026. The WHD programme now operates with different legislation in Scotland from that used in England and Wales. 9.4% of the programme spend will be in Scotland and 90.6% delivered in England and Wales. The programme has an ambition to provide direct support to 3.2m customers per year.
- Energy Company Obligation (ECO) scheme is a Government scheme to tackle fuel poverty which also provides a consequential reduction in carbon emissions. The scheme requires suppliers with more than 50K customers to invest in energy efficient measures with the obligation based on customer numbers and supply volumes. This is the 4th programme of this nature and will operate until March 2026.
- Great British Insulation Scheme (GBIS) is an Obligation to be introduced in June 2023. Legislation will impose annual targets (until March 2026) on suppliers to improve the energy efficiency performance of homes in GB. A minimum of 20% of the programme is to be delivered to low income & fuel poor homes the remaining support may be offered to homes in a wider qualifying criteria.
- As part of its reaction to the current cost of living crisis, Government has announced its intention to consider a social tariff from April 2024

## **Customers: Mexico**



# Legacy Regime LSPEE (1992)

## **Customer regulatory framework**

- Sale of energy and capacity generated by Iberdrola power plants under self-supply or cogeneration regime (autoabasto)
- Medium- and long-term contracts with self-supply partners (industrial clients), according to different criteria depending on each client
- Iberdrola sells energy and other related products to CFE in long term PPAs under the Independent Power Production scheme.

Regulated Tariff Suministro Básico

- Additive tariff incorporates the costs of all the activities in the system. The Federal Government set the target of maintaining the basic supply tariff throughout the six-year period.
- Components of the additive tariff :



# Iberdrola Clientes Qualified Supplier)

- Supply to liberalised clients (demand >1 MW)
- Requirements for long term hedging with Iberdrola power plants defined by *Comisión Reguladora de Energía* (CRE)
- Qualified supply tariff:
  - o Fixed costs: according to regulated cost of the basic supply tariff (suministro básico)
  - Variable costs: according to the generation portfolio that supplies Iberdrola Clientes in the market.

## **Customers: PPA(1)**



## **PPAs: long-term Power Purchase Agreements**

- A PPA is a long-term Power Purchase Agreement, with agreed conditions (term, price, amount, etc.) between a renewable energy generator and a consumer that ensure revenue and price stability for the customer.
- In a market with highly volatile prices, PPAs set a price that totally or partially limits this risk.
- Iberdrola group has signed contracts of this type in countries such as the United States, the United Kingdom, Spain, Mexico, Brazil and Australia.



#### **DEPENDING ON THE POINT OF INJECTION OF ENERGY**

#### **OFFSITE PPA**

Energy produced at a specific location and connected to the grid

#### **ONSITE PPA**

Renewable energy produced near or on the site of the customer's premises



#### **DEPENDING ON THE TYPE OF DELIVERY**

#### **PHYSICAL**

Bilateral contract for the supply of energy and delivery of Renewable Certificates from a specific production plant to the end customer

#### **VIRTUAL**

Bilateral energy contract that does not provide for the physical delivery of energy from the seller to the customer



#### BY FORM OF ENERGY DELIVERY

#### **AS GENERATED**

The customer consumes the plant's generation

#### **BASELOAD**

The seller is responsible for converting the generation of the asset into a baseload



## **Customers: PPA(1)**



## Flagship projects: Key PPAs signed by Iberdrola



PPA to supply 100% renewable energy from solar PV plant Nuñez de Balboa in Extremadura





PPA for the production of 490 GWh from onshore wind farm Pier (220 MW) in the state of Puebla



PPA for the production of wind power from Santiago wind farm (105 MW) located in the state of Guanajuato







PPA for the production of 149 MW coming from solar PV plant Luzia in Paraíba



Meta

PPA for the production of 240 MW from solar PV plant True North in Falls County, Texas



PPA for the production of 200 MW from onshore wind farm Montague located in Gilliam, Oregon



PPAs for the production of 196 MW from onshore windfarms Coyote Ridge and Tatanka in South Dakota



BHP

PPA for hybrid plant (PV and wind) produced by Port Augusta project with 320 MW in South Australia

# Content



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04 Generation & Customers (page 101)

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## **Green Financing at the core**



## World private group leader in green bonds issued



**Accountability** 

Use of proceeds guarantees transparency in impact and accountability

**Assurance** 

Strict Reporting, SPOs and external verification to provide assurance

**Taxonomy** 

Strict standards for the eligibility fully aligned with the Company strategy

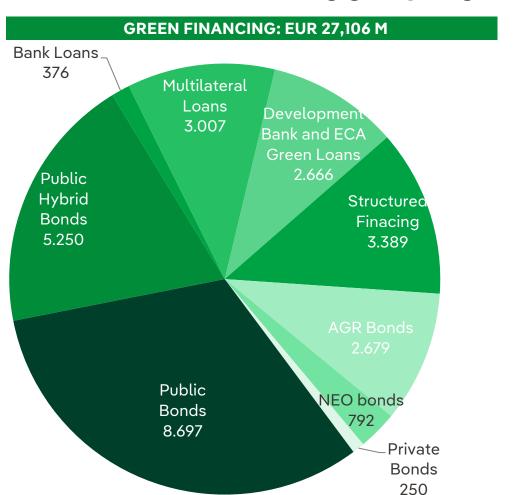
Best in class format for investors with an estimated Greenium of 8-10 b.p.\*

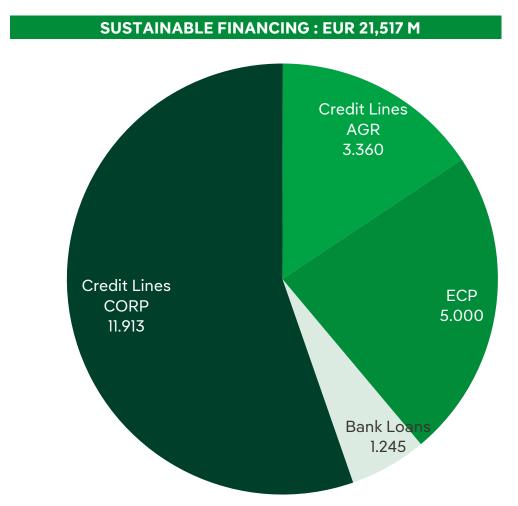
**Asset base + energy transition = maximizing access to the green bond market** 

## **Green / Sustainable financing**



## Iberdrola is the world leading group in green bonds issued



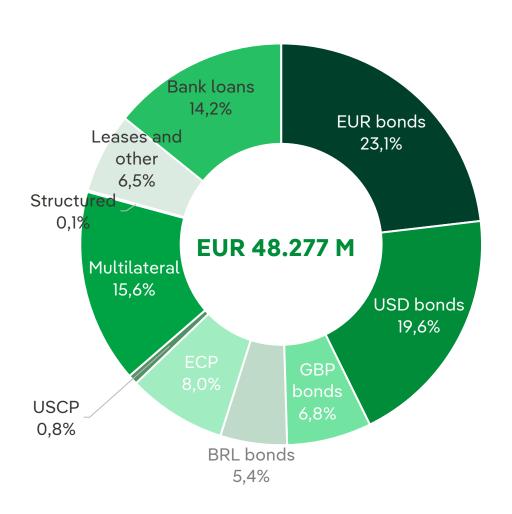


In 2022 Iberdrola signed EUR 3.5 bn of new sustainable transactions and EUR 7.2 bn of new green financing for a total of EUR 48.6 bn in ESG financing as of December 2022

## **Financing markets diversification**



## Debt structure by market as of December 2022



Bond market

- Main source of LT financing
- Access to different markets globally and locally

Multilateral lenders

- Iberdrola considered strategic partner (EIB, BNDES, ICO)
- New development banks financing sustainable investments

Bank market

- Diversified portfolio with main international/local banks
- Low share allows increasing if competitive

Hybrid market

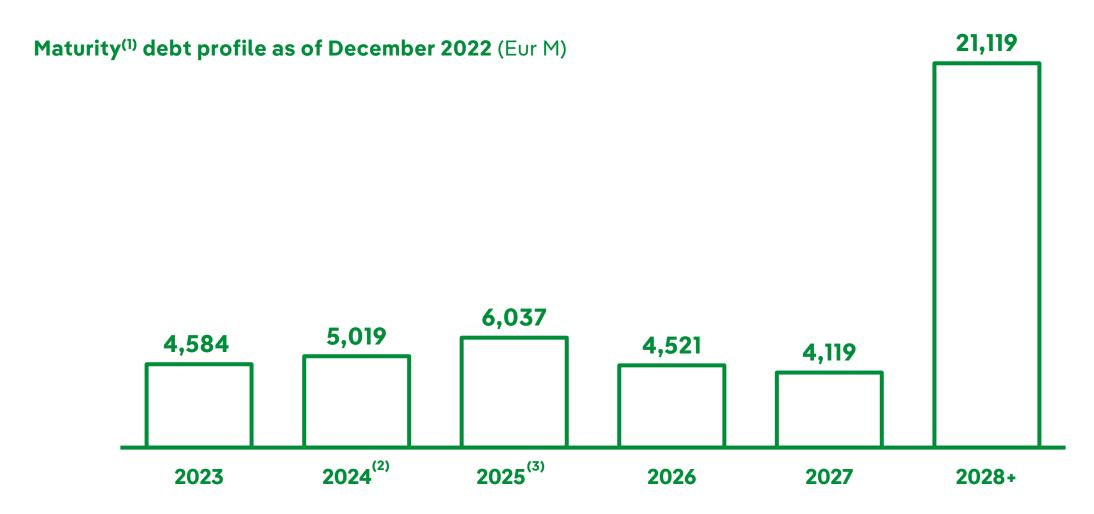
 Low outstanding balance allows share to increase during the plan

Hybrids amount outstanding: Eur 8.3 Bn

## **Maturities**



## Maturity profile with an average debt life over 6 years



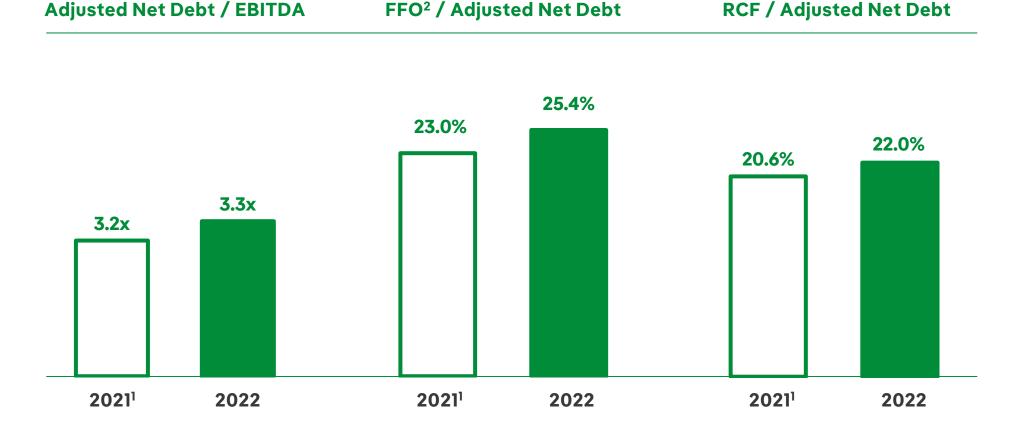
<sup>1)</sup> Long-term debt with credit institutions. Commercial paper maturities are shown in 2028+

