



PORTUGUESE RENEWABLE ELECTRICITY REPORT

JUNE 2020



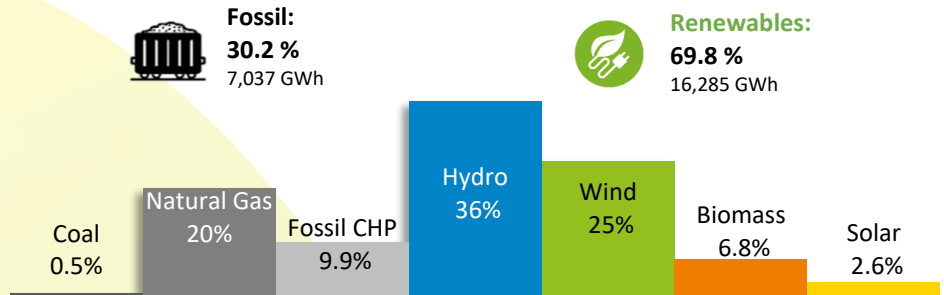
APREN Associação
de Energias
Renováveis

EXECUTIVE SUMMARY

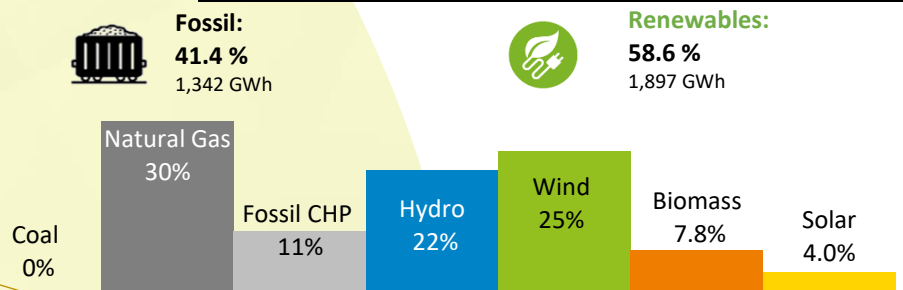
69.8 %

Renewable electricity generation
(January to June 2020)

CUMULATIVE ON JUNE 2020 (JAN-JUN)







JUNE 2020



THE IMPACT OF COVID-19 ON THE ELECTRICITY SECTOR

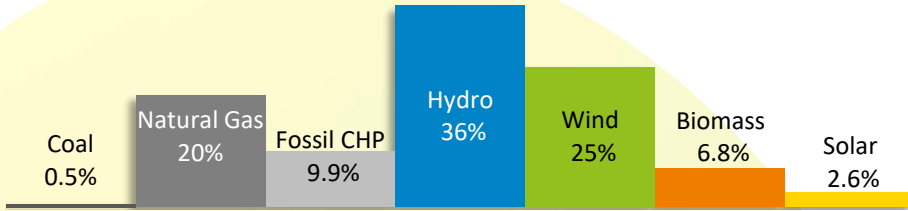
After the State of National Emergency was decreed on March 18th and later the State of Calamity from May 4th to June 28th, in response to the COVID-19 pandemic, a big part of the national businesses stopped, which had serious repercussions in the electricity sector, such as:

- 
Reduction on the electricity demand by 8.8 % compared to June 2019, considering the necessary corrections on temperature and number of working days.
- 
Slight reduction on the CO₂ emission allowances price by 7.6 % in comparison to June 2019.
- 
Reduction on the hourly average electricity price by 35 % compared to June 2019 (47.2 €/MWh).
- 
Reduction of CO₂ emissions in the electricity sector, having recorded, in June, a value of 149 gCO₂/kWh, about half the value registered in the same period of 2019 (299 gCO₂/kWh).


However, it is already possible to denote a slight price recovery in the electricity market and in the European market for CO₂ emission allowances, as a result of the reopening of a substantial part of national and European economic activity.

