

March

BULLETIN

2021

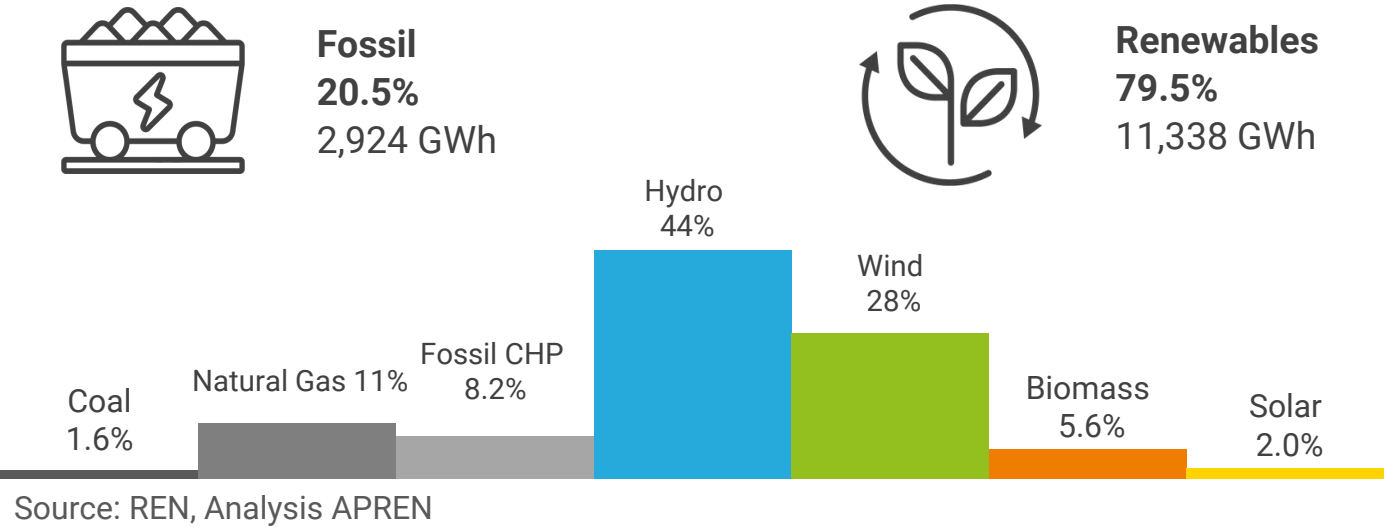
Renewable Electricity



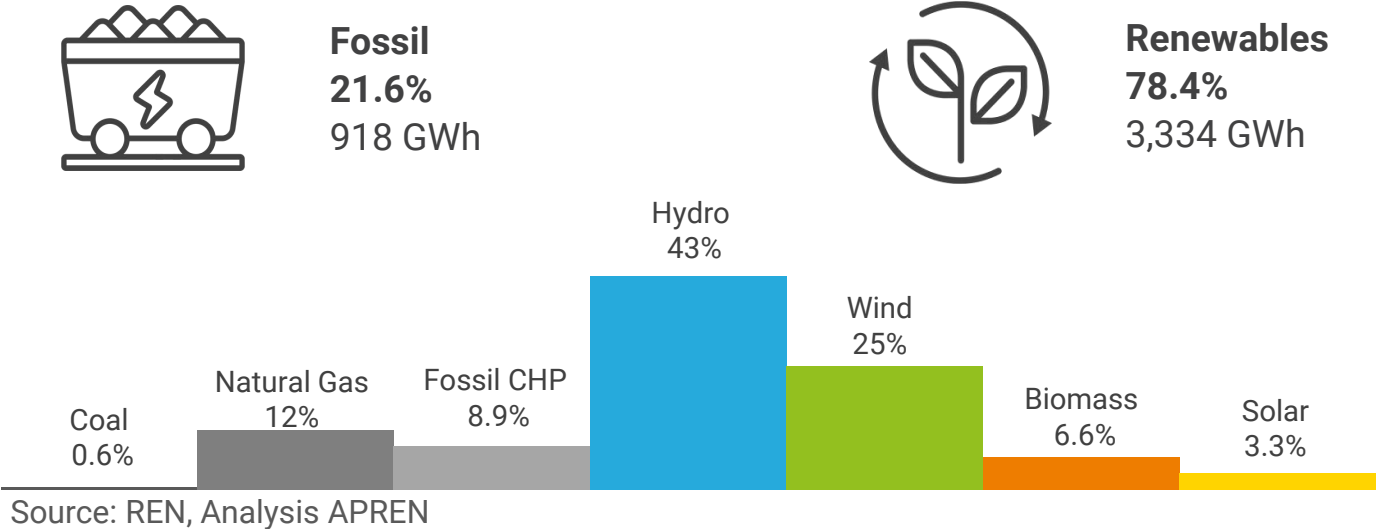
APREN Associação de Energias Renováveis

Executive Summary

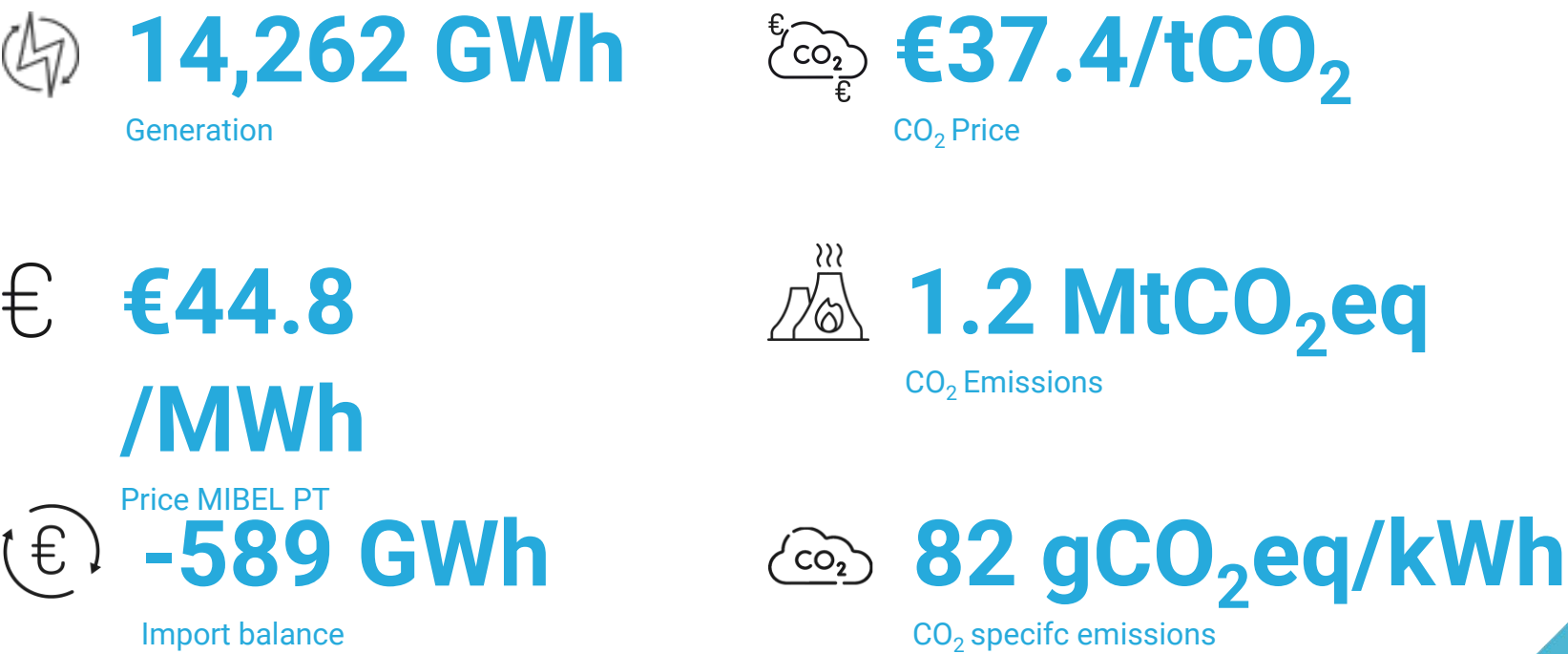
Accumulated March 2021 (Jan-Mar)