<sup>2)</sup> Includes USD 400 million with extension option for one year

<sup>3)</sup> Includes USD 500 million with extension option for one year



## Strong credit metrics, with Adjusted net Leverage of 42.8% as of 2022 (from 41.0% in 2021)



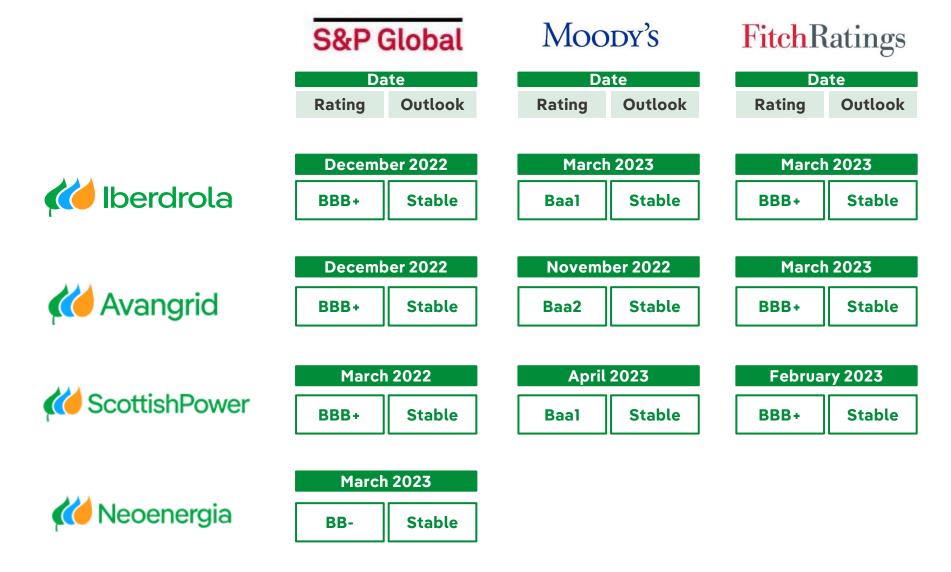
Accounting solvency ratios well aligned with rating agencies thresholds (BBB+/Baa1)

<sup>1)</sup> Proforma including Neoenergia Brasilia and Poland onshore in December 2021

<sup>2) 2022</sup> FFO includes collection of EUR 826 M on positive court rulings in Spain and positive one-off linked to NY Order that allows to accrue certain regulatory assets (EUR 340 M)

## **Credit Ratings**

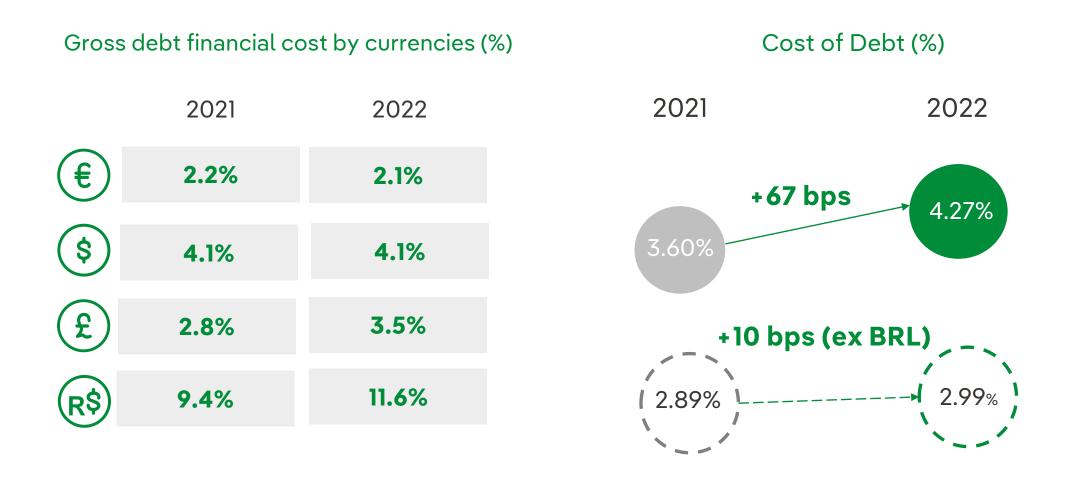




## **Cost of Debt**



Inflation-linked debt in Brazil mainly drives the 67 bp increase in the cost of debt, more than compensated by revenues indexed to inflation at EBITDA level



## **Structural Subordination**



## Our model is based on financing the Group needs from the Holding



Subordination ratio below 30% in 2022 in line with financial policy and historical levels



Direct access to cash flows from unlevered and fully owned subsidiaries (large part of Group's EBITDA ~ 70%)



High visibility of centralized cash flows (regulated and long term contracted)



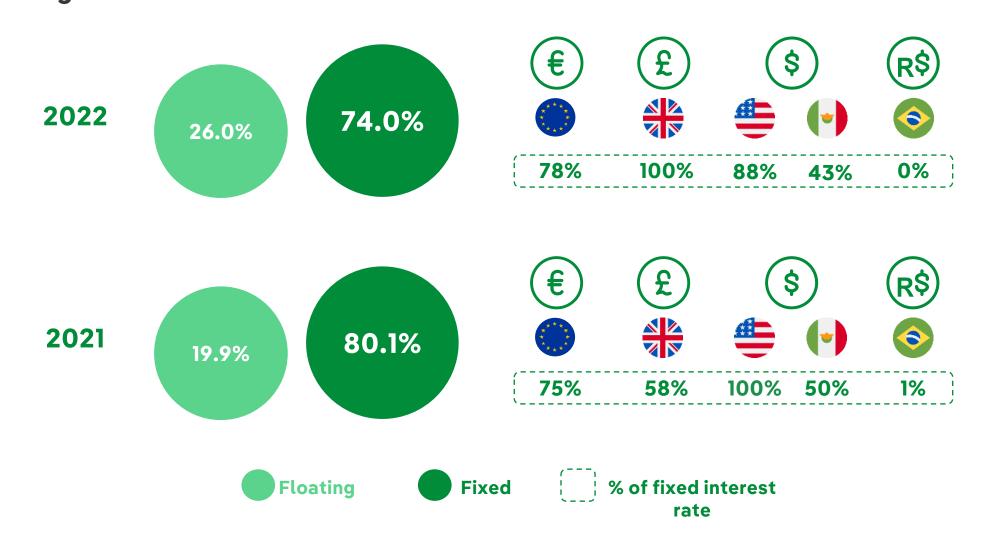
Centralized treasury and very strong liquidity at Holding



## Interest rate risk management



# Conservative while active management of interest rate risk aligned with our earnings structure



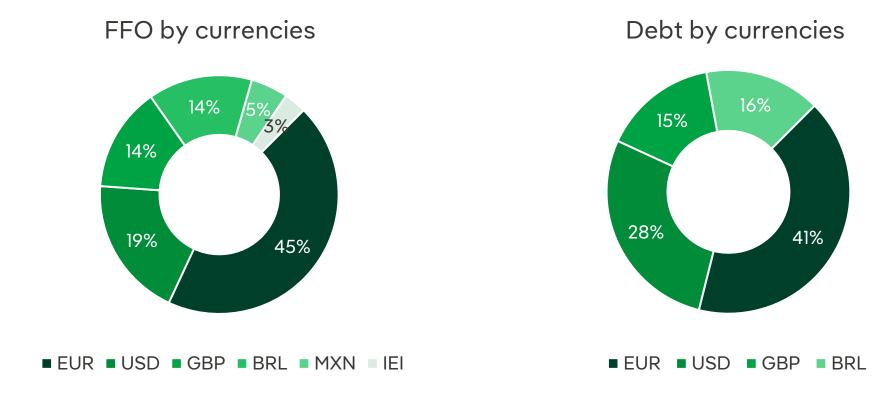




## Structural FX hedge is taken by having the debt in the same currency and similar % as the funds from operations

#### Minimize FFO/Net Debt Ratio volatility

**December 2022** 



... protecting the solvency and rating

#### FX risk management: annually



#### FX risk in the Profit & Loss account is hedged through derivatives

Hedging Net Income FX exposure in currencies against the Euro

Net Income FX risk is managed on a yearly basis

Long term FX management not possible as it would generate huge P&L volatility

#### **Debt reconciliation**



#### Note 21 of Iberdrola Consolidated Annual Report 2022

Thousand euros	31/12/2022	31/12/2021
Bank borrowings, bonds and other marketable securities (Note 28)	46,587	41,163
CSA derivatives security deposits (Note 32)	96	_
Derivative liability instruments	960	760
Leases	2,439	2,411
Gross financial Debt	50,082	44,334
Derivatives of treasury stock with physical settlement that at this date are not expected to be executed	436	241
Adjusted gross financial debt	49,646	44,093
Non-current financial deposits (Note 15.b)	80	65
Derivative asset instruments	1,083	764
CSA derivatives security deposits (Note 15.b)	107	101
Current financial investments (between 3 and 12 months) (Note 15.b)	18	12
Cash and cash equivalents (Note 20)	4,608	4,033
Total treasury assets	5,896	4,975
Adjusted net financial debt	43,749	39,119

#### Eur 8.3 Bn of Hybrids<sup>1</sup> not included in net debt calculations as they are accounted as equity

Note: difference between debt figure in slide 140 and gross financial debt in this slide refers to the inclusion of derivative instruments and accrued interest payable (1) Outstanding figure as of Dec-22

Iberdrola Consolidated Annual Financial Report 2022:

#### SFDR. Principal Adverse Impacts on sustainability factors



		CLIMATE A	AND OTHER ENVIRONMENT-RELATED	INDICA	ATORS		
	1.		Scope 1 GHG emissions	11,927,119	t CO2 eq		
	l.	OHO amainaiana	Scope 2 GHG emissions	1,879,381	t CO2 eq		
		GHG emissions	Scope 3 GHG emissions	42,013,976	t CO2 eq		
			Total GHG emissions	55,820,476	t CO2 eq		
Greenhouse	2.	Carbon footprint	Carbon footprint	55,820,476	t CO2 eq		
gas	3.	GHG intensity of investee companies	GHG intensity of investee companies	1,035	t CO2 eq / M€		
emissions	4.	Exposure to companies active in the fossil fuel sector	Share of investments in companies active in the fossil fuel sector	16% 0%	Revenues Gas Revenues Coal		
	5.	- Share of non-renewable energy	Share of non-renewable energy consumption and non-renewable energy production of investee companies from non-	99.9%	Non-Renewable energy consumption		
		consumption and production	renewable energy sources compared to renewable energy sources, expressed as a percentage of total energy sources	54.1%	Non-Renewable energy production		
	6.	Energy consumption intensity per high impact climate sector	Energy consumption in GWh per million EUR of revenue of investee companies, per high impact climate sector	2.24	GWh/M€		
Biodiversity	7.	Activities negatively affecting biodiversity-sensitive areas	Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas, and no mitigation measures nor impact assessment is adopted.	No	Iberdrola has in force a <u>Biodiversity policy</u> to integrate the protection and conservation of biodiversity in the territories in which the Group operates		
Water	8.	Emissions to water	Tons of emissions to water generated by investee companies per million EUR invested, expressed as a weighted average	-	Consolidated data of emissions to water as requested in SFDR is not available. Emissions to water are regulated by the environmental permits and all facilities comply with the maximum permitted. Data of some facilities can be found in this web site		
		Hazardous waste and radioactive	Tons of hazardous waste and radioactive waste generated by	17,713	t of hazardous waste		
Waste	9.	9.	9.	waste ratio	investee companies per million EUR invested, expressed as a weighted average	357	m <sup>3</sup> of radioactive waste (medium and low activity)

#### SFDR. Principal Adverse Impacts on sustainability factors



INDICAT	ORS	•	RESPECT FOR HUMAN RIGHTS, ANTI-CORR BRIBERY MATTERS	UPT	ION AND ANTI-
	10.	Violations of UN Global Compact (UNGC) principles and Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises	Share of investments in investee companies that have been involved in violations of the UNGC principles or OECD Guidelines for Multinational Enterprises	No	The company has been identified as LEAD company for its high levels of commitment as Participants in the United Nations Global Compact
Social and employee	11.	Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises	Share of investments in investee companies without policies to monitor compliance with the UNGC principles or OECD Guidelines for Multinational Enterprises or grievance/complaints handling mechanisms to address violations of the UNGC principles or OECD Guidelines for Multinational Enterprises	No	Policy on Respect for Huma Rights (iberdrola.com)
matters	12.	Unadjusted gender pay gap	Average unadjusted gender pay gap of investee companies	-5.5	%
	13.	Board gender diversity	Average ratio of female to male board members in investee companies, expressed as a percentage of all board members	43	%
	14.	Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)	Share of investments in investee companies involved in the manufacture or selling of controversial weapons	No	

Getting ahead of CSDR requirements providing disclosure for SFRD PAIs applicable to investee companies

## Content



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02 Networks (page 18)

03 Renewables (page 46)

04 Generation & Customers (page 101)

05 Financing (page 136)

06 ESG (page 151)

07 Annex (page 216)

#### **ESG** at Iberdrola



Leaders in promoting the SDGs and climate change, were incorporated back in 2018 in our company's foundational regulations