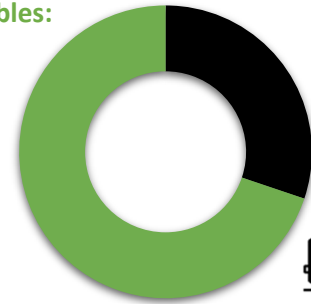
ELECTRICITY GENERATION: MAINLAND PORTUGAL

CUMULATIVE ON JUNE 2020 (JAN-JUN)



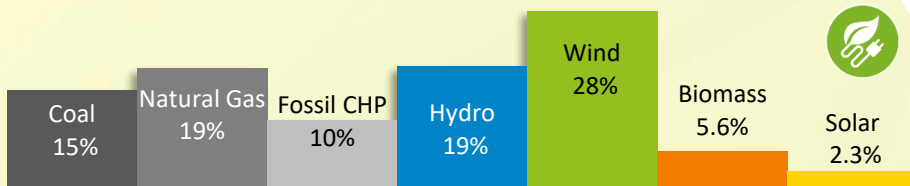
Source: REN, APREN Analysis

 **Renewables:**
69.8 %




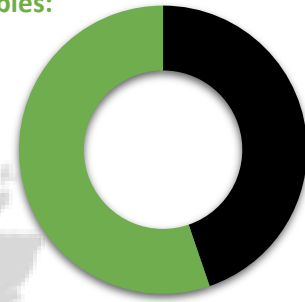
 **Fossil:**
30.2 %

CUMULATIVE ON JUNE 2019 (JAN-JUN)



Source: REN, APREN Analysis

 **Renewables:**
55.2 %



 **Fossil:**
44.8 %

MAIN INDICATORS:

CUMULATIVE ON JUNE (JAN-JUN)

	2020	2019	
% renewable generation	69.8	55.2	↑ 14.6%
Total Generation [GWh]	23,322	23,206	↑ 0.5%
Demand ¹ [GWh]	24,815	25,886	↓ 4.3%
Wind index	0.86	0.98	
Hydro index	0.96	0.56	

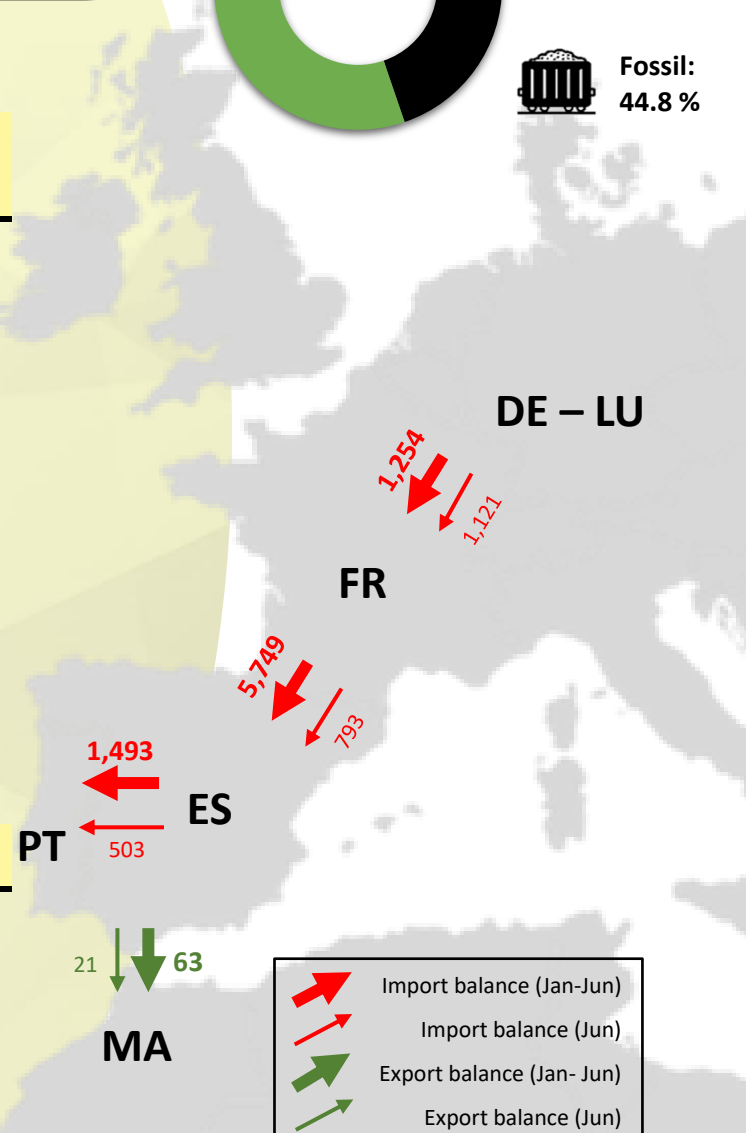
¹ Demand referred to the powerplants' net power generation, considering the import-export balance.

Source: REN, APREN analysis

INTERNATIONAL TRADE

Between January 1st and June 30th of 2020, the Portuguese mainland electricity system recorded electricity imports of 3,454 GWh and exports of 1,961 GWh, resulting in an import balance of 1,493 GWh.

Source: REN, ENTSO-E, APREN analysis



ELECTRICITY MARKET

Between January 1st and June 30th of 2020 there was an average electricity market price within the Iberian Electricity Market (MIBEL) in Portugal of 29.1 €/MWh², a significant reduction of 44 % in comparison to the same period of 2019.

Also, it was recorded 340 non-consecutive hours in which renewable electricity generation was sufficient to meet the demand in Mainland Portugal, being characterized by an average MIBEL price of 25.7 €/MWh.

June registered an average hourly price of 30.6 €/MWh, a decrease of 35 % compared to the same period of 2019 (June 2019 - 47.2 €/MWh). This scenario reflects the impacts of the COVID-19 pandemic, for which a summary of the main impacts is presented in the section [COVID-19: IMPACT ON THE ELECTRICITY SECTOR](#).

²Arithmetic average of the hourly prices

Source: OMIE, APREN Analysis

AND ON THE REST OF EUROPE?

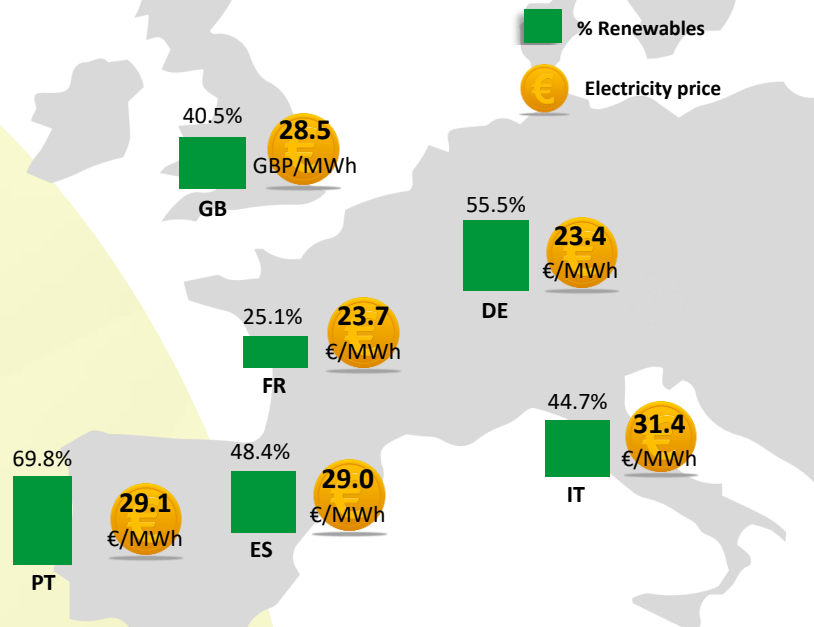


Figure 2. Renewable electricity generation share and average hourly electricity market price, between January and June 2020. Source: REN, Fraunhofer, REE, Terna, National Grid, ENTSO-E, APREN analysis

RENEWABLE GENERATION, DEMAND AND MIBEL PRICE

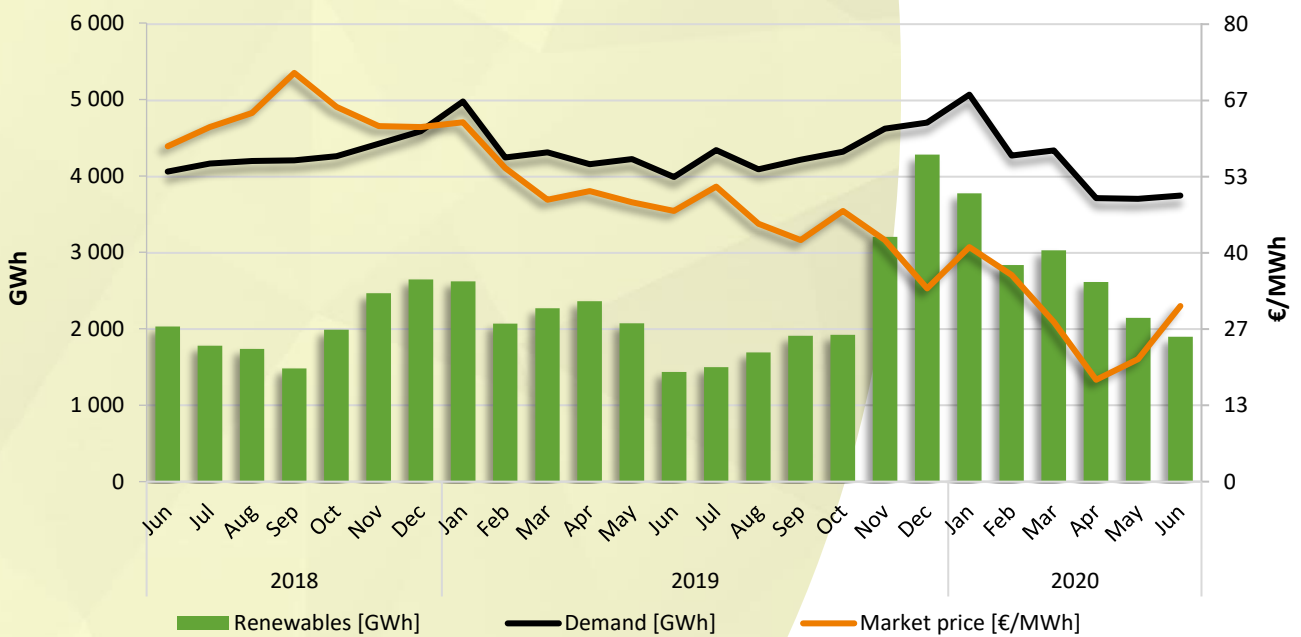


Figure 3. Market price, electricity demand and renewable electricity generation (Jun-2018 to Jun-2020). Source: OMIE, REN, APREN analysis

POWER SECTOR EMISSIONS

The table aside identifies the savings achieved between January 1st and June 30th of 2020 on fossil fuel imports, CO₂ emissions and CO₂ emission allowances, as result of the renewable electricity generation.

During this period, the European market for CO₂ allowances (EU-ETS) registered an average price of 21.9 €/tCO₂.

June recorded an average price for CO₂ emission allowances of 23.3 €/tCO₂, a 7.5 % reduction compared to June 2019, contrary to the trend on increasing allowances prices that has been observed. This is a result of the COVID-19 pandemic impact on the carbon market. The main impacts of the pandemic are presented in the section [COVID-19: IMPACT ON THE ELECTRICITY SECTOR](#).

Source: SendeCO2

THIS YEAR RENEWABLES AVOIDED...

Fossil fuel imports



291 M€

Jan-Jun

CO₂ emissions



9.2 MtCO₂

Jan-Jun

CO₂ allowances



201 M€

Jan-Jun

Source: REN, SendeCO2, WorldBank, DGEG, ERSE, APREN analysis
Note: Coal prices were considered until November 2019, due to data unavailability.

SPECIFIC EMISSIONS AND CO₂ ALLOWANCES PRICE

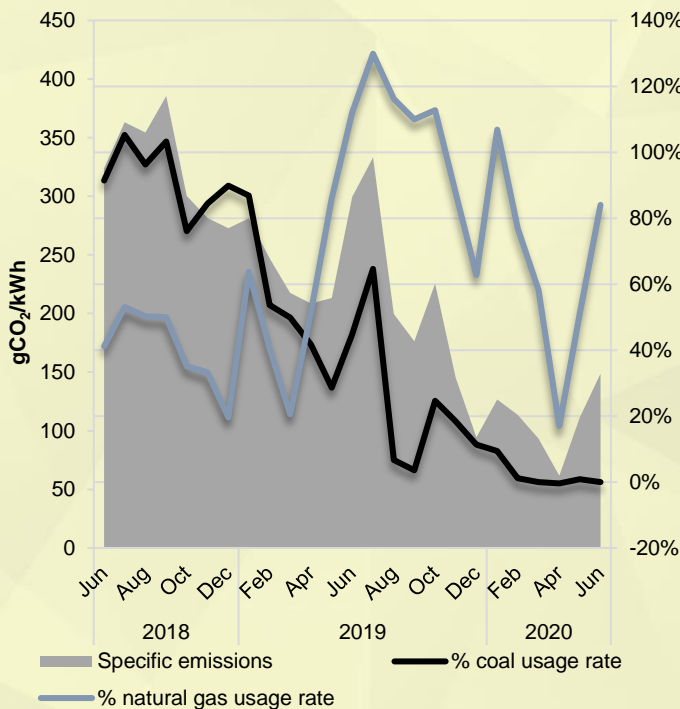


Figure 4. Specific emissions from the power sector in Mainland Portugal, % usage rate of coal and natural gas power plants (Jun-2018 to Jun-2020).
Source: REN, DGEG, ERSE, APREN analysis.

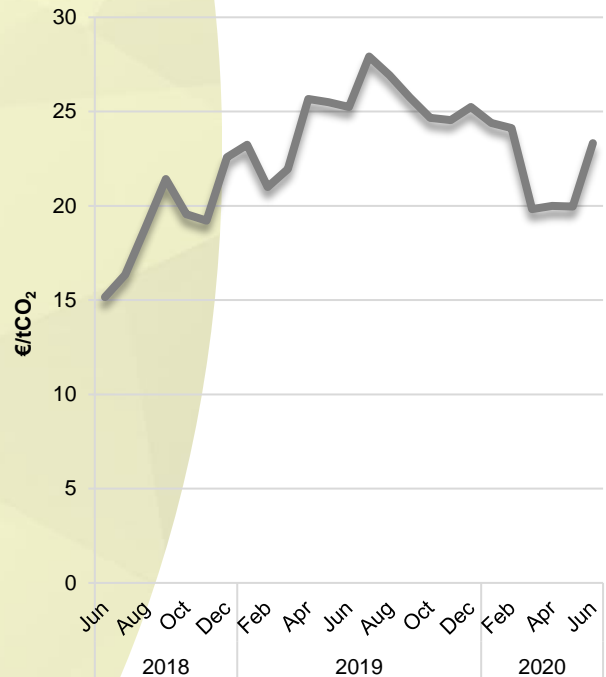


Figure 5. CO₂ allowances price (Jun-2018 to Jun-2020).
Source: SendeCO2.

MONTHLY ANALYSIS: JUNE

In June, renewable electricity generation represented 58.6% of the overall electricity generation in Mainland Portugal (3,239 GWh).

Concerning the international trade in June, we highlight the import balance of 503 GWh recorded for the mainland electricity system.

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

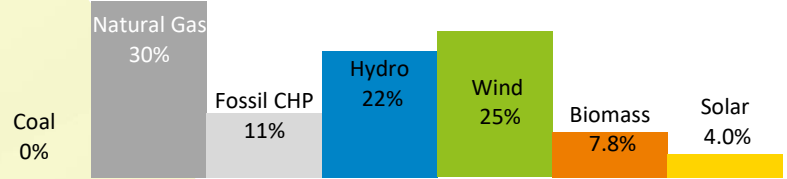
Source: REN, APREN analysis

MAIN INDICATORS

GENERATION

Total generation: 3,239 GWh

Renewables share: 58.6 %



OTHER INDICATORS

Demand: 3,742 GWh

Wind index: 1.04

Hydro index: 0.78

Source: REN, APREN analysis

LOAD DIAGRAM FOR JUNE 2020

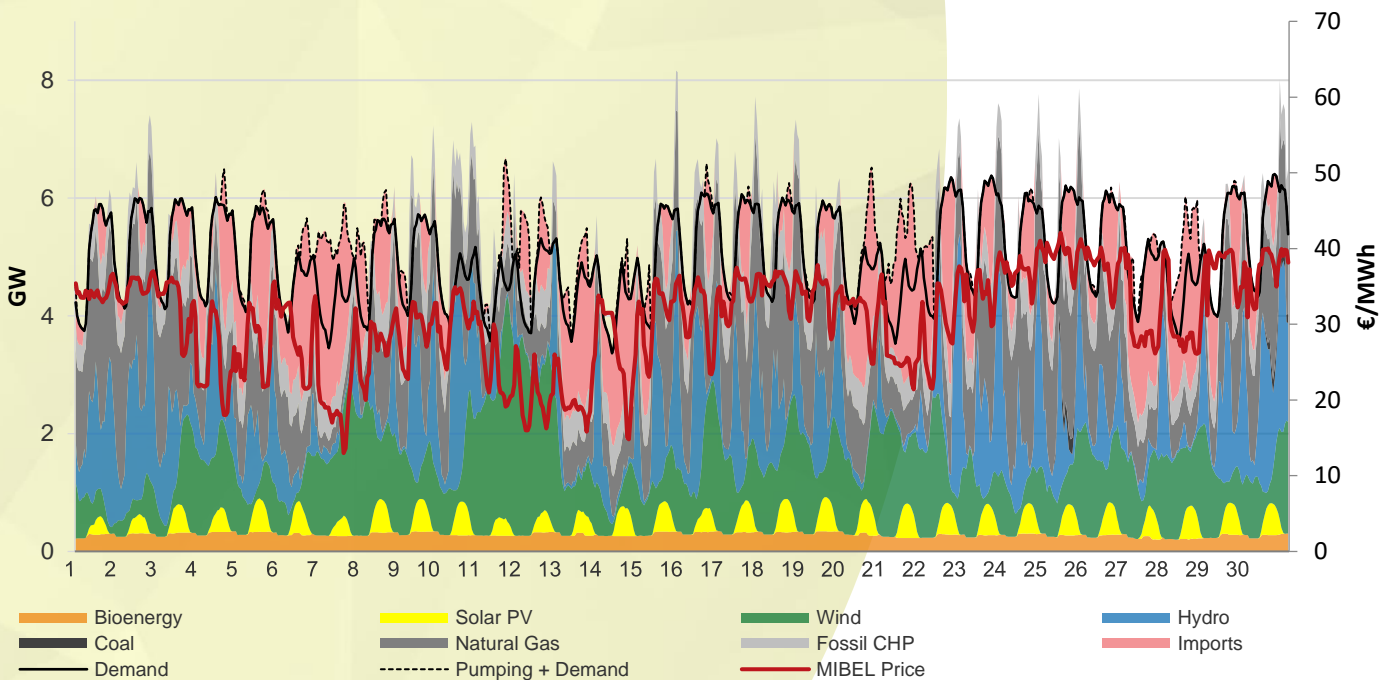


Figure 6. Load Diagram for Mainland Portugal (Jun-2020). Source: REN, APREN analysis.

COVID-19: IMPACT ON THE ELECTRICITY SECTOR

LOAