



PORTUGUESE RENEWABLE ELECTRICITY REPORT

JANUARY 2020



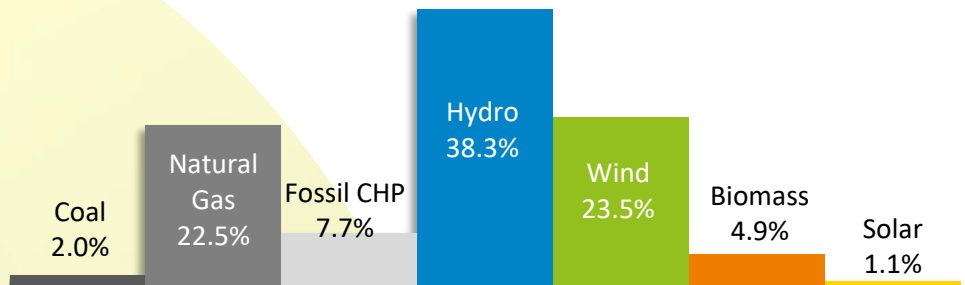
APREN Associação
de Energias
Renováveis

EXECUTIVE SUMMARY

JANUARY 2020

67.9 %

Renewable electricity generation (January)



Fossil:
32.1%
1 787 GWh



Renewables:
67.9%
3 773 GWh

GENERATION

5 560
GWh

CO₂ PRICE

24.4
€/tCO₂

CO₂ EMISSIONS

0.7
MtCO₂

PT MIBEL PRICE

40.9
€/MWh

IMPORTS

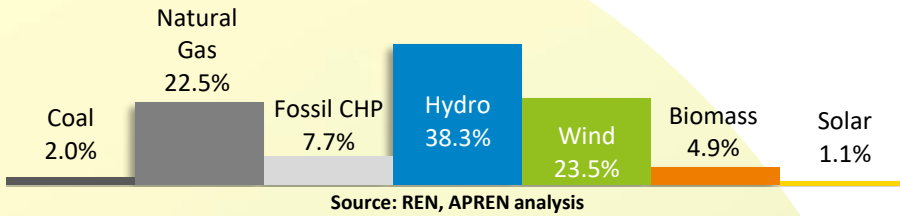
307 GWh

EXPORTS

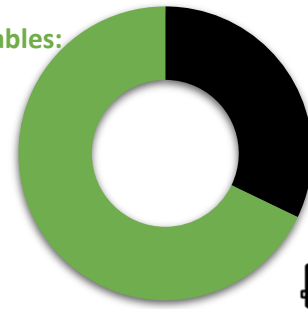
804 GWh

ELECTRICITY GENERATION: MAINLAND PORTUGAL

JANUARY 2020

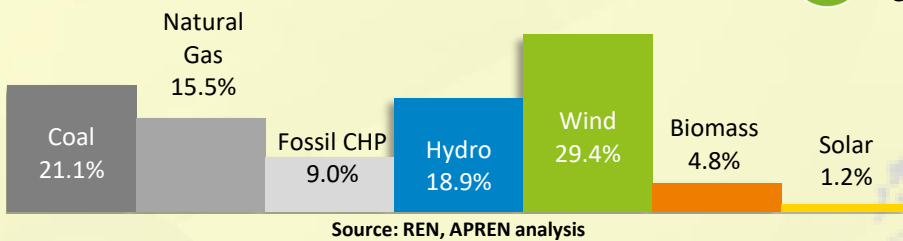


Renewables:
67.9%

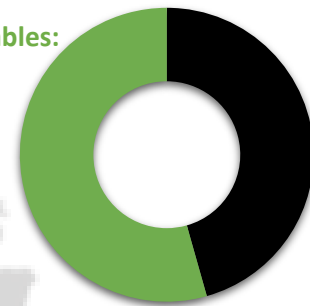


Fossil:
32.1%

JANUARY 2019



Renewables:
54.4%



Fossil:
45.6%

MAIN INDICATORS - JANUARY

	2020	2019	
% Renewable generation	67.9	54.4	↑ 15%
Generation [GWh]	5 063	4 815	↑ 14 %
Demand ¹ [GWh]	5 063	4 975	↑ 1.8 %
Wind index	0.99	1.10	
Hydro index	1.03	0.42	

¹Demand referred to the powerplants' net power generation, considering the import-export balance.

Source: REN, APREN analysis

INTERNATIONAL TRADE

On January 2020, the national electricity system recorded electricity imports of 307 GWh and exports of 804 GWh, resulting in an export balance of 497 GWh.