#### MAIN FOCUS





#### DIRECT CONTRIBUTION











Energy Transition



Climate Change



Circular Economy



Biodiversity



Environment



Just Transition

#### Environmental

Decarbonization

Water

Circular Economy

Biodiversity

Innovation

#### Social

Diversity & Inclusion

Health & Safety

Products & Services

Stakeholders, Communities and Human Rights

#### Governance

**Best Practices** 

#### Financial

ESG Finance Strategy

#### SDGs as part of Iberdrola group's business strategy



Iberdrola contributes to the sustainable development goals, with focus on SDG 7 and 13 but with direct contribution to 4 additional SDGs

#### Main Focus



- 140 Eur bn invested to lead energy transition
- World leader in wind power with 21 GW installed
- More than 85 Mt of CO2 emissions avoided over the last three years
- Iberdrola has brought electricity to 11 million people with Electricity for all program since 2014
- Leaders in Green Bonds issued: 27 Eur bn as of today



- SBTi Targets: Carbon neutral company in 2030 and Net Zero before 2040.
- 81% of the group's installed capacity comes • Reduce the intensity of from emissions-free sources
- Iberdrola has decommissioned all of its coal-fired power plants
- Objective to plant 20 million trees by 2030, capturing c.6 million tones of CO2 over 30 years

## 6 CLEAN WATER AND SANITATION

- One of the utilities with the best water productivity (sales/water used), according to the Global 100 classification
- water use/production by 63% in 2030 compared to 2021
- In 2022, Iberdrola returned 95% of the water extracted to the environment
- Iberdrola is a part of the **United Nations' CEO Water Mandate**

#### Direct contribution



- Vector for employment and growth investing: 47 Eur bn between 2023 and 2025
- Investments and purchases of goods will help to **support** around 500,000 jobs around the world by 2025
- Leading private utility in Europe and the second in the world by investment in R&D with 363 Eur M/year in 2022 and 420 Eur M/year by 2025



- More than 800 actions to protect biodiversity per year
- Iberdrola promote the planting of 20 million trees by 2030, focusing on ecosystem restoration
- Iberdrola has received the first **AENOR** certificate for Corporate **Environmental Footprint**



- Iberdrola is part of UN Global Compact (since 2002), World Business Council for Sustainable Development<sup>1</sup> and We Mean Business<sup>2</sup>
- We support different **SDG Partnerships** key to achieve the fulfillment of the 17 goals included in the 2030 Agenda
- Selected as a leading company in the **OpenODS Index**
- Iberdrola is a member of several sustainable finance associations

<sup>&</sup>lt;sup>1</sup>World Business Council for Sustainable Development: <a href="https://www.wbcsd.org/Overview/Our-members">https://www.wbcsd.org/Overview/Our-members</a>

<sup>&</sup>lt;sup>2</sup> We Mean Business: <a href="https://www.wemeanbusinesscoalition.org/">https://www.wemeanbusinesscoalition.org/</a>

<sup>&</sup>lt;sup>3</sup> According to the model of the World Health Organisation (WHO)

#### A comprehensive, relevant and ambitious set of targets



#### **ENVIROMENTAL TARGETS**

TARGET	METRIC	2022	2025	2030
Net Zero in scopes 1, 2 and 3 before 2040	Achieve before 2040	36%1	On going	Carbon Neutral Scopes 1 y 2 <sup>1</sup>
Carbon Neutral in electricity generation in 2030	Specific emissions (global mix) g CO2 /kWh	88	<70	Carbon Neutral <sup>2</sup>
NOx Emissions	kg/MWh	0.35	-	< 0.10
Specific water consumption	% reduction vs 2021	+2	- 18%	- 63%
Smart solutions portfolio	million solutions	13	18	21
Green hydrogen	Installed capacity (kt H2)	0.02	35	350
Conservation, restoration and plantation of trees	Number of trees (Million) & No Net Deforestation in 2025	2.5	8	20
Net positive impact in 2030	% assets with biodiversity assessment and Neutrality Plan	0%	20%	100% (Net positive)
Blade Recycling	% of blades recycled³	0%	50%	100%
Investment in R&D	Million euros (annual)	363	420	550
Storage capacity	Cumulated Installed storage capacity (GWh)	101.2	102	>120
Sustainable light vehicle fleet	% over total light vehicle fleet	27.7 %	-	100%
Renewable electricity consumption in corporate buildings (Europe and USA)	% over total electricity consumption	49.4%	-	100%

<sup>1) 36%</sup> refers to percentage achieved of the 2030 emissions reduction target. vs 2020 (base year). Carbon Neutral on Scope 1 & Scope 2 according to SBTi methodology.

<sup>3)</sup> This target is subject to the existence of a commercial feasible solution.

#### A comprehensive, relevant and ambitious set of targets



<b>TARGETS</b>	METRIC	2022	2025	2030
Presence of women in relevant positions	% women	26.1%	30%	35%
Presence of women in positions of responsibility	% women	34%	35%	36%
Equal pay external certification	Equal pay certification	On going	<b>v</b> 1	
Accidentality rate (own employees)	TRIR (reduction vs 2021)	-6.4%	- 10%	- 21%
Employee training	Hours per employee (annual)	≥ 55 h	≥ 55 h	≥ 55 h
Quality of supply	Reduce the Global SAIDI (vs 2019-21 period avg)	- 4%	-10%	-
Smart Grids	% HV & MV grid	76%	83%	-
nstalled charging points <sup>2</sup>	Thousand	34.4	110	400
Digital customers (with a registered user in digital channels)	% of total commercial customers	66.12	73	80
Beneficiaries of the "Electricity for all" program	Millions of beneficiaries (cumulative)	11	14	16
Beneficiaries of the foundations programs	Millions of annual beneficiaries	5.7	8	10
Corporate volunteering	No of volunteers (thousands of employees and companions)	17	15	18
Purchases from local suppliers	% of total purchases	87.1%	≥80%	≥80%
Purchases from sustainable suppliers	% of total purchases	91.5%	≥85%	≥85%
nclusion and diversity solutions	Number of solutions	29	30	_
luman Rights Due Diligence procedure	Continuous review	✓	√	✓
Formal Stakeholder Engagement Process	Keep increasing the deployment of the scope of the Stakeholder Engagement Process	<b>V</b>	<b>V</b>	V
Cybersecurity assessments	Number of annual assessments or external verifications	1,919	2,000	2,000
Cybersecurity education and training	Number of annual hours	75.722	63,000	68,000

1) 31/12/2024 2) Referred to logic terminals.

#### A comprehensive, relevant and ambitious set of targets



GOV	'EDNL	V $V$ $C$ $E$ .	TARGE	TC
			TANUL	T

TARGET	METRIC	2022	2025	2030
Corporate governance practices (best)	Maintain	V	V	V
Independent Members in the Board of Directors	Over 50%	V	V	V
Women in the Board of Directors	At least 40%	V	V	V
Diversity in the Board of Directors	Promote	V	V	<b>√</b>
Independent external certification or validation of the compliance system	Obtain/maintain (yearly)	V	V	V

#### FINANCIAL TARGETS

TARGET	METRIC	2022	2025	2030
Green financing frameworks	Annual review and update (if applicable)	V	V	<b>√</b>
ESG financing	% of ESG financing	82%	Minimum 80%	-



## Environment

#### Iberdrola's nature positive vision



#### AN ENERGY MODEL IN HARMONY WITH NATURE AND HUMAN BEING



Based on

Electricity generation from renewable energy

Smart networks and energy efficiency storage

Electrification of the demand



Action

Economy

Climate Action Plan

Reduction of emissions and climate action



Circular Economy Plan

Sustainability use of resources and action for a circular economy

**IBERDROLA BIODIVERSITY** 

Biodiversity Plan

Protection y promotion of biodiversity and action for nature

#### Net zero in Scopes 1, 2 and 3 before 2040

# Climate Action

#### KEY ELEMENTS OF THE CLIMATE ACTION PLAN



2030

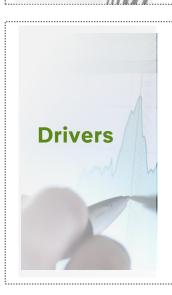
<2040

## Neutrality in emissions for scopes 1 and 2

Direct emissions (generation and other) and indirect emissions from electricity T&D losses and own consumption

#### Net-zero emissions all scopes

Scopes 1, 2 **and 3** (rest of indirect emissions that occur in sources that are not owned or controlled by the company (e.g., gas sales, purchase of electricity for sale to the final customer, generation of electricity for third parties, suppliers))





#### 100% Renewables

All energy 100% zero-emissions

"green" products



### 100% Intelligent networks

Networks more robust and 100% digitalised



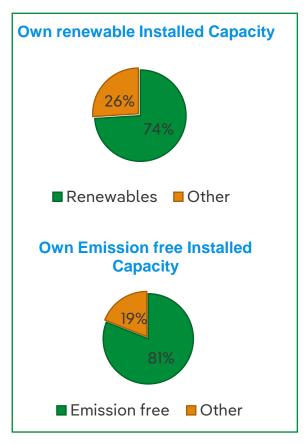


## Green solutions for customers

Offer of green products and solutions (electrification, green H2)

#### Alliances for green technologies and decarbonization





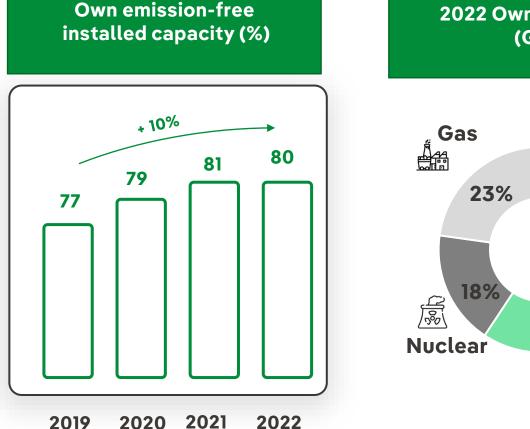


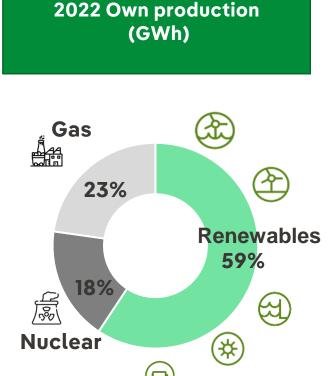
Iberdrola has approved near and long-term science-based emissions reduction targets with the SBTi. The SBTi has verified Iberdrola's net-zero science-based target by 2039.

#### Carbon neutral in electricity generation in 2030

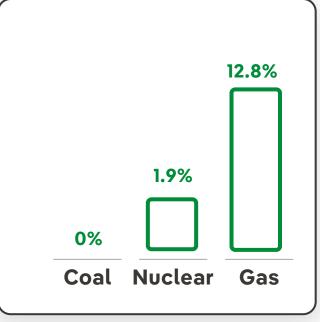


Since 2020, Iberdrola has no coal exposure (coal free)...