March 2021

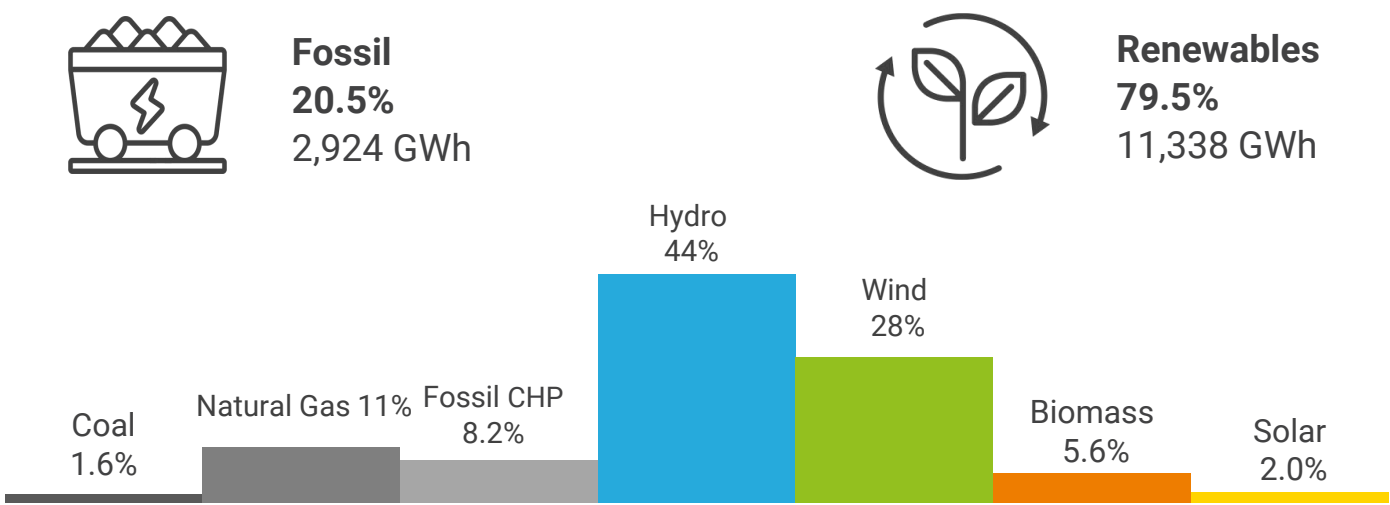


Electricity sector indicators (accumulated Jan-Mar)



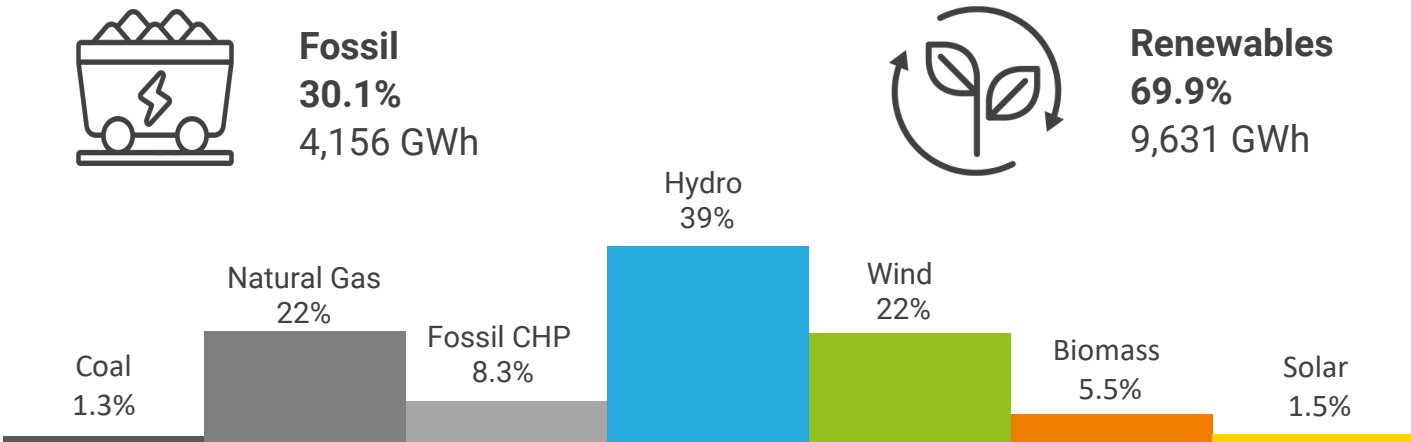
Electricity Generation: Mainland Portugal

Accumulated March 2021 (Jan-Mar)



Source: REN, Analysis APREN

Accumulated March 2020 (Jan-Mar)