Source: REN, ENTSO-E, APREN analysis APREN

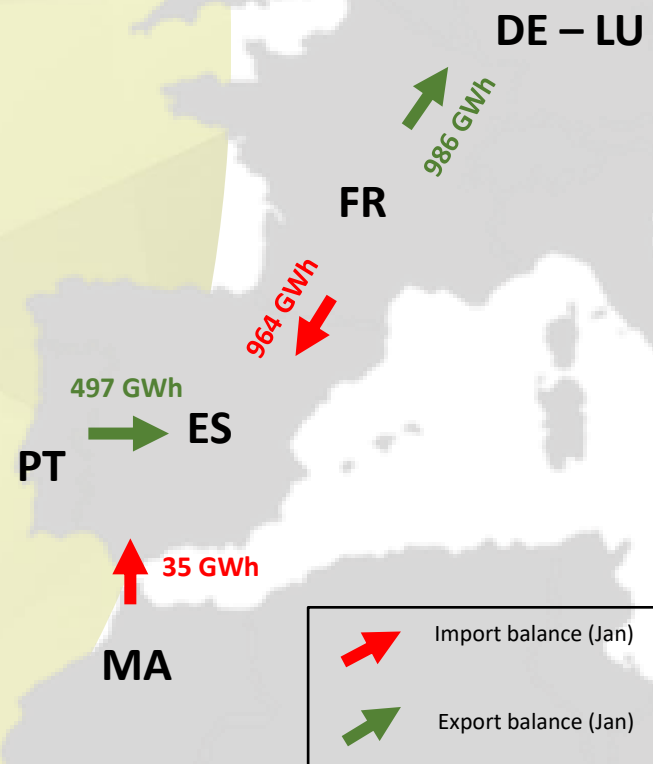


Figure 1. Import-export balance PT-ES, ES-MA, ES-FR e FR-(DE-LU).
Source: ENTSO-E, IESOE

ELECTRICITY MARKET

On January 2020 there was an average electricity market price within the Iberian Electricity Market (MIBEL) in Portugal of 40,9 €/MWh², a significative reduction of 35 % in comparison to the same period of 2019.

There were registered 91 non-consecutive hours where renewable electricity generation was enough to meet the demand in Mainland Portugal, which were characterized by an average MIBEL price of 35.9 €/MWh.

²Arithmetic average of the hourly prices

Source: OMIE, APREN analysis

AND ON THE REST OF EUROPE?

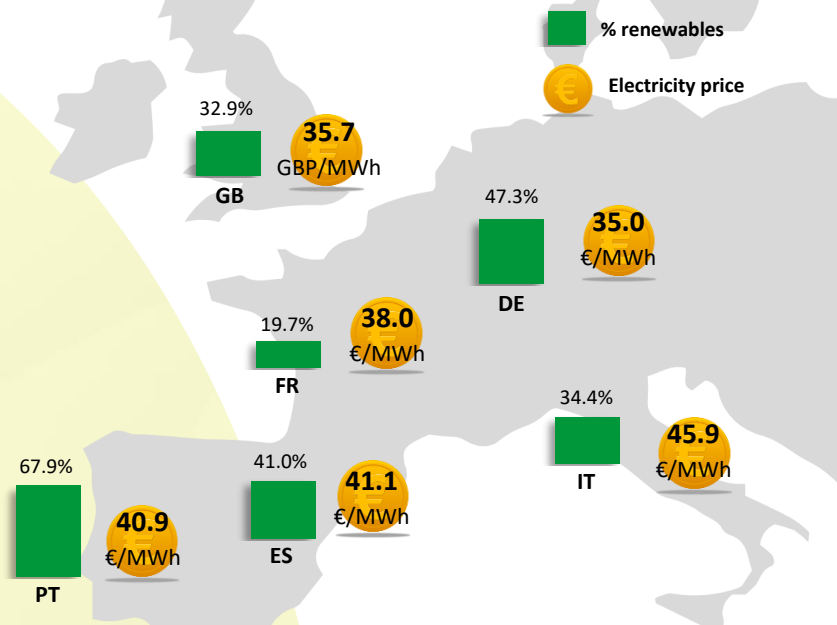


Figure 2. Renewable electricity generation share and average hourly electricity market price, in January 2020. Source: REN, Fraunhofer, REE, Terna, National Grid, ENTSO-E, APREN analysis