... and will be reducing drastically the revenues coming from gas with the agreement to sell 88% of CCGTs installed capacity in México (50% of CCGT total capacity of the group)

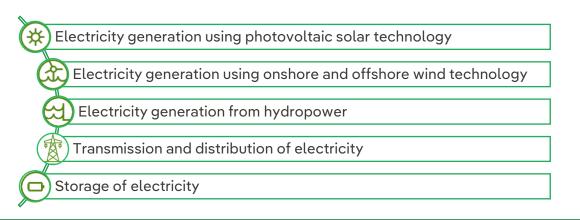
#### **European Taxonomy**



#### Activities aligned with the Climate Change Mitigation Objective

Elegibility and Aligment FY2022	Revenues (M€)	OPEX (M€)	CAPEX (M€)
Total Iberdrola Group	53.949	1.795	10.730
Total Eligible Activities	30.354	1.672	9.623
Eligibility Percentage	56,3%	93,1%	89,7%
Total Aligned Activities	19.670	937	9.282
Aligment Percentage	36,5%	52,2%	86,5%

Evaluation of eligibility, compliance with substantial contribution criteria, no significant harm, and existence of social safeguards include activities such as:

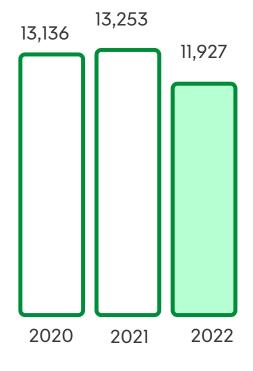


... with 96,5% of the Eligible Capex Aligned

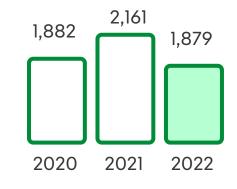
#### **Greenhouse Gas Report (Carbon Footprint)**





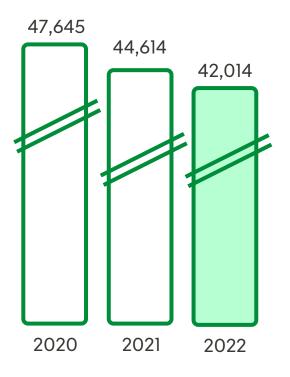


Scope 2: Indirect emissions (Mt)



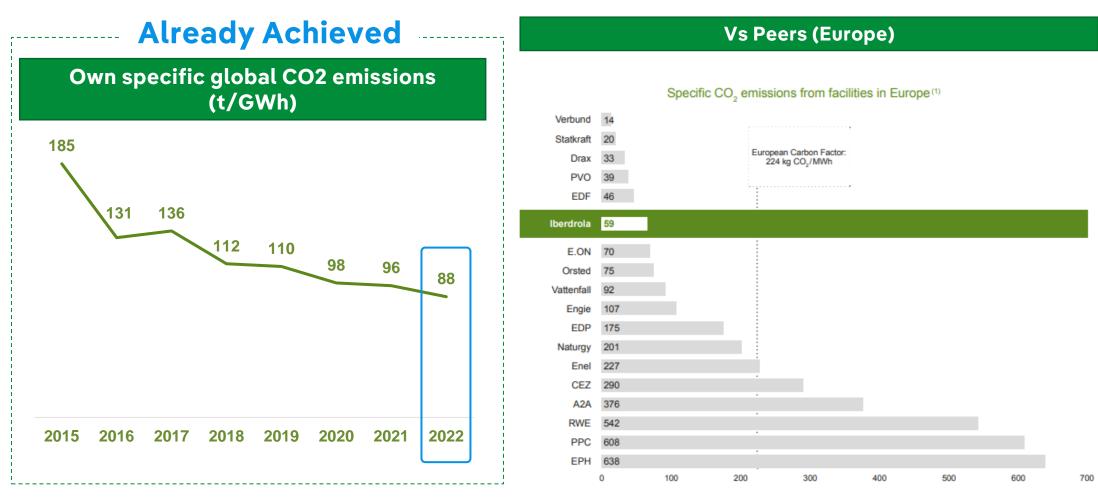
2022 Emissions

Scope 3: Other Indirect emissions (Mt)



#### **Emissions intensity: CO2**





... and will continue reducing the global emissions to meet our climate goals

#### **Biodiversity**



#### A path towards net positive impact on Biodiversity by 2030

#### 2025 Objective: No net deforestation



## 2030 Objective: Net positive impact on biodiversity

- Compensate impacts due to construction of new developments
- · Act on our supply chain
- The "Iberdrola Trees" program guarantees soundness and credibility in meeting this objective
- Impacts on ecosystems from new developments
- Impacts on species from operational and maintenance of our assets

#### **Biodiversity MEASURE** ACT **TRANSFORM & LEAD PLAN** Ensuring application of Conservation Supporting action for Stablish a biodiversity biodiversity in the Hierarchy accounting International Agenda: COP15 framework on Biodiversity From 2025 all new developments with neutral/positive biodiversity impact Creating shared value: Evaluation of all promotion of ecosystems priority facilities by Deployment of nature-based solutions: services, R&D&i, supply 2025 Trees Programme, biodiversity projects chain, social awareness...

#### Interaction and actions on drivers of biodiversity loss



#### Interaction

#### **Facilities in Protected Areas**

- 18% of the reservoirs of hydroelectric power plants are located within protected areas or areas of high biodiversity. Often, these areas have been classified as such thanks to the existence of the reservoir.
- 11.3% of onshore wind farms are in protected areas.
- 8% of power distribution lines and 2% of transmission lines are in protected areas.

## More than 200 threatened species near our facilities

#### Actions

#### More than 800 actions per year to protect biodiversity (1)

Driver of Biodiversity loss	Actions
Change of land use	Biodiversity policy: Avoid locating new infrastructure projects in spaces that are protected due to their ecological, biological, cultural and/or landscape value or areas catalogued as having high value for biodiversity;  Biodiversity Plan: From 2025 all new developments will have a Biodiversity Action Plan to be neutral o positive on biodiversity.
Climate change	Climate action plan. Carbon neutral by 2030 (generation and distribution activities) and Netzero emissions by 2040 (all activities)
Loss of species	Specific programs and actions to avoid, minimize, restore and compensate for effects on habitats and species, as well as monitoring their interactions to correct the impacts. Biodiversity Plan: By 2025 all priority facilities will have a Biodiversity Action Plan to be neutral or positive on biodiversity.
Pollution	Iberdrola Management System. Iberdrola applies the principle of prevention in all its activities and implements control mechanisms to avoid contamination of the water or soil environment due to spills or discharges.
Invasive species	Iberdrola contributes to reducing these species as part of operating its facilities (vegetation management programs and zebra mussel control) and through dedicated voluntary actions to this end.

#### Iberdrola Trees Programme





20 million trees planted in 2030

More than 2,5 million trees planted in the period 2020 – 2022 (2)

**Already Achieved** 

#### **Circular Economy Plan**



#### IBERDROLA'S CIRCULAR ECONOMY MODEL AND GOALS

Based on the 4 'r': redesign, reduce, reuse and recycle

#### **2030 Objectives**

#### Reduce

- Consumption of raw materials (water, fossil fuels, etc.) by **50%**
- Emissions, lightweight corporate fleet: 100% sustainable

#### Reuse / Recycle

Blades and PV modules: 100%

# CIRCULAR ECONOMY GOALS Suppliers

#### Redesign

Improve our supply chain through:

- Use of low environmental impact materials: recycled and recyclables
- Inclusion of eco-design criteria, life cycle analysis and environmental product declaration

#### Reduce

CO<sub>2</sub> emissions

#### **Example of Iberdrola's commitments in steel:**

- First Movers Coalition: 10% near-zero steel 2030
- **SteelZero from The Climate Group:** 50% sustainable steel in 2030 and 100% net-zero in 2050

## Customers

#### Reduce

- Stimulate the energy efficiency through electrification:
- Electric mobility
- Heat (residential and industry)
- Green H<sub>2</sub>

#### **Energy efficiency - Emissions avoided**



#### **Progress**



Mt of CO2 emissions avoided

27.72 30,74

(2021) (2022)

Initiatives to reduce emissions are undertaken through a broad range of products and services promoting energy efficiency and savings:

- Production of renewable energy
- Savings through cogeneration
- Improving networks efficiency
- Offering green products and services to our customers



Million GJ/year avoided of equivalent consumption of non-renewable primary energy

270,27

265,93

(2021)

(2022)

Million GJ/year of energy savings from green products and services

266,13

245,70

(2021)

(2022)

#### Water use





95% of water collected for cooling purposes is returned to the supply source



69% of the water withdrawn is seawater or saltwater that does not affect water stress.



4.3 hm³ of waste of water was recycled in cooling processes



#### **Already Achieved**

	2022	2021
Total water consumption (ML)	88,076	87,289
Water use/overall production (m3/GWh)	540	531
Water use/overall sales (m3 / k€)	1,56	2,16



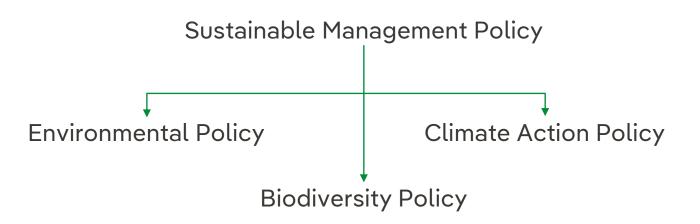
**Objective 2030:** 

63% reduction vs 2021 consumption

#### **Environmental governance and management**



#### **Corporate Policies**



Iberdrola Group's Environmental Management System converts the corporate environmental policies into environmental guidelines.

The Company's environmental strategy and management has been acknowledged on different international environmental performance indexes, such as FTSE4Good and DowJones

#### The Environmental Management System is integrated into all the Iberdrola Group organisations Corporate Policies Board of Directors **Environmental Guidelines** Corporate Environmental Footprint Stakeholders Corporate Objetives and Sustainability and Qualt Environmental **Environmental Risk** Investments and Management Expenses Corporate Environmen Objetives of the Regions departments in Environmental objetives and action plans in Organisations Avangrid, Inc. is 81.50% owned by liberdrola, S.A. Iberdrola Group Environmental Management System Directives

Combat

Guarantee sustainable

modalities of production

•

Protect the environment and prevent

the loss of biodiversity

⊗

#### **Environmental management**











environmental management based on the principles of respect for environment, the dialogue with stakeholders and single **Environmental Management System** for the group

Iberdrola Group's Environmental Management System converts the corporate environmental policies into environmental guidelines.



## **Environmental Guidelines**



To protect the environment and halt biodiversity loss







To fight climate change and its effects



To guarantee sustainable modes of production and consumption





To strengthen alliances with Stakeholders for sustainable development



The Company's environmental strategy and management has been acknowledged on different international environmental performance indexes, such as FTSE4Good

#### **Environmental Management: Corporate Environmental Footprint (CEF)**



Our Corporate Environmental Footprint (CEF)<sup>1</sup>, which is published every year, evaluates Iberdrola's effects on the environment, based on the Life Cycle Analysis (LCA). It is based on ISO 14072 and verified by AENOR since 2015



#### Footprint breakdown by environmental impacts

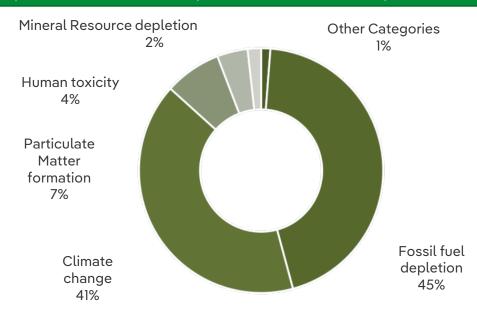
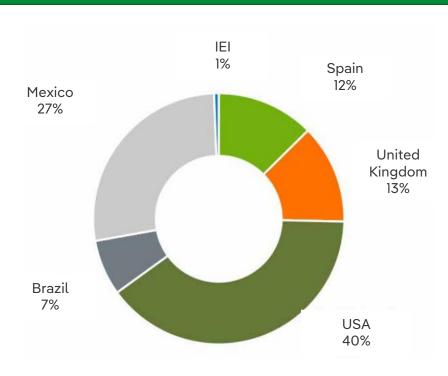


Figure 1. Environmental profile regarding impact categories [Iberdrola Group - Endpoint]

Climate change (86%) is the impact that contributes most to the direct scope of the CEF. In the indirect scope, the ones that contribute the most are the depletion of fossil fuels (48%) and climate change (37%).

#### Footprint breakdown by Subholding



The largest contribution of Avangrid (40%), to the CEF is due to the commercialization of gas and electricity, while that of Iberdrola Mexico (27%) is due to fuel consumption.

#### **R&D** - Innovation



#### Iberdrola will increase its R&D investment effort to 4,000 M€ by 2030



CUMULATED INVESTMENT

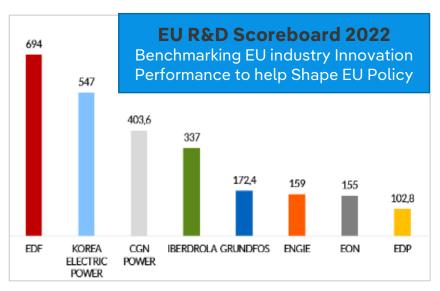
2025 2,000 M€

2030 4,000 M€

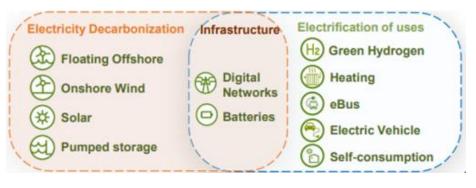
First private
utility by R&D
investment
according to 2022
EU R&D
Scoreboard
Investment increased

to **363 M€** in 2022 vs.