Source: REN, Analysis APREN

Main indicators



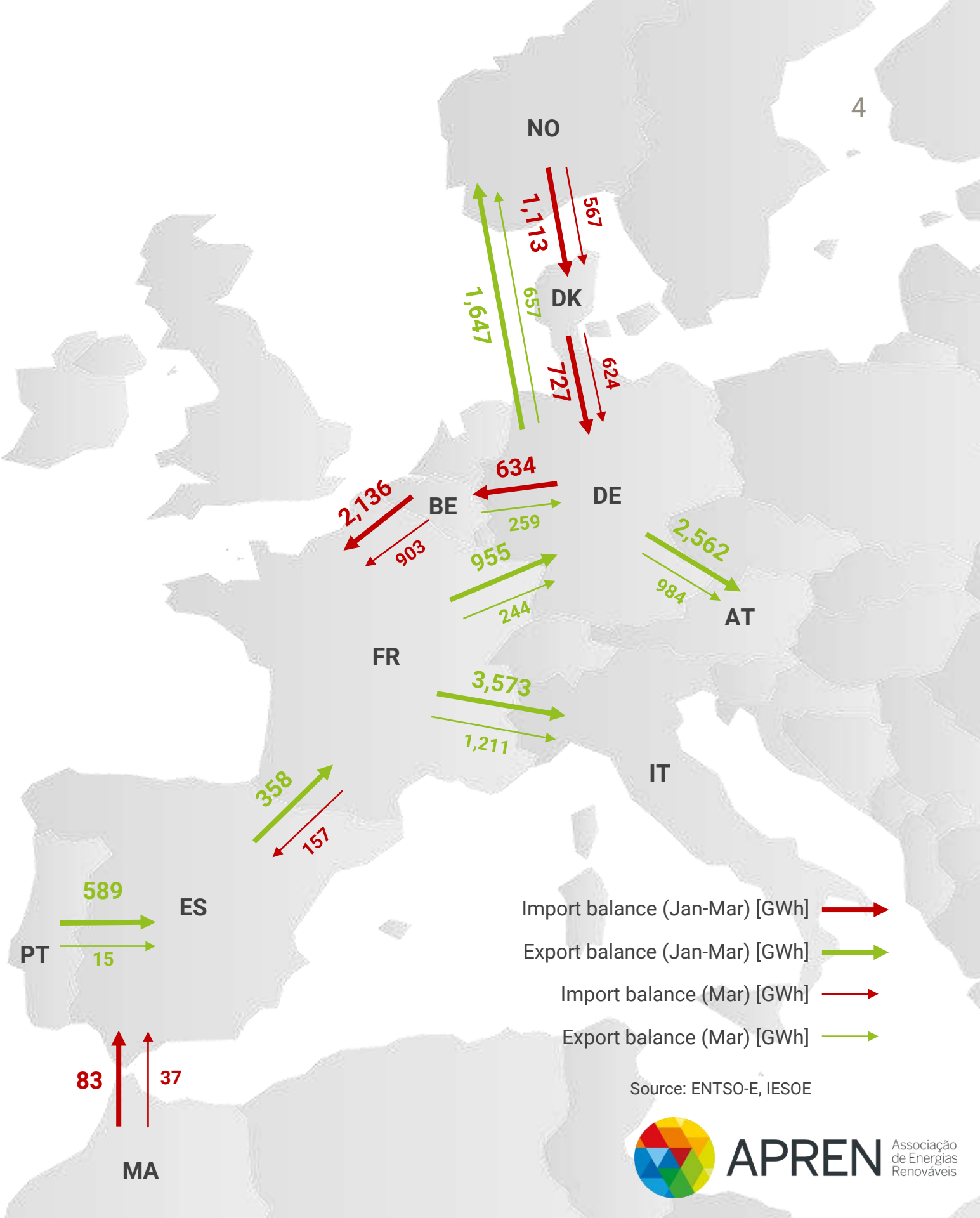
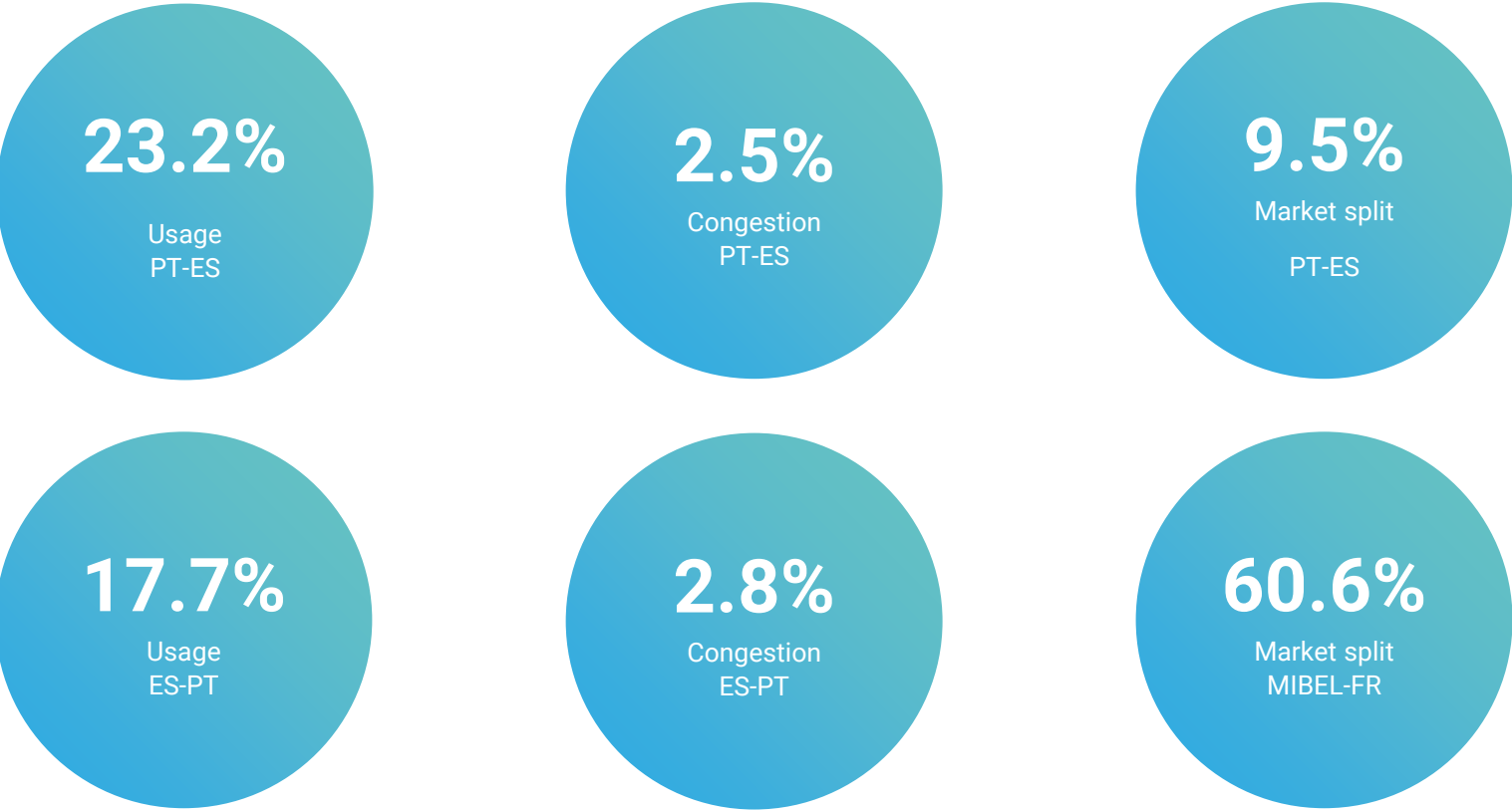
¹ «Consumption» refers to the net power generation from power plants, bearing in mind the balance of import-export.
Source: REN, Analysis APREN

Internacional trade

Between January 1 and March 31, 2021, the electricity system of Mainland Portugal registered electricity imports equivalent to 1,308 GWh and exports of 1,897 GWh, having Portugal been an exporter with a balance of -589 GWh.