RENEWABLE GENERATION, DEMAND AND MIBEL PRICE

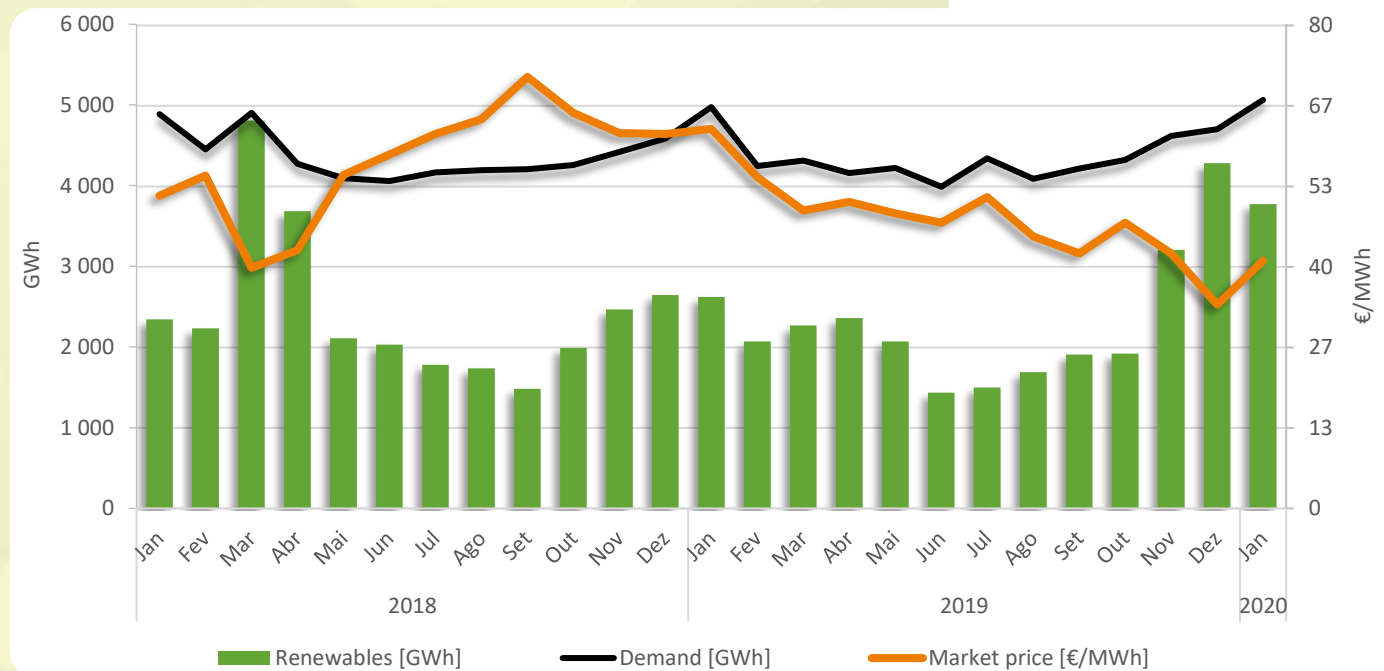


Figure 3. Market price, electricity demand and renewable electricity generation (Jan-2018 to Jan-2020). Source: OMIE, REN, APREN analysis

POWER SECTOR EMISSIONS

The table aside identifies the savings achieved on January 2020 on fossil fuel imports, CO₂ emissions and CO₂ emission allowances, as result of the renewable electricity generation.

During the first month of the year, the European market for CO₂ allowances (EU-ETS) recorded an average hourly price of 24.4 €/tCO₂, a 4.3 % increase in comparison to the same period of 2019.