337 M€ in 2021



+ 250 Innovation projects on-going (renewables, networks, storage, H2, digitalization, etc.)



#### **R&D** - Open Innovation and Partnership





IBERDROLA Universities program focuses its efforts on reinforcing IBERDROLA's link with the academic world

#### IBERDROLA UNIVERSITIES PROGRAM- IBERDROLA U



Iberdrola students, scholarship holders, entrepreneurs, professors, researchers and employees form a network that promotes training, entrepreneurship and research.

Through 13 global agreements and other collaborations with universities, Iberdrola U currently connects more than 500,000 members.

CHAIRS

R&D PROJECTS

YOUNG ENTREPRENEURS TRAINING

IBERDROLA ALUMNI

#### **R&D** - Open Innovation and Partnership

• 1 in **USA** (in process)



**IBERDROLA** 



Open network of centers to connect the internal and external innovation ecosystem, foster learning, collaboration and respond to the challenges of the energy sector

#### ICON- INNOVATION CONNECTED NETWORK POWER NETWORKS CENTER | PNDC (UK) CLEAN EARTH LAB (USA) GLOBAL **SMART GRIDS** IBERDROLA CAMPUS INNOVATION (Madrid & Larraskitu) Iberdrola has created a HUB INNOVATION localized and connected MIDDLE EAST CENTRO DE innovative ecosystem H2 GREEN EXCELENCIA HUB through Innovation Hubs: (Madrid) (Madrid) • 3 In the Basque Country OPEN SMART MOBILITY INNOVATION LAB • 3 in **Madrid** (2 in PLATFORM process) (Brasil) • 1 in Qatar • 1 in **UK** • 1 in **Brazil** (in process)

#### **R&D** - Open Innovation and Partnership



BERDROLA



#### GLOBAL CENTERS OF EXCELLENCE

To be a world leader in smart grids and digitalization, renewable energies and energy solutions

#### ICON- INNOVATION CONNECTED NETWORK

GLOBAL SMART GRIDS INNOVATION HUB | GSGIH

INNOVATION MIDDLE EAST

IBERDROLA CAMPUS

SMART MOBILITY LAB

**Mobility** 

POWER NETWORKS DEMOSTRATION CENTER | PNDC



Center of excellence in smart grids and digitization in Bilbao SPAIN



A center that aims to lay the foundations of 'digital energy' by developing innovative digital solutions for the integration of renewable energy, smart grids and energy efficiency and conservation

**QATAR** 



A global center for **training**, innovation and employability in **Madrid** and **Bilbao SPAIN** 

Laboratory with the most current electric vehicle charging technologies

SPAIN



Scottish Power in collaboration with Strathclyde University and other industrial entities

UK













#### 15 years of PERSEO Start-up program



## 125 M€ invested in startups

9 companies in our portfolio



#### Challenges

**Open Innovation Tool** 

10 challenges launched anually

+ 500 proposals received each year



#### Venture Builder Program

For **creating and investing** in companies



## +7.500 start-ups in our ecosystem

Increasing at a rate of 300 per year



#### Pilot projects

Access to technology in real cases

+25 real pilot projects per year



#### Andromeda Sustainable Tech Fund

First major technology fund for energy transition

**300 M€** for investing in scaleups



#### **ANDROMEDA**

Spain's first major technology fund to accelerate the energy transition and sustainability launched in 2022 by Iberdrola, with the collaboration of ICO Next Tech Fund and Seaya.

Venture capital fund to have concrete sustainability objectives in line with **Article 9** of the EU Regulation





#### Perseo Programme's 2022 Highlights





#### Two IPOs of companies in our portfolio

2 unicorns<sup>(1)</sup> in our portfolio: Wallbox & STEM - IPOs @NYSE during 2021

New Investments materialized:
 Follow-on investments + incorporation of
 4 new portfolio companies





Recycling & Circular Economy

Electrification of Heat





Edge Computing & Cybersecurity

Batteries & EU-based industry

And a Fund (Andromeda), the first major technology fund to accelerate energy transition and sustainability

(1) Definition for a start-up company with market valuation over 1,000M\$

#### Open innovation - Challenges, pilots and other activities



**Pilots launched** (12 from challenges)



Challenges published Spain and Germany



Proposals received



**Events** in startup ecosystem

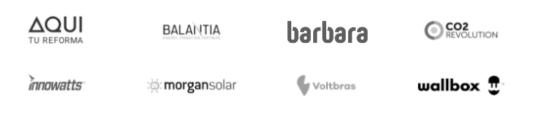




#### Currently, Perseo's portfolio is composed of 16 companies\*, 12 start-up + 4 industrial companies

\* Investments through Andrómeda included

#### **Venture Capital investments**





#### **Venture Builder / Industrial stakes**









## Start-Up Challenges Program Open calls to the Start-up community to tackle key challenges of the Energy Transition







10 Challenges launched in 2022+500 start-ups participated in the Challenges



## Social

#### **Social commitments**



#### Loyal to our firm commitment to creating sustainable value for society at large



Diversity and inclusion



Social contribution



Corporate culture



Women's sport



Paralympic sport



Corporate volunteering

- Increase the presence of 'Energy to Thrive' plan, women in relevant positions, to 30 % by 2025
- Created a committee responsible for promoting and monitoring progress on diversity and inclusion1
- Raise awareness among employees about the value that diversity brings to Iberdrola, to incorporate behaviors that foster better decision-making
- Reinforce inclusion and diversity in internal and external communications

- to strengthen our environmental, social and governance (ESG) pillars
- Iberdrola invests to look ahead to the energy transition 47 Eur bn between 2023 and 2025
- Total return for shareholders of c.400% over the last 20 years
- Having a pull effect on our more than 19,000 suppliers.
- Implementation of a Responsible supply chain management policy

- Commitment to the **training** First company to and development of all its professionals, accounting more than 65 hours of trainee per employee
- Average remuneration of men and women within the consolidated group is quite similar. Works to the promotion of STEM<sup>2</sup> careers in more minority groups
- Ensure a safe and healthy workplace throughout the whole group

- make a global commitment to encourage women's participation in sport
- In 2022 Iberdrola launched the third edition Iberdrola SuperA Awards with the aim of recognizing and giving visibility to the best initiatives launched in Spain in favor of equality and empowerment of women
- The ADOP Plan<sup>3</sup> (Paralympic Target Sport Support Plan) is an initiative by the Spanish Paralympic Committee, the Higher Sports Council (CSD) and the Ministry of Social Rights and Agenda 2030
- The ADOP Plan includes a Scholarship Programme which provides athletes with financial aid and a Programme of Services that includes an integral training support system

- In 2022, more than **16,800** volunteers participated in the Corporate Volunteering Programme - 38% more than the previous year
- In 2022, It was launched the Volunteers for Ukraine programme, that has sent more than eight tonnes of humanitarian material
- In 2022, it was celebrated the 11th edition of its International Volunteer Week. with more than 7.000 volunteers
- 1. World Business Council for Sustainable Development: https://www.wbcsd.org/Overview/Our-members
- 2. We Mean Business: https://www.wemeanbusinesscoalition.org/
- 3. According to the model of the World Health Organisation (WHO)

#### **Just Transition: Citizen's Innovation Platform**



Multistakeholder parternship

The Citizens' Innovation Platform is an initiative of Iberdrola, the Centre for Innovation in Technology for Human Development of the Polytechnic University of Madrid (itdUPM) and the Agirre Lehendakaria Center (ALC)

Lada Coal Power Station **Closed** in 2020







Velilla Coal
Power Station
Closed in 2020









Activate new socioeconomic opportunities

Promote collaboration among citizens, public entities and local companies

Design interconnected processes that respond to the perceptions and priorities

Resulting
initiatives are
Taylor Made for
each specific
situation

## Renewable growth: "CONVIVE" Program





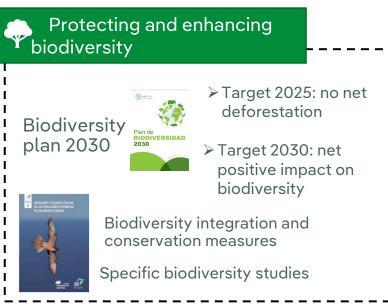
For the past two decades, **Iberdrola** has been **leading the energy transition** and we are committed to keep on leading it going forward. At the same time, Iberdrola is **committed to** a deployment of **renewable energies better aligned with biodiversity and local communities**.

**Convive Program** builds from this historical commitment and is **set up to ensure** that **renewable energies** generate **benefits for all**. At a global level, contributing to climate action, and locally generating economic activity and improving biodiversity.

Convive Program develops initiatives that multiply these positive impacts, thus contributing to improving social acceptance.

3 main areas of action, combining global as well as facility-level initiatives:



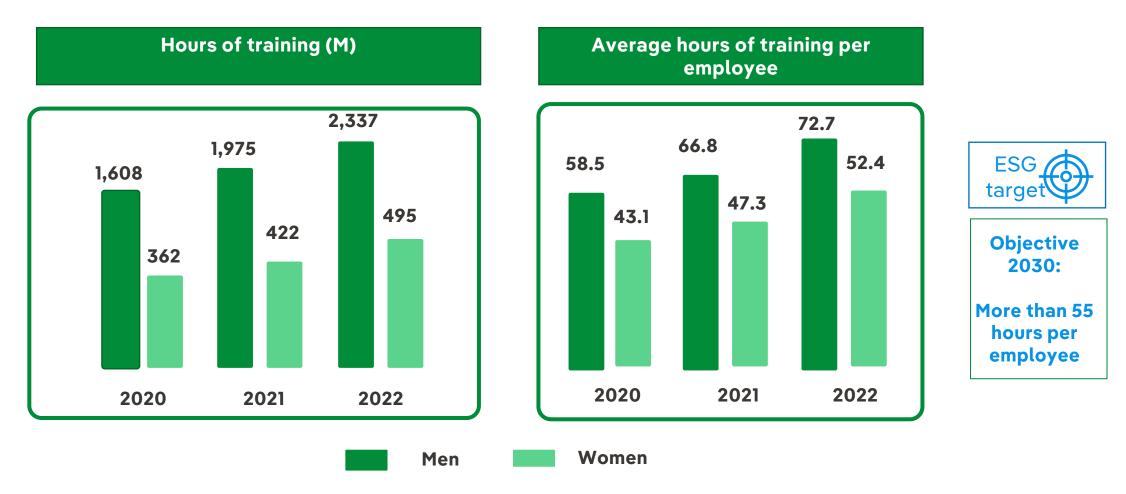




# Professional training and development



**Iberdrola's commitments to the training and development of its professionals** extend to all professional categories, all levels of responsibility, and without distinction as to gender



**Note:** The high numbers of training hours received by skilled workers and support personnel, 85% of whom are men, explains the difference in average hours between men and women

# **Diversity and Inclusion Strategy**



At Iberdrola, we embed diversity, equity and inclusion into our value chain through cross-cutting initiatives aimed at our workforce and other stakeholders to drive economic growth, social development and generate a more innovative and sustainable energy future for all

#### Pillars of action:



## **Diversity and Inclusion Strategy**







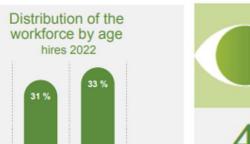




Distribution of the







Over 50 years

31 and 50



Generations

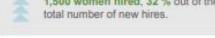
Baby boomers

Generation X

Millennials

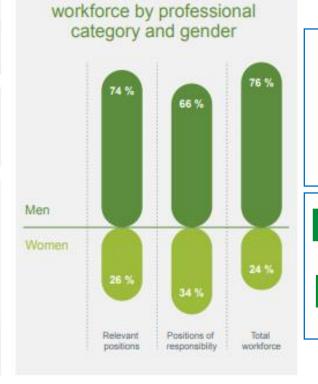
Generation Z













Woman in relevant positions in 2030 Woman in positions of responsibility in 2030

Up to

30 years



Men

Women

36%

# Diversity and inclusion Main recognitions





Recognised for the sixth year in a row in the <u>Bloomberg Gender Equality Index (Bloomberg GEI)</u> as a referent for equal opportunities, highlighting its transparency and commitment to equality between women and men. We are the only Spanish electric company included in all editions of this index

S&P Dow Jones Indices Once again included in the **Dow Jones Sustainability Index**, the only European utility to be included in its 23rd edition. In the social section, it is worth highlighting the increase in the score for the aspects: Remuneration by gender and Breakdown of the workforce.







the **SUSE Inclusive Employer Award** for its Breaking Barriers program.