Source: REN, Analysis APREN

Main interconnection indicators PT-ES



Source: ENTSO-E, IESOE

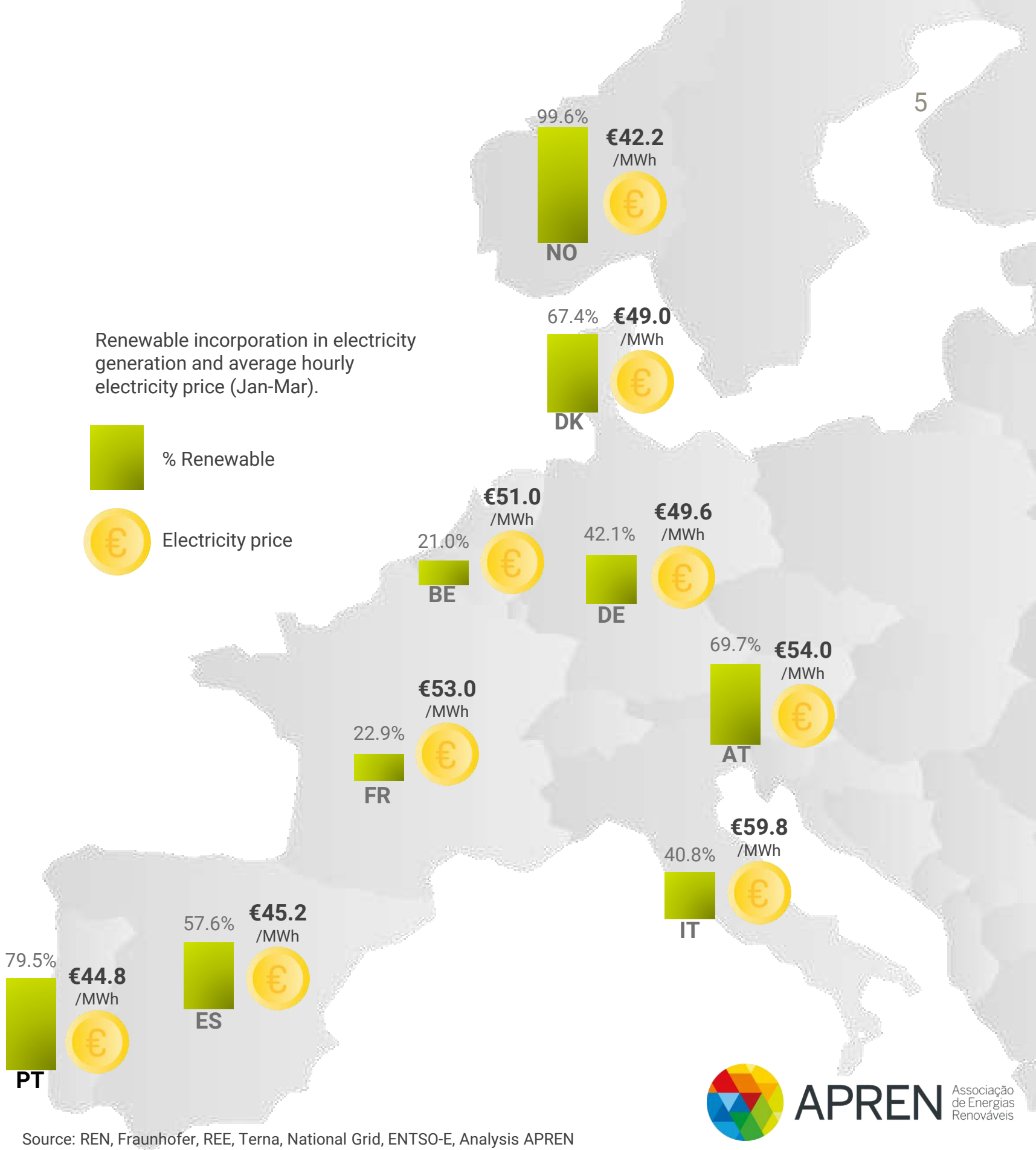
Accumulated Electricity Market Europe

Between January 1 and March 31, 2021, there was an average hourly price in the Iberian Electricity Market (MIBEL) in Portugal of €44.8/MWh², resulting of the high renewable incorporation, the second lowest price, compared to the other countries shown on the right. Portugal was the second country with the largest renewable incorporation in electricity generation, behind Norway which obtained 99.6% from RES.

The analysis only took into account the main European markets, in order to have a representative panorama of comparison.

² Arithmetic average of hourly prices

Source: ENTSO-E, OMIE, Analysis APREN

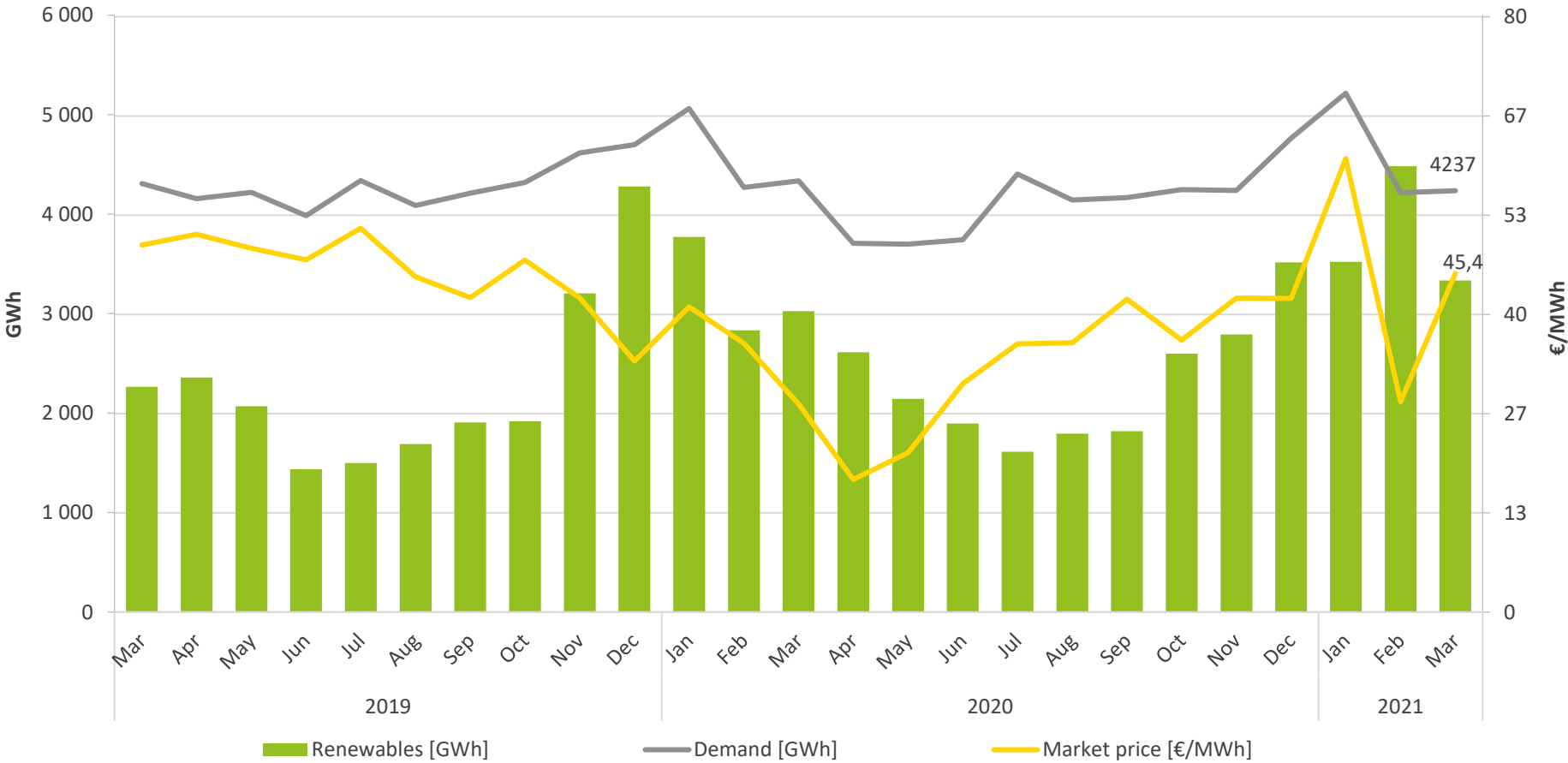


Accumulated Electricity Market - Portugal

Between January 1 and March 31, 2021, the average hourly price registered at MIBEL in Portugal (€44.8/MWh²) represents an increase of 28.2 % in comparison to the same period from last year.

In the same period, 912 non-consecutive hours were recorded , in which renewable generation was sufficient to supply the electricity consumption in mainland Portugal, with an average hourly price in the MIBEL of €31.7/MWh.

² Arithmetic average of hourly prices
Source: OMIE, Analysis APREN



Market price, electricity consumption and renewable generation (Mar-2019 to Mar-2021).
Source: OMIE, REN, Analysis APREN

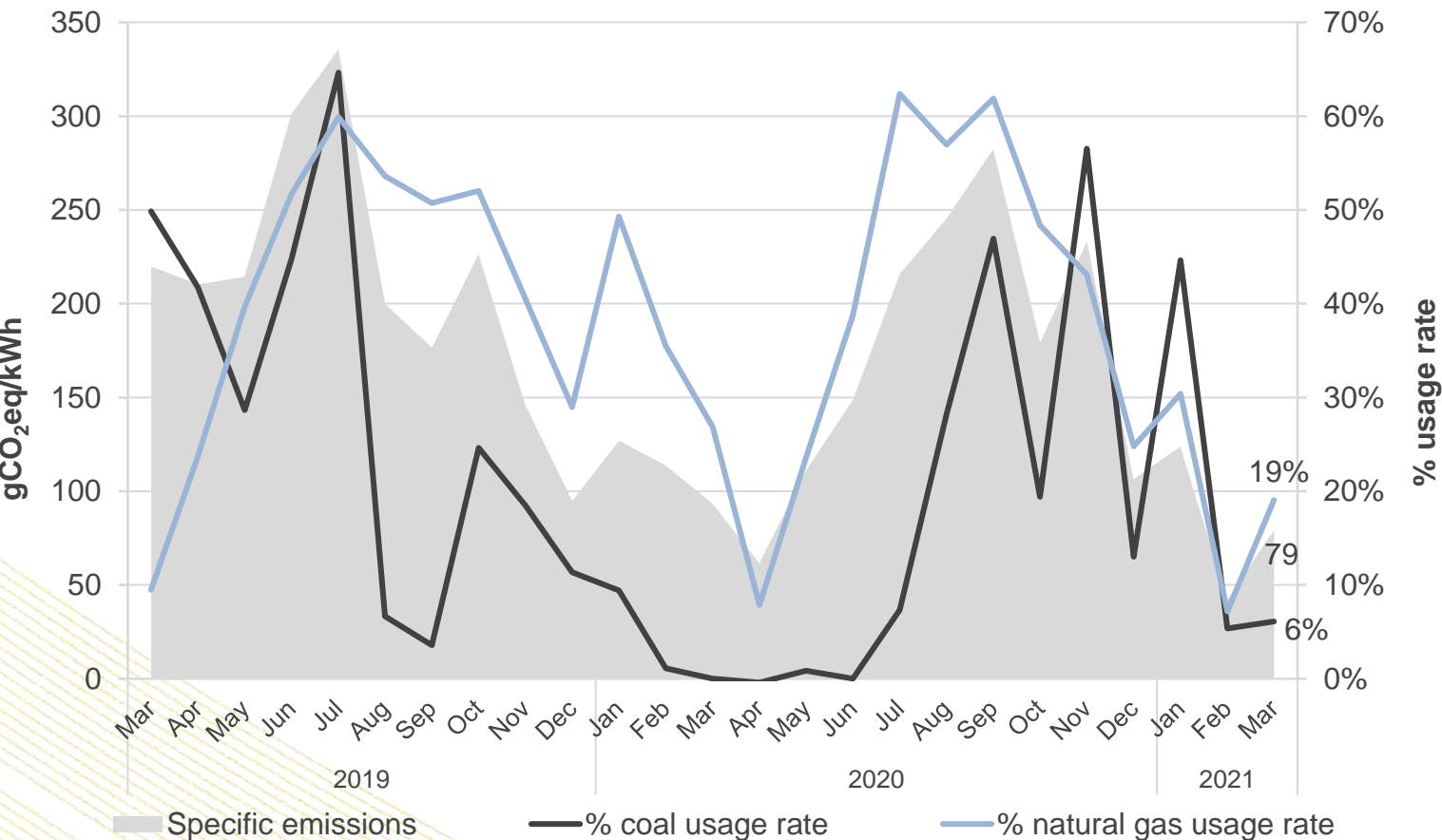


Power sector emissions

Between January 1 and March 31, 2021, specific emissions reached a total of 82 gCO₂eq/kWh, while the total emissions from the electricity generation sector reached 1.2 MtCO₂eq, of which 0.3 MtCO₂eq corresponds to the month of March.

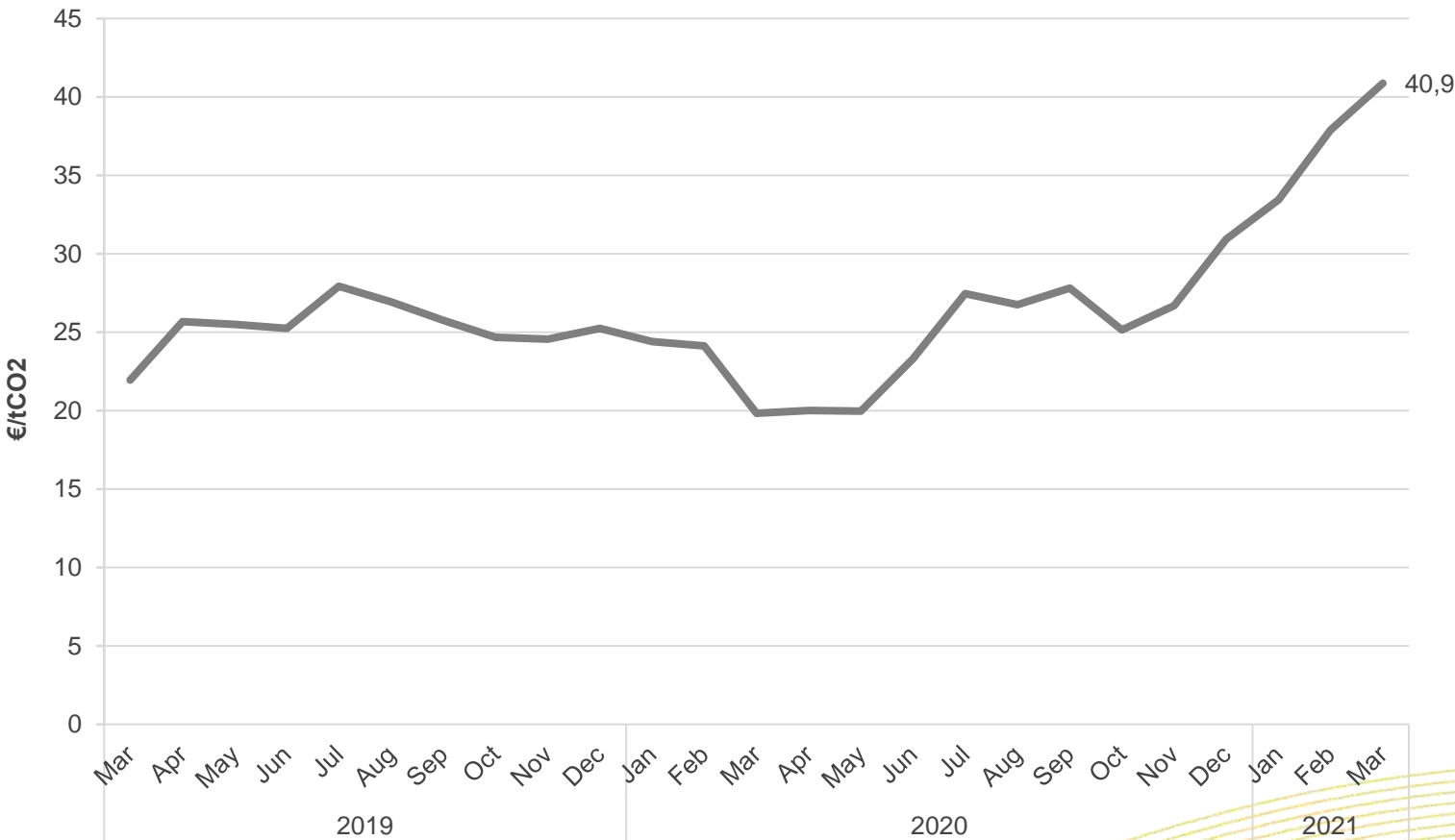
Since the beginning of the year, the European Emissions Trading System (EU-ETS), recorded an average price of €37.4/tCO₂ which represents an increase of 57 % in comparison to the same period from 2020. The highest average price ever was recorded this month (€40.9/tCO₂), about double the price recorded in March 2020.