Source: SendeCO2

RENEWABLES AVOIDED ... In January

Fossil fuel imports



60 M€

CO₂ emissions



1.98 MtCO₂

CO₂ allowances



48 M€

Source: REN, SendeCO2, WorldBank, DGEG, ERSE, APREN analysis

SPECIFIC EMISSIONS AND CO₂ ALLOWANCES PRICE

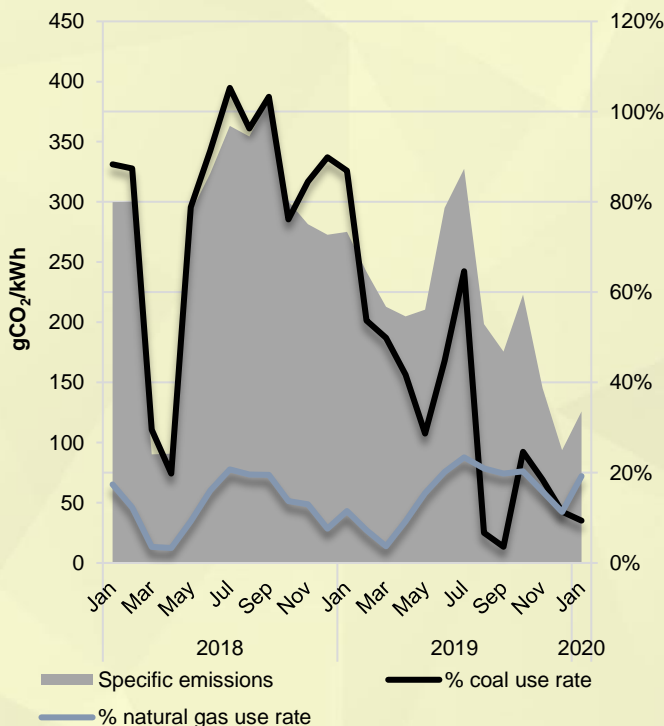


Figure 4. Specific emissions from the power sector in Mainland Portugal, % usage rate of coal and natural gas power plants (Jan-2018 to Jan-2020). Source: REN, DGEG, ERSE, APREN analysis.

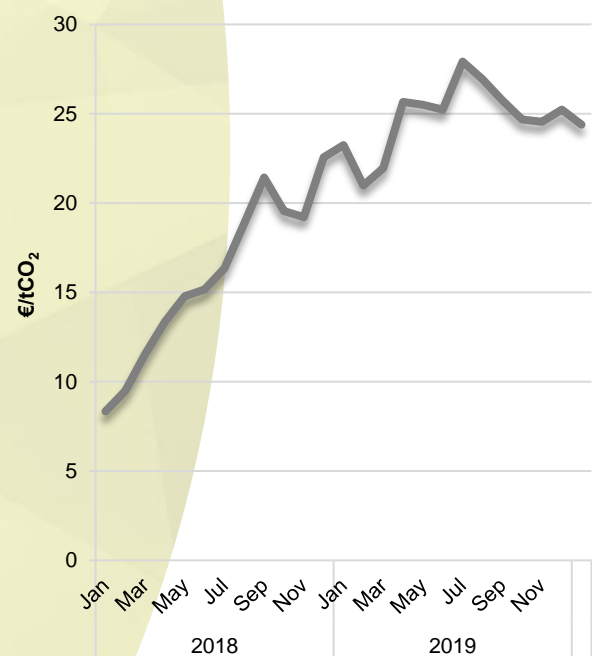


Figure 5. CO₂ allowances price (Jan-2018 to Jan-2020). Source: SendeCO2.

MONTHLY ANALYSIS: JANUARY



From January 19th to 21st, the total renewable electricity generation was enough to supply the electricity demand in Mainland Portugal, where wind power had a greater representativity, of 58% over the demand.

The table aside shows the main productivity indicators for renewable generation in January 2020.

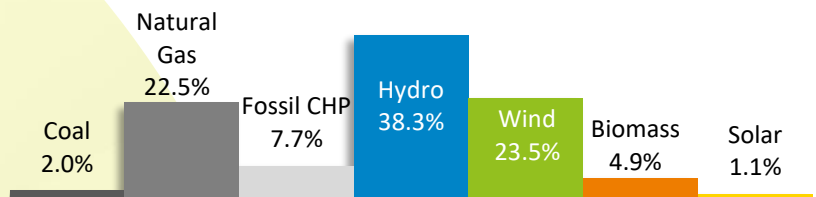
Source: REN, APREN analysis

MAIN INDICATORS

GENERATION

Total generation: 5 560 GWh

Renewables share: 67.9 %



OTHER INDICATORS

Demand: 5 063 GWh

Wind index: 0.99

Hydro index: 1.03

Source: REN, APREN analysis

LOAD DIAGRAM FOR JANUARY 2020

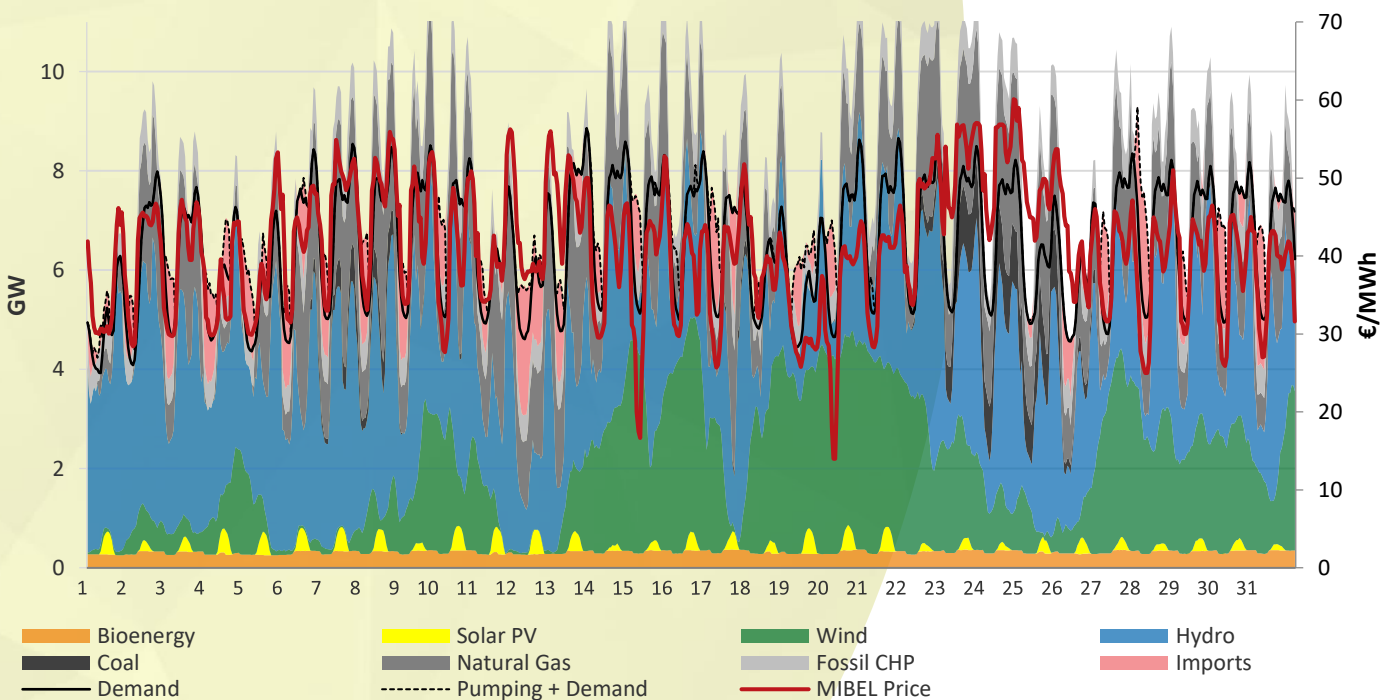


Figure 6. Load Diagram for Mainland Portugal (Jan-2020). Source: REN, APREN analysis.

FINAL REMARKS

National legislation



Within the scope of the Decree-Law No. 162/2019, which establishes the legal framework applicable to the renewable electricity generation for individual and collective self-consumption, the following were approved:

- The Inspection and Certification Regulation (ICR) and the Technical and Quality Regulation (TQR) through the Dispatch No. 4/2020 from February 3rd.

European legislation



On January 15th the European Parliament (EP) agreed on the final wording of the Green Deal resolution, which advocates concrete measures to be applied by the European Commission and transposed by the Member States, which essentially follow:

- Green financing, which redirects investments towards sustainable technologies and business areas, finances long-term sustainable growth and contributes to the creation of a circular, low-carbon economy and resilient to climate change;
- A just transition mechanism to support regions and sectors that are most affected;
- Europe as a global leader.



Relevant facts







Concerning 2019 results, APREN points out that only 311 MW of renewable capacity were installed, of which 155 MW were from solar PV - 21 MW distributed and 134 MW centralized. This scenario falls short from the kick-off scenario from the National Energy and Climate Plan 2030, according to which Portugal will need around 540 MW of renewable capacity to meet the 2020 starting point.



According to DGEG, the normalized renewables share in the electricity demand for 2019 was only 52.9%, when Portugal has committed to 59.6% for 2020.

POLICY AND REGULATION

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Final wording of the Green Deal resolution approved in the EP
On January 15th the final wording of the Green Deal resolution was agreed in the EP.
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Dispatch from the State Secretary of Energy exempts the “clawback” to producers with PPAs
Published on January 2nd, the Dispatch clarifies the clawback (market equilibrium mechanism) scope, whereby producers who have signed PPAs, which do not benefit from the MIBEL daily market price variation, are exempted from paying this fee.
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ICR and TQR approved
Under Decree-Law No. 162/2019, from February 3rd, the Inspection and Certification Regulation (IRC) and the Technical and Quality Regulation (TQR) were approved by Dispatch from the Directorate General for Energy and Geology.
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Guarantees of Origin still not operational
Although the “Guarantees of Origin Issuing Authority Procedures Manual” has already been published, the Guarantees of Origin issuing system is not yet operational.

Information available in:

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