AVANGRID recognised as a <u>Top Company for Workforce Equity and Mobility</u> by JUST Capital for being a company committed to advancing racial equity and equal opportunity for all.



Neoenergia won the Diversity and Inclusion category, in the regional stage, with the Junt+s diversity program, obtaining the **Prémio Aberje 2022**, the most important recognition in corporate communication in Brazil.

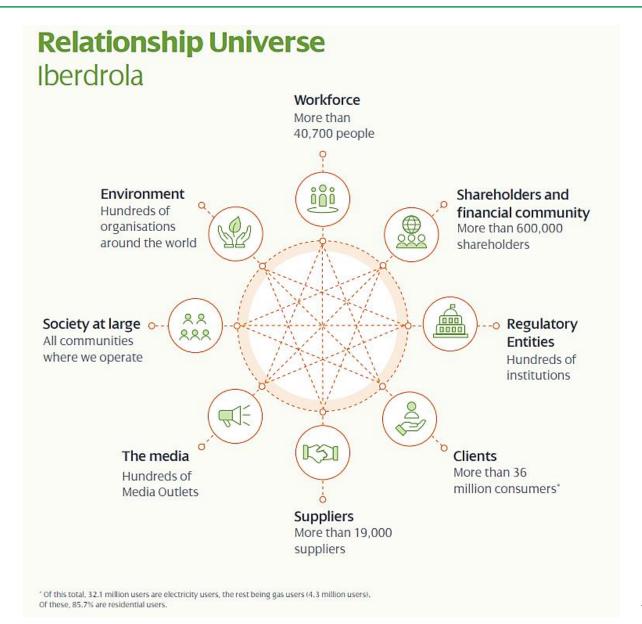


Iberdrola Mexico received the Gold Award for <u>Best Practices in SDGs</u> from the Ibero-American Foundation for Quality Management (Fundibeq) for its program Impulso STEM, which awarded 58 scholarships to young people in Oaxaca, 50 % of them to women.

### Stakeholders at the center of our decisions



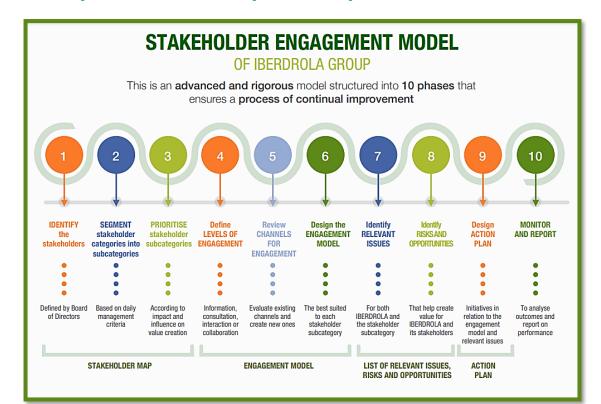
- Iberdrola eight priority Stakeholder categories:
  - 1. Workforce
  - 2. Shareholders and the financial community
  - 3. Regulatory entities
  - 4. Customers
  - 5. Suppliers
  - 6. The media
  - 7. Society at large
  - 8. The Environment
- Behind them are institutions, organizations and groups.
- All of them, with their decisions and opinions, influence the company and are also affected by our activities.



### Stakeholders at the center of our decisions



- ✓ Involvement of stakeholders in the Iberdrola business project.
  - ✓ Strong engagement with the communities.
  - Creation of sustainable and shared value for the stakeholders.
- Respond to the legitimate interests of the stakeholders.
- ✓ Promote recognition by all stakeholders of Iberdrola's commitment to diversity.
- ✓ Build lasting, stable and robust relationships.
- ✓ Contribute to preserve the corporate reputation.



# RELEVANT CROSS-CUTTING IDENTIFIED ISSUES



**Implemented by all Iberdrola** group companies, business units and major sites using a **shared digital application**.

# **Human Rights**



Iberdrola has a firm commitment to the defense of human rights. Therefore, it has a set of tools, aligned with the main international standards, that ensure and promote the protection of and respect for people, in order to prevent, mitigate and repair any negative impacts in this area.

# Iberdrola commitments

To **respect the human and labor rights** even in countries in which the legislation on human rights has not been adequately developed

To reject child labor exploitation, forced labor or any other form of modern slavery, and respect freedom of association and collective bargaining, as well as nondiscrimination, the right to move freely within each country.

To respect the right to the environment of all the communities in which it operates,

To promote a culture of respect for human rights and the awareness of its professionals

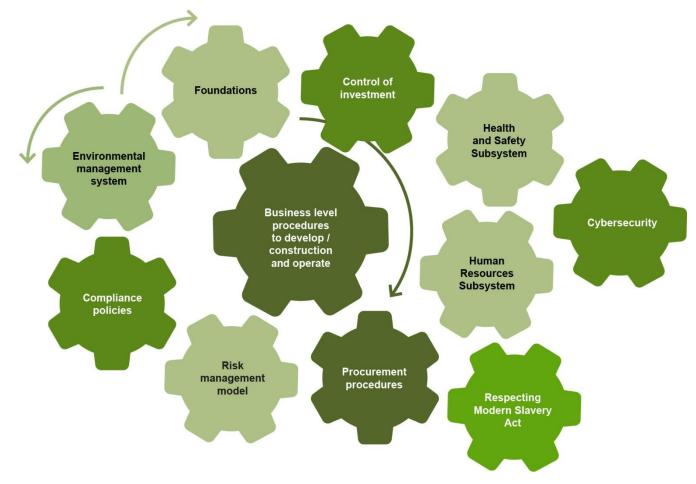
**Going further:** Transmitting **to all stakeholders,** including suppliers and affected communities, the importance of respecting human and labor rights and demanding the same commitment.

## **Human Rights**



Iberdrola's Human Rights Due Diligence System based on the Governance and Sustainability System and on the three lines of defense Controlling Model: prevention, monitoring and evaluation of human rights management.

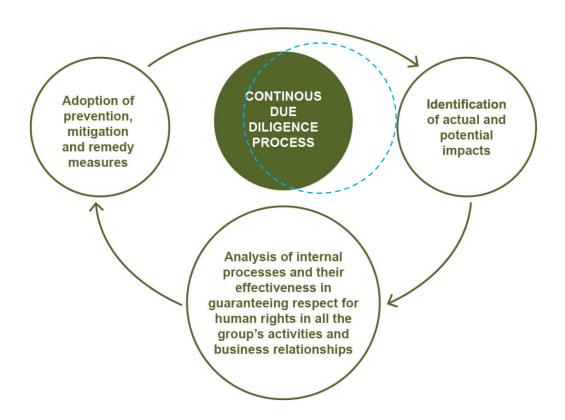
- As a result of the adoption of a broad definition of human rights, the due diligence system is based on various subsystems and procedures:
  - Compliance
  - Health and Safety
  - Purchases
  - Cybersecurity
  - •



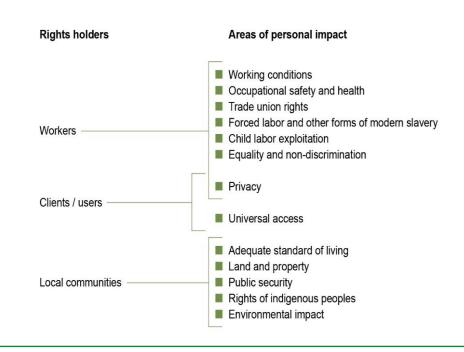
## **Human Rights Due Dilligence**



Iberdrola's **Human Rights Risk Map** (annually reviewed) identifies the main risks, both in the countries of operations (taken into account activity/technology/phase of operations) and in those from which it obtains its supplies.



# Areas of potential impact and Stakeholders rights-holders

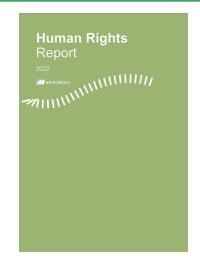


✓ Iberdrola carries out a **human rights risk and impact analysis at 100% of its activities** (259 main representative locations of operation).

## **Human Rights**



- Promoting a culture based on knowledge of and respect for human rights.
   Engaging through a number of regular internal and external training and awareness-raising activities for different Stakeholders.
- Communication and reporting of measures adopted: Iberdrola published its first Human Rights Report in 2022 on the company's governance and performance in this area.



### Management of suppliers from a human rights perspective

Iberdrola invites its suppliers to align themselves with its sustainability objectives through the implementation of good human rights practices.

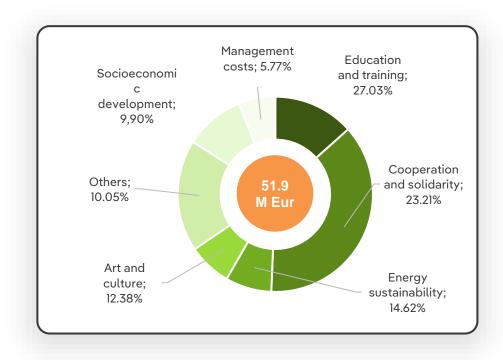
The purchasing function also seeks to have the necessary mechanisms in place to ensure a fair, transparent and ethical value chain. The measures adopted by the Company to protect human rights in the management of suppliers and during the purchasing process are based on both the Purchasing Policy and the Suppliers' Code of Ethics.

The supplier management process also includes other human rights measures, including an assessment based on ESG criteria, including human rights in supplier selection, specific social responsibility clauses in the contracting terms and conditions, and compliance reviews during the term of the contracts.

# **Contribution to the Community**



### Iberdrola's contribution by programs





In 2022, Iberdrola's contribution amounts to 51.9 M EUR

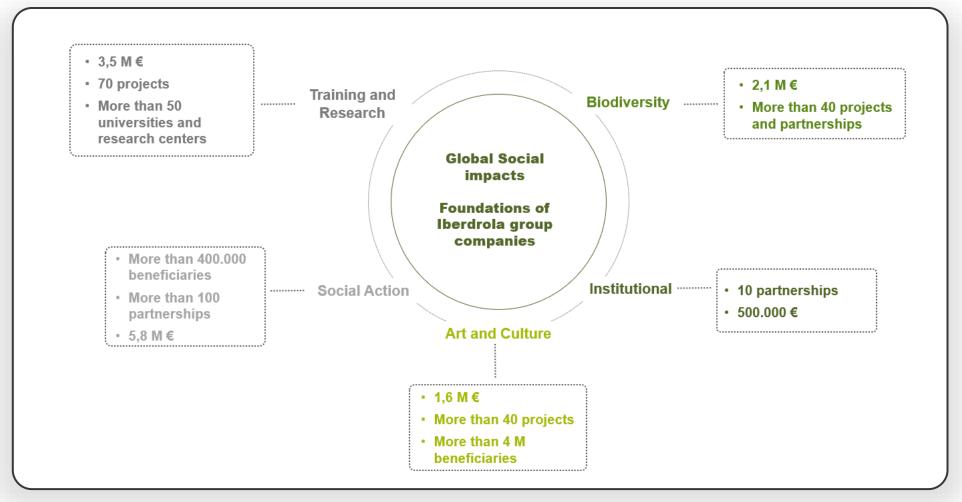
This amount is equal to 1.2% of net profits for the year.

Sustainability Report 2022: <a href="https://www.iberdrola.com/documents/20125/2931678/gsm23\_IA\_SustainabilityReport2022.pdf">https://www.iberdrola.com/documents/20125/2931678/gsm23\_IA\_SustainabilityReport2022.pdf</a>

### **Foundations**



### 2022 Foundations of Iberdrola Programs: Impact in the main areas



Sustainability Report 2022: <a href="https://www.iberdrola.com/documents/20125/2931678/gsm23\_IA\_SustainabilityReport2022.pdf">https://www.iberdrola.com/documents/20125/2931678/gsm23\_IA\_SustainabilityReport2022.pdf</a>

# **Electricity for All**





We are aiming to bring electricity to more than 16 million people in 2030



Since January 2014, we have contributed to 11 million people benefiting from access to electricity

### Iberdrola and UNICEF. International alliance



The main objective of this alliance is to promote opportunities for empowerment, education, training and employability of young people in vulnerable situations in Spain and internationally, contributing to generate a more sustainable, resilient and inclusive employment.

Working in Spain with the initiative "Generation Unlimited España"

Working in Brazil with "I Million opportunities" program and Somalia with UPSHIFT innovation programmed

Promoting training on climate change and sustainability in formal education

"With this alliance we are responding to the challenge of generating employment opportunities for vulnerable young people in sectors of the future, such as clean energy"

Executive Chairman, Ignacio Galán







### **Direct Tax Contributions**



Direct tax contribution of Eur 7,458 M in 2022 (39% of the Group's profit before taxes)...

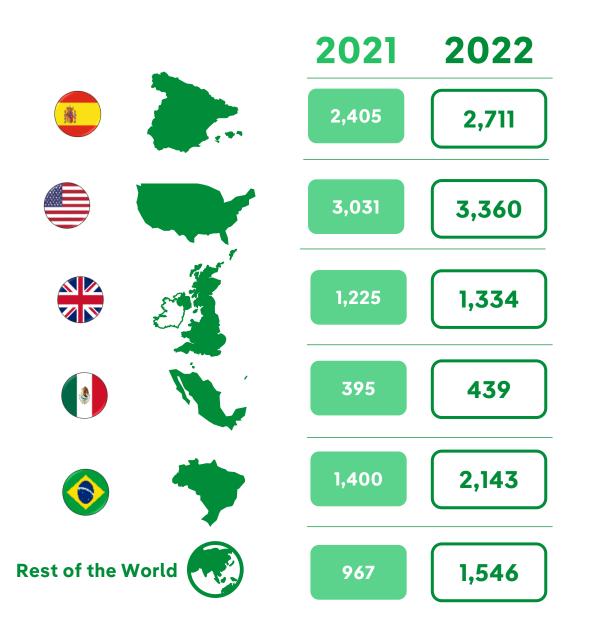
### Iberdrola's tax contribution by countries

Taxes paid to public treasury (M€)	<b>Company contributions</b>	Contributions due to third-party payments	Total	
Spain	1,740	845	2,585	
United Kingdom	197	477	674	
United States	870	363	1233	
Brazil	180	2,090	2,270	
Mexico	150	117	267	
Other countries	118	311	429	
Total	3,255	4,203	7,458	

... EUR 3,255 M from company's contributions and EUR 4,203 M due to third-party payments

### **General Procurement**





Iberdrola placed purchase orders with almost 20,000 suppliers for a total of 11,533 M€ in 2022

Increase of 22% vs 2021



80% of total purchases will come form **local suppliers** by 2030

TOTAL Amount awarded in 2022: €17,796.2 million



# Governance

### **Corporate Governance**



### Iberdrola, at the forefront of Corporate Governance and Compliance...

The Governance and Sustainability System is the Company's internal system of rules and it is structured in five books:

#### **By-Laws:**

The core of the internal system of rules, they make up the backbone of the Governance and Sustainability System.

#### **Environment and Climate Change:**

Iberdrola's response to sustainable management of environmental challenges while helping to identify and take advantage of the opportunities arising from the energy and ecological transition.

#### **Social Commitment:**

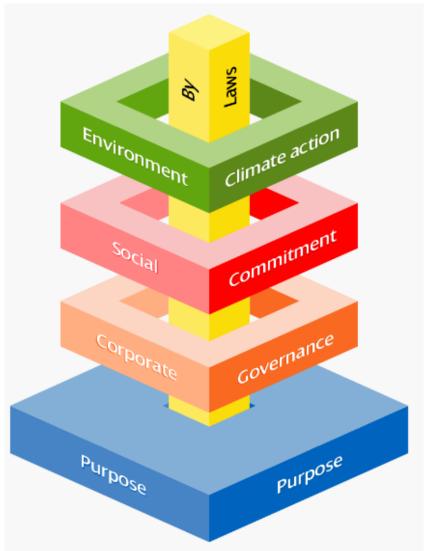
Recognizing and valuing the importance of human and personal capital and promoting diversity, inclusion, equal opportunity and non-discrimination.

#### **Corporate Governance:**

Guidelines and standards for conduct of the corporate bodies, establishing the operation thereof and complying with legal requirements and the highest standards in this field.

#### **Purpose:**

This book embody the Company's corporate philosophy and the ideological and axiological bases on which its corporate enterprise is based.



### **Corporate Governance**



Structure of the governance and sustainability system



# A leader in Corporate Governance for years in accordance with the highest national and international standards for listed companies

- Recognised by the League of American Communications Professionals (LACP) as the best European company in terms of ESG information dissemination
- Company with the best corporate governance practices among European utilities. Ethical Boardroom recognised Iberdrola with the 2019 Award for Best Corporate Governance



Listed and non-listed country sub-holding companies and subsidiaries also have the highest international standards



#### Continuously updating Governance and Sustainability System

- Articulating its content around three aspects: Environmental, Social and Corporate Governance (ESG)
- Ongoing implementation of best-in-class Equality, Diversity & Inclusion policies, updated in 2022



#### **Compliance System reflects best practices and international standards:**

- 9 consecutive years as one of the most ethical companies in the world by Ethisphere Institute
- Compliance Leader Verification issued by Ethisphere Institute (USA)
- Iberdrola 1<sup>st</sup> ranked in *Corporate Transparency Index* in Integrity, Compliance and Human Rights of IBEX-35 companies elaborated by *Transparencia International*
- Award for the best compliance system 2018 -2019 awarded by Expansión



#### **Climate governance**

- TCFD (Task Force on Climate-related Financial Disclosures) implementation
- Climate Action Policy and Plan approved in 2021 Annual Shareholders Meeting

### Iberdrola and the TCFD<sup>1</sup>



**One of the first companies** to publicly commit to implement the recommendations of the TCFD by 2020 with an ongoing constructive feedback to approve and improve TCFD



#### **Corporate Governance**

- Describe the BOARD oversight of climate-related risks and opportunities
- Describe management's role in assessing and managing climate-related risks and opportunities



#### **Strategy**

- Describe the organization processes for identifying and assessing climate-related risks
- Describe the organization processes for managing climate-related risks
- Describe how processes for **identifying**, **assessing and managing climate-related risks** are integrated into the organization's overall risk management



#### **Risk Management**

- Describe the climate related risks and opportunities the organization has identified over the short, medium and long term
- Describe the impact of climate related risks and opportunities on the organization's businesses, strategy and financial planning
- Describe the **resilience of the organization's strategy**, taking into consideration different climate related scenarios, including a 2°C or lower scenario



#### **Metrics and targets**

- **Disclose the metrics** used by the organization to assess climate related risks and opportunities in line with its strategy and risk management processes
- Disclose Scope 1,2 and if appropriate Scope 3 greenhouse gas emissions and the related risks
- Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets

## Implementation of TCFD Recommendations



TCFD recommendations fully implemented, including scenario analysis...



### 2022 improvements

**Physical risks:** Full review of vulnerability and adaptation measurements **Climate Change Risks:** New specific working group focused on reporting

### **Board of Directors structure as of 23.02.2023**

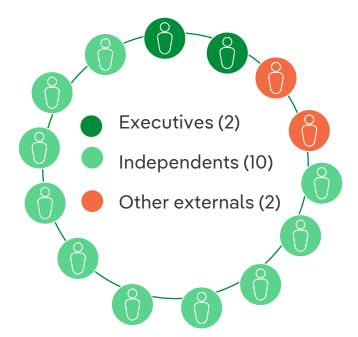


- All members of the Executive Committee and Consultative Committees attended 100% in 2022
- Diversity in Gender, Academic background and nationality



# Board composition (14 Members)

#### TYPES OF DIRECTORS



CONSULTANT COMMITTEES OF THE BOARD OF DIRECTORS

#### **Audit and Risk Supervision Committee**



3 members (3 independents, independent chairwoman)

#### **Appointments Committee**



3 members (2 independents, 1 other external, independent chairman)

#### Remuneration Committee



3 members (2 independents, 1 other external, independent chairman)

#### Sustainable Development Committee



3 members (3 independents, independent chairwoman)



Women (Chair in the case of the Sustainable Development Committee & Audit and Risk Supervision Committee)

### **Board of Directors structure as of 23.02.2023**



Clear differentiation between the duties of strategy and supervision and those of guidance and management. System of checks-and-balances that avoids the accumulation of powers

#### **Board Structure**

**Strong Independent Oversight** 

- Split between oversight and management: 10 independent members, 2 non-independent members, 2 executives
- 71% independence. Majority of independent directors in every key Board Committee.
- Experience and skills that are relevant to ensure that the Board contributes to Iberdrola's strategic direction and ability to challenge management
- Diversity in gender (43% women) and 6 different nationalities.
- Balance between experience and refreshment (64% of directors in office between 0 - 5 years).
- Director term: 4 years.
- No more than 3 listed companies in which the office of director can be discharged.

# Executive Chairman/

Clear and Separate Responsibilities

#### **Executive Chairman**

- Corporate Strategy
- Financing
- Control Aspects
- Stakeholder Relations
- Corporate & Sustainable Development

#### **CEO**

- Lead the Group Businesses
- Implement Business Strategy
- Supervise Execution throughout the Group
- Responsible of Human Resources, Procurements, Insurances, Security and Cybersecurity, IT

#### Lead Independent Director

**With Strong Powers** 

- Chair the Board meetings in absence of the Chairman and Chair of the Remuneration Committee.
- Coordination of non-executive directors
- Lead the Chairman evaluation and succession
- Call a Board meeting
- Preparation of the Board agenda and request the inclusion of new matters.
- Engage with shareholders

# **Group Governance Structure**

**Decentralized** 

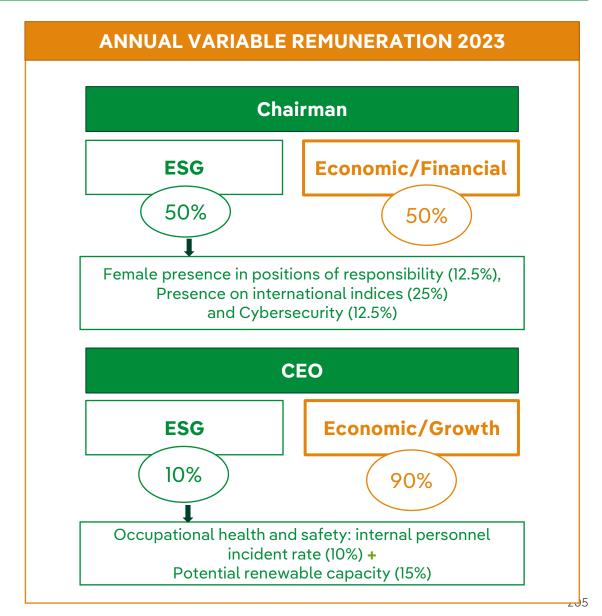
- IBERDROLA, S.A., as holding company, is focused on strategy, policies, oversight and governance, not involved in business operation.
- The countries subholding companies help with the strategic supervision, organisation and coordination
- Management allocated in different Head of Business Companies.
- Subholding and Head of Business Companies organised through boards of directors (with CEOs and external directors), audit committees, internal audit areas, and compliance units or divisions.

# **Iberdrola's Executive Pay Practices**



#### **CONSISTENT - TRANSPARENT - CHALLENGING**

- Fixed Remuneration (with no pension) has remained the same since 2008 and annual variable remuneration since 2011.
- The bonus targets set are disclosed in detail post attainment (due to commercial sensitivity).
- The Pay Mix stands at ~20:80 (fixed:variable)
- More than half of variable pay is measured over a longterm
- Targets set under incentive plans consider the targets communicated to the financial markets, which are considered ambitious
- Iberdrola's track-record in meeting both financial and nonfinancial targets is aligned with the value created for all stakeholders, including shareholders



# Strategic Bonus (LTIP) 2023-2025 KPIs



Economic and Financial Objectives (Maximum compliance)		
Economic	Consolidated Net Profit (Eur 5,400 Mill (+25% 2022))  Relative TSR (+5pp Euro Stoxx Utilities Index)	30% 20%
Financial	✓ Maintain the financial strength (rating level) ✓ ESG Financing (+80% of new financing)	15%
	ESG Objectives (Maximum compliance)	30%
7 GINN DEEDT 13 DAME  13 DAME  13 DAME  14 DAME  15 DAME  16 DAME  17 DAME  18 DAME	Reduction of CO2 Emissions up to 70 grCO2/kWh	10%
3 MEALTH  6 GLANWAITER  14 MELOW WATER  15 ONLINE  5 SCHOOLS  15 ONLINE  15 ONLINE  15 ONLINE  15 ONLINE  15 ONLINE  15 ONLINE	85% of main suppliers subject to sustainable development policies and standards	10%
	√ 30% of female presence in relevant positions	10%

Three-year performance period 2023-2025 and three-year deferral period 2026-2028 avoiding overlapping performance linked remuneration

### **Public affairs**



Iberdrola participates, both at global and countries level, in entities and associations defending its

business interests and those of its main Stakeholders.

#### **OUR STATEMENT:**

Iberdrola Group is committed to the Paris Agreement goals and the energy transition, as the path to achieve a more sustainable future: Acting today to protect the planet of tomorrow.

We are highly committed to continuing to lead the way towards a zero emission future, working towards reaching CO2 neutrality in scopes 1 and 2 by 2030 and globally by 2050, and Net Zero before 2040.

To accomplish our commitment to reduce emissions, we will continue to promote and lead a business model fully integrated into a decarbonized future, boosting investments, innovation in new technologies, while creating value for our Stakeholders.

We advocate and promote collaboration among governments, institutions, and organizations in order to accelerate energy transition and economy decarbonization."





In 2022, no organization in which Iberdrola participates has been identified that has been assessed as being opposed to the Statement.

### **Public affairs**



Participating in the public life of the communities in which Iberdrola has a presence and conveying its positions to the Stakeholders are objectives of Iberdrola's public activities.

In line with its strategy, Iberdrola promotes the approval of objectives and frameworks for climate policies in line with the Paris Agreement from an ambitious perspective that creates value for society as a whole.

#### Participation in national and international associations

Alignment with Paris Agreement, the promotion of energy transition and the company's Statements

- Consistency: with the Corporate Purpose and Values, among which the energy transition and the fight against climate change are of paramount importance.
- Number of associations: In 2022, the group participated in 532 organizations.
- The group carries out an annual analysis of the degree of alignment of these organizations

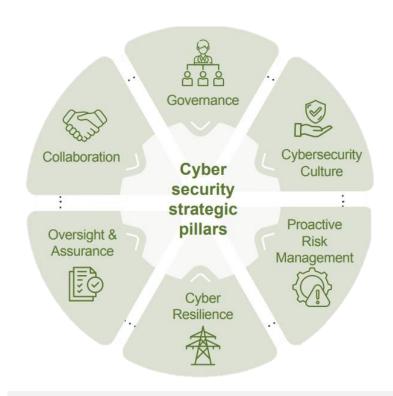
#### **Engagement with public bodies**

Legitimate defense of Iberdrola and its stakeholders' interests.

- Iberdrola's participation in **public consultation** processes stating its positions in defense of decarbonization and the energy transition.
- Maintaining regular contacts with public bodies.
- Financial contributions to political parties: Iberdrola is a politically neutral company. In the financial year 2022, UK, US and Australia, contributed to the political parties.

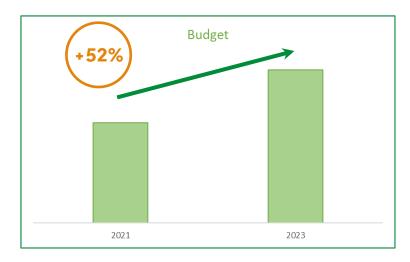
## **Cybersecurity Strategic Pillars**





- Enabling secure operations, innovation, and digitization
- in an increasingly complex ecosystem and threat landscape
- by embedding Cybersecurity within Business' decisions and operations

# INCREASING BUSINESS COMMITMENT AND DEDICATION OF RESOURCES





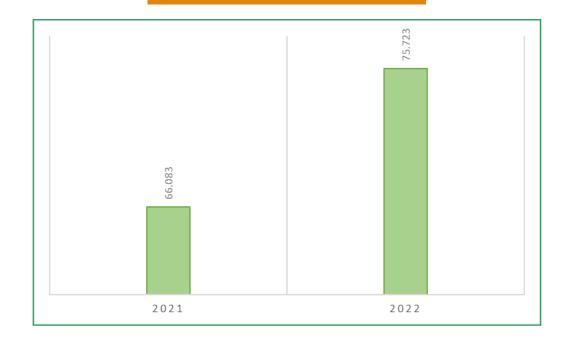
## **Cybersecurity Key Metrics**



# Accompanying the company's digitization process and adapting to the evolving threat landscape

Number of Cybersecurity training hours per year

Number of security and vulnerability assessments per year







2025 - 63,000 hours of cybersecurity training 2030: - 68,000 hours of cybersecurity training

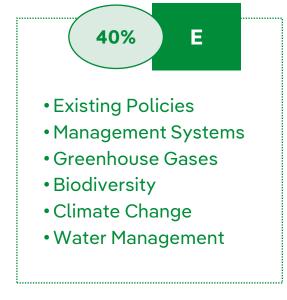
# Increased supplier sustainability challenge for 2025

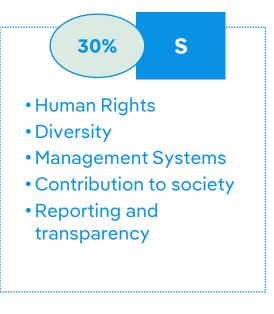




# First company with AENOR's Sustainable Procurement Strategy certificate

**Iberdrola's sustainability evaluation model**, conformed to the international reality of the Iberdrola Group and organized **around the three core pillars of sustainability** (based on 47 factors)







## Increased supplier sustainability challenge for 2025



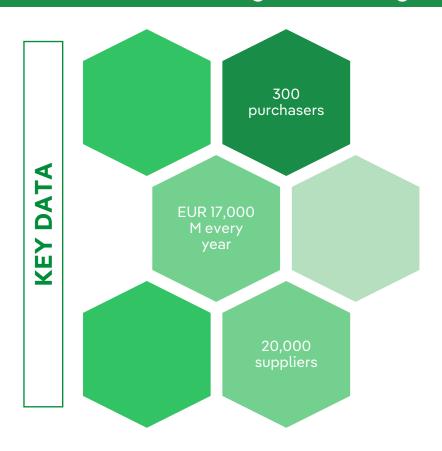


Iberdrola has surpassed the 70% objective set for the years 2020-2022 in relation with Iberdrola's main suppliers subject to sustainable development policies and standards, achieving a 77% result



For 2025, Iberdrola is increasing the ambition and setting an 85% target

- ESG evaluation embedded in the purchase decision making guaranteed by digital online interfaces between the Supplier Risk/ESG platform and the Purchasing platform
- Suppliers that don't meet the ESG minimum value receive a personalized improvement plan to help them improve their sustainability.
- In 2020-22 Iberdrola proposed improvement plans to almost 1000 suppliers. 57% of them have managed to improve beyond the Sustainability threshold





Dow Jones Sustainability Indices In Collaboration with RobecoSAM	Included in all 23 <sup>rd</sup> editions	DRIVING SUSTAINABLE ECONOMIES	A
MSCI	AAA Only 8% utilities with AAA	CDP" SUPPLIER ENGAGEMENT LEADER 2022	Iberdrola Included
FTSE4Good	Percentile Rank: 99	Corporate ESG Performance Prime ISS ESG	Iberdrola classified as Prime
SUSTAINALYTICS	82 out of 677 Electric Utilities Rank	Bloomberg Gender-Equality Index 2022	Only Spanish electrical utility included in all editions
Sustainability Yearbook 2023 S&P Global	Top 5 % S&P Global ESG Score	V.B	Iberdrola selected

# Content



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# Annex

# Significant events after 2022 year-end



#### Federal Renewables Tax Incentives - IRA

# Onshore Wind & Solar PTC Elections

PICELECTIONS		
Start Construction	COD Deadline	Project PTC <sup>(1)</sup>
2016	2022	100%
2017	2023	100%
2018	2024	100%
2019-2021	2025	100%
2022	2026	100%
2023	2027	100%
2024	2028	100%
After 2025 <sup>(4)</sup>	4 yrs. later	100%

# Onshore Wind, Solar & Storage ITC Elections

Start Construction	COD Deadline	Project ITC <sup>(2)</sup>
2016	2022	30%
2017	2023	30%
2018	2024	30%
2019-2021	2025	30%
2022	2026	30%
2023	2027	<b>30%</b>
2024	2028	<b>30%</b>
After 2025 <sup>(4)</sup>	4 yrs. later	30%

Offshore Wind ITC Progression			
Start Construction	COD Deadline	Project ITC <sup>(3)</sup>	
Before 2033 <sup>(4)</sup>	10 yrs. later	30%	

- Projects started more than 59 days after IRS guidance issuance subject to wage/apprentice rules to get maximum credit (otherwise only 20% of maximum).
- Hydrogen credits up to \$3/kg (or 30% ITC) available for hydrogen production facilities in service after 2022 (same wage/apprentice rules apply).
- Credits generated after 2022 may be transferred to third parties for cash from existing and new projects (including in TEI structures).
- Direct pay only available for tax exempt entities other than hydrogen facilities (PTCs only generated in first five years for hydrogen facilities).
- US domestic content credit (10% maximum) for near term projects unlikely.
- Various projects may qualify for energy community credit (10% maximum).
- Bonus credits above do not include additional Low Income Community credits available in limited locations with less than 5 MWh projects.

<sup>1)</sup> With Domestic Content & Energy Community bonus placed in service after 2022 - maximum 120% PTC

<sup>3)</sup> With Domestic Content bonus placed in service after 2022 - maximum 40% ITC

<sup>2)</sup> With Domestic Content & Energy Community bonus placed in service after 2022 - maximum 50% ITC

### Iberdrola and Mexican government agreement



### Iberdrola and Mexican government agreement (April 2023) to sell 13 operating plants for ~6 Bn USD

### Transaction perimeter (~55% of EBITDA)

- Iberdrola Mexico has signed an agreement with Mexico Infrastructure Partners (MIP), being the transaction financed by Mexican public institutions (FONADIN and Development Banks)
- The portfolio includes 12 CCGTs with a total 8,436
   MW installed capacity and 1 windfarm of 103 MW:
  - 7,400 MW (87% of the total) contracted with CFE (PIE), under Government concession renewal
  - ~5,000 MW (c.60% of the total) with already >16 years in operation
  - 4 assets (~1,400 MW) stopped due to open litigations with regulatory bodies, transferred with the assets

Asset	Technology	Capacity (MW)	COD
	PIE CCGT	449	2002
Monterrey (I, II)	PIE CCG1	449	2002
Altamira III y IV	PIE CCGT	1,096	2003
Altamira V (Del Golfo)	PIE CCGT	1,155	2005
Escobedo	PIE CCGT	878	2018
La Laguna	PIE CCGT	537	2004
Tamazunchale	PIE CCGT	1,179	2007
Baja California	PIE CCGT	324	2017
Topolobampo II	PIE CCGT	917	2019
Topolobampo III <sup>1</sup>	PIE CCGT	766	2023E
La Venta III	PIE Wind Onshore	103	2012
Monterrey III & IV <sup>1</sup>	CCGT Private	477	2002
Enertek <sup>1</sup>	CCGT Private	144	2002
Tamazunchale II	CCGT Private	514	2022
Total Perimeter		8,539	

# Iberdrola and Mexican government agreement



### Iberdrola and Mexican government agreement (April 2023) to sell 13 operating plants for ~6 Bn USD

### The new Iberdrola Mexico (~45% of EBITDA)

- **Iberdrola keeps presence in Mexico** with 14 operating plants (2,427 MW<sup>(1)</sup>):
  - o 1,059 MW renewables<sup>(1)</sup>
  - 1,166 MW CCGTs
  - o 202 MW Cogen,
- Focus on Renewables and Customers
- 6 GW of renewable pipeline to secure energy to our private customers
- Contribution of 400 M USD in 2023 EBITDA (e)
- Maintaining commercial activity and access to firm capacity to ensure the supply to Mexican private customers and foster renewables growth