Source: SendeCO2



Specific emissions from the electricity sector in mainland Portugal, % use of coal and natural gas plant from Mar-2019 to Mar-2021.

Source: REN, DGEG, ERSE, Analysis APREN



Price of CO₂ allowances from Mar-2019 to Mar-2021.

Source: SendeCO2.

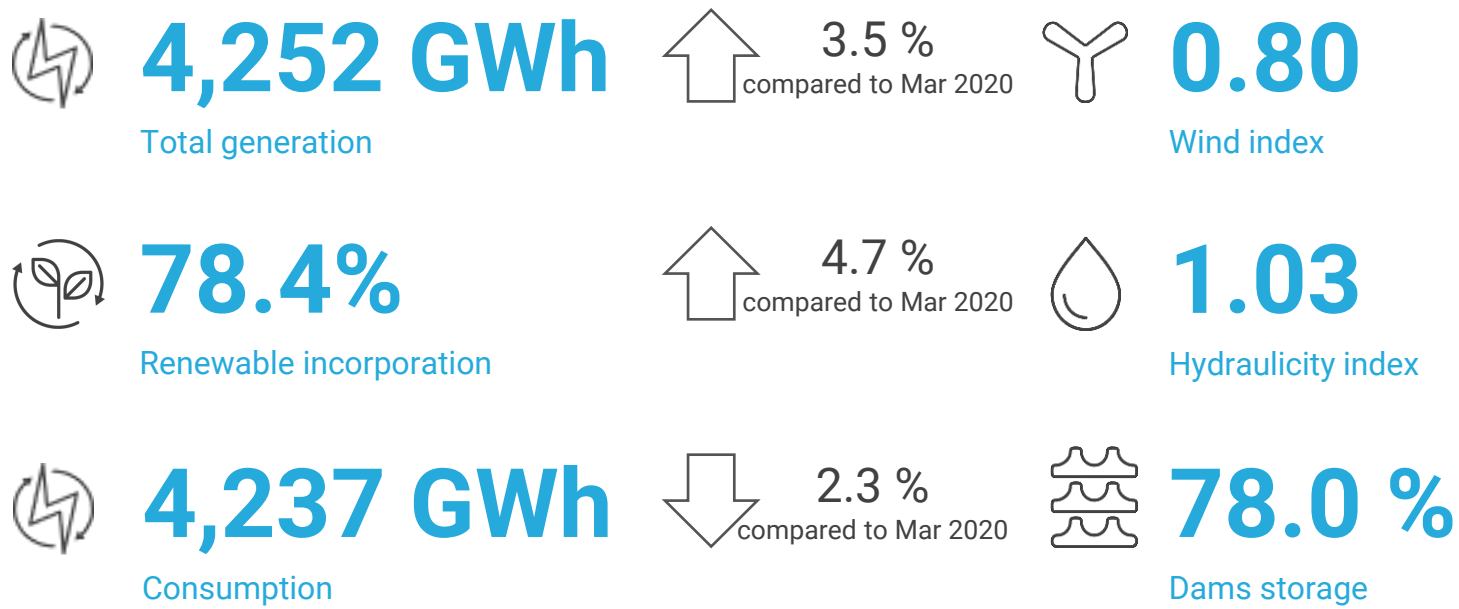
Monthly analysis in Portugal: March

In March, the generation of renewable electricity represented 78.4 % of the total of electricity generated in mainland Portugal (4,252 GWh). March recorded a total of 250 non-consecutive hours in which renewable generation was sufficient to supply electricity consumption in mainland Portugal, with an average hourly price in the MIBEL of €43.9/MWh.

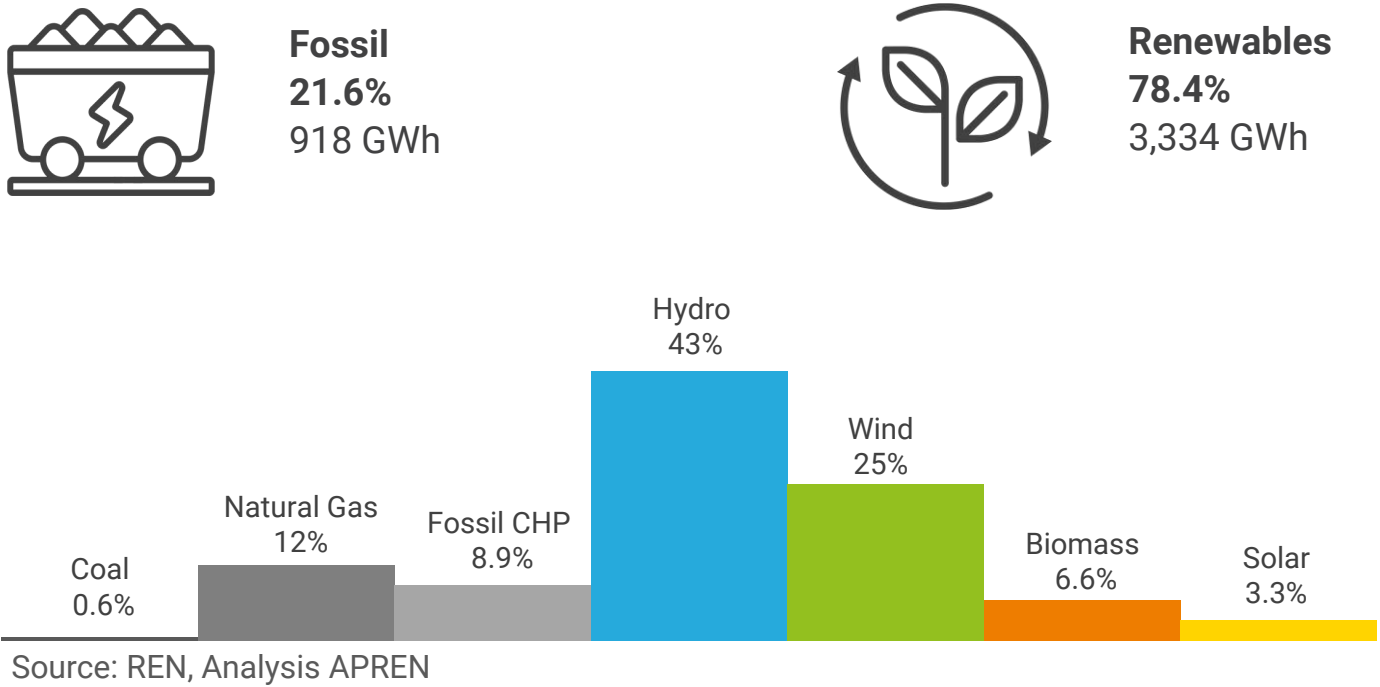
With regard to international trade in March, it should be pointed out that mainland Portugal was an exporter, registering a balance of -15 GWh, reversing the sense compared to the import balance recorded in March 2020 (228 GWh).

Source: REN, Analysis APREN

Electricity sector indicators

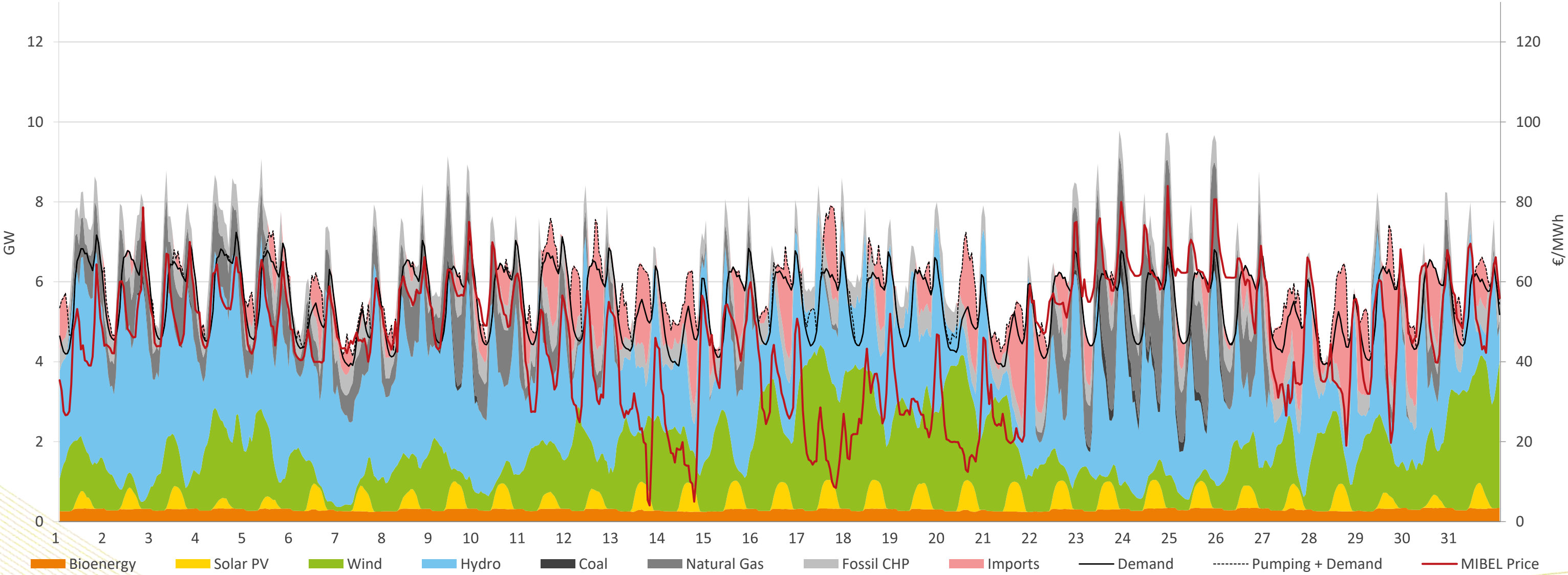


Fonte: REN, Análise APREN



Monthly analysis in Portugal: March

Load diagram from March 2021



Source: REN, Analysis APREN

Monthly market analysis: March

Electricity market in Europe

During the month of March 2021, there was an average hourly price at MIBEL in Portugal of €45.4/MWh, which represents an increase of 62.9 % compared to March 2020. In Portugal and Spain there was a minimum hourly price in the MIBEL of €4.0/MWh.

Of the countries shown on the right, the lowest price was €-57.6/MWh in Belgium, with Germany, Denmark and France also presenting negative hourly minimum prices. Denmark had the highest maximum hourly price, reaching €109.0/MWh.

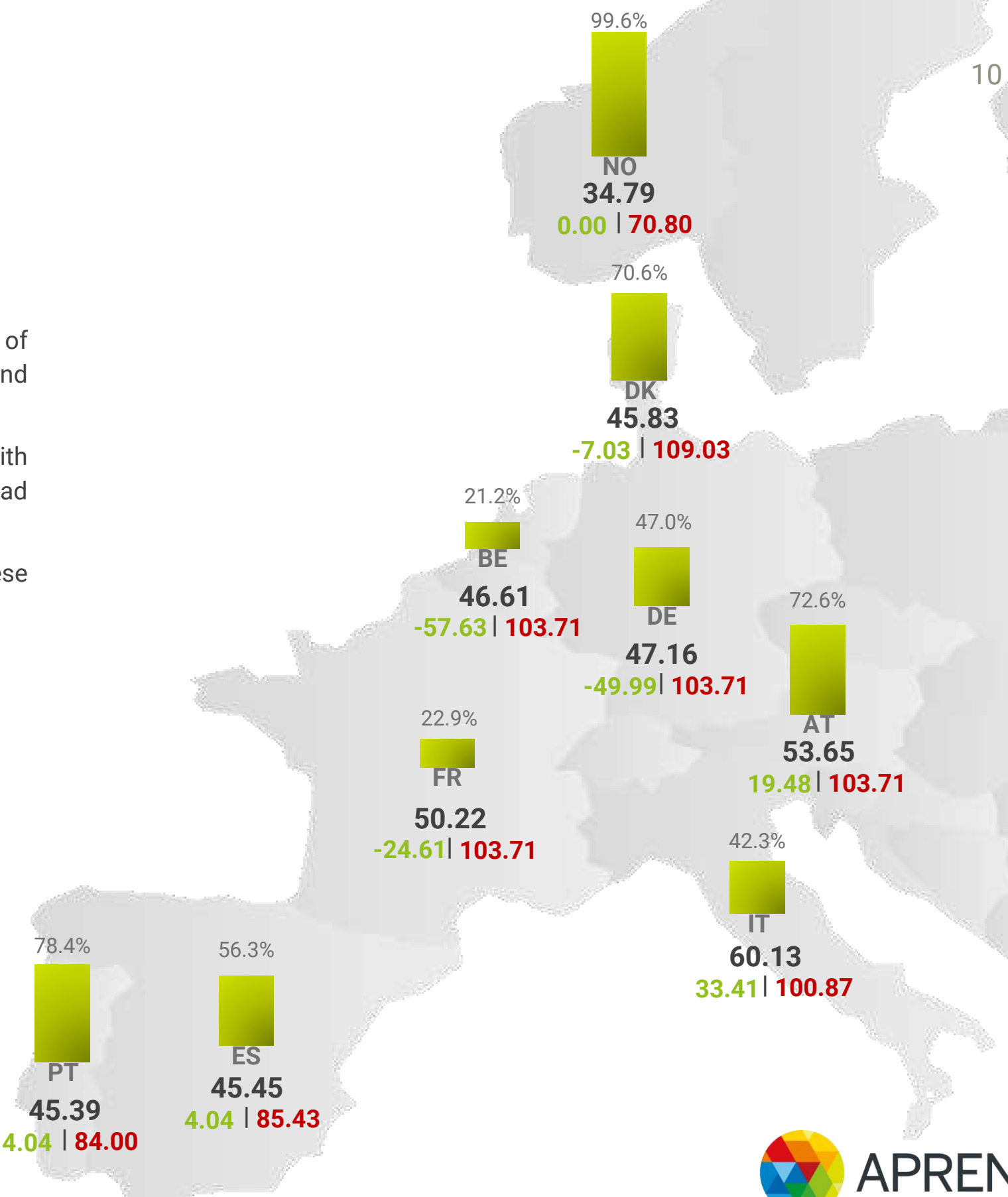
This analysis only took into account European countries with influence in the Portuguese market.

Source: ENTSO-E, IESOE, Analysis APREN

Prices in €/MWh

- Highest
- Lowest
- Average

Source: ENTSO-E, IESOE



Monthly market analysis: March

Electricity market in Portugal



Environmental Service

The indicators below show the savings achieved between January 1 and March 31, 2021 in fossil fuels, CO₂ emissions and CO₂ emission licenses, resulting from the renewable incorporation in electricity generation.

This analysis is based on the assumption that, in the absence of renewables, production would be ensured firstly by natural gas, followed by coal and finally the use of imports.

Renewables have avoided ...

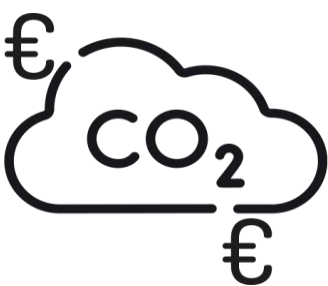


€ 260 M

Imported fossil fuels (Jan-Mar)

€ 88 M

Imported fossil fuels (Mar)

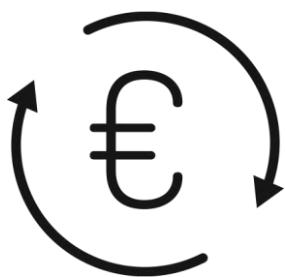


3.8 MtCO₂eq

CO₂ emissions (Jan-Mar)

1.3 MtCO₂eq

CO₂ emissions (Mar)



€ 165 M

Imported electricity (Jan-Mar)

€ 32 M

Imported electricity (Mar)



€ 125 M

CO₂ allowances (Jan-Mar)

€ 49 M

CO₂ allowances (Mar)

Source: REN, SendeCO2, WorldBank, DGEG, ERSE, Analysis APREN.

Note1: To estimate savings on imported fossil fuels, coal prices until November 2019 were considered, due to unavailability of data.

Note 2: For the estimate of savings in imported electricity, the average price in the MIBEL market was considered.

European Policy and Regulation

Cross-border infrastructure

The European Parliament and the Council reached an agreement on the Connecting Europe Facility, providing more than € 30 billion in funding for transport, digitalization and energy projects.

Long-term renovation strategies

The European Commission (EC) has published a preliminary analysis of the long-term renovation strategies (LTRS) of 13 member states, with the aim of disseminating good practices in the policies and measures proposed by national governments.

Integration of the Energy and Hydrogen System

On 22nd of March, the European Parliament's Committee on Industry, Research and Energy approved the reports of the dual initiative on the European Strategy for the Integration of the Energy System (ESI INI) and on the European Strategy for Hydrogen (Hydrogen INI).

EC appoints new director for the energy department

The European Commission announced that Paula Pinho has been appointed Director of the Directorate for Fair Transition, Consumers, Energy Efficiency and Innovation of the Directorate-General for Energy (ENER).

Carbon Border Tax

The European Parliament voted in favor of implementing the carbon border tax, with the aim of increasing global climate ambition and preventing carbon leakage.

National Policy and Regulation

Assessment and Taxation in the Municipal Property Tax of wind and solar power plants

On March 3, [Circular No. 2/2021](#) of the Tax Authority was published, according to which the wind and solar power plants (as a whole, and not each individual generator) fulfill the requirements underlying the concept of building, for tax purposes. According to this Circular, these power plants must be registered as urban industrial buildings.

Parliamentary Commission of Inquiry into the Payment of Excessive Rents to Electricity Producers

It was published on March 15 a [Resolution of the Assembly of the Republic](#), recommending to the Government the urgent implementation of the recommendations of the Parliamentary Committee of Inquiry on the Payment of Excessive Rents to Electricity Producers.

Energy Efficiency Promotion Plan (PPEC)

On March 11, the [Ordinance No. 55/2021](#) was published, establishing rules on the evaluation criteria and procedures to be observed in the selection and ranking of applications for tenders under the PPEC.

It was also published the [Regulation](#) on PPEC by the Energy Services Regulatory Authority (ERSE) for the electricity and gas sectors.

Incentives for low-emission vehicles

On March 5, the [Order No. 2535/2021](#) was published, that regulates the allocation of the incentive for the introduction into the consumption of low-emission vehicles 2021.

National Policy and Regulation

Exceptional measures under the National Electric System (SEN) and the National Natural Gas System (SNG)

On March 2, the [Regulation No. 180/2021](#) was published, establishing exceptional measures within the scope of the SEN and the SNG.

Strategic Partnership Agreement between the EU, its Member States (MS) and Japan

On March 19, the [Resolution of the Assembly of the Republic No. 82/2021](#) was published, approving the Strategic Partnership Agreement between the EU and its MS, on the one hand, and Japan, on the other hand, signed in Tokyo on 17 July 2018. This agreement establishes relations between the parties, in various areas, namely with regard to fighting climate change.

Strategic Partnership Agreement between the EU, its MS and Australia

On March 19, the [Resolution of the Assembly of the Republic No. 89/2021](#) was published, approving the Framework Agreement between the EU and its MS, on the one hand, and Australia, on the other hand, signed in Manila on 7th of August 2017. This agreement establishes relations between the parties, in various areas, namely with regard to fighting climate change.

Answers to Frequently Asked Questions regarding the application of the self-consumption and CER production regime

On March 19, the Directorate General for Energy and Geology (DGEG) published a [document](#) which brings together the answers to frequently asked questions regarding the application of the self-consumption production regime and Renewable Energy Communities (CER).

European Barometer



Cross-border infrastructure

The European Parliament and the Council reached an agreement on the Connecting Europe Facility, providing more than € 30 billion in funding for transport, digitization and energy projects.



Long-term renovation strategies

The European Commission has published a preliminary analysis of the long-term renovation strategies (LTRS) of 13 member states, with the aim of disseminating good practices in the policies and measures proposed by national governments.



Integration of the Energy and Hydrogen System

On 22 March, the European Parliament's Committee on Industry, Research and Energy approved the reports of the dual initiative on the European Strategy for the Integration of the Energy System (ESI INI) and on the European Strategy for Hydrogen (Hydrogen INI).

Barómetro Nacional



Long-Term Strategy for Renovation of Buildings

On February 3, the Resolution of the Council of Ministers No. 8-A/2021 was published, approving the Long-Term Strategy for the Renovation of Buildings.



Charges borne by PRE in the market

On February 24, ERSE Directive No. 5/2021 was published, which approves the definition of the parameter of charges borne by PRE within the scope of the transitional rule of article 8 of DL No. 76/2019.



Assessment and Taxation in the Municipal Property Tax of wind and solar power plants

On March 3, the Circular No. 2/2021 of the Tax Authority was published, according to which the wind and solar power plants fulfill the requirements underlying the concept of building, for tax purposes.



Parliamentary Commission of Inquiry into the Payment of Excessive Rents to Electricity Producers

On March 15, the Assembly of the Republic Resolution was published, which recommends to the Government the urgent implementation of the recommendations of the Parliamentary Commission of Inquiry into the Payment of Excessive Rent to Electricity Producers.

APREN | Technical and Communication Department

Av. Sidónio Pais, nº 18 R/C Esq.
1050-215 Lisboa, Portugal

(+351) 213 151 621
www.apren.pt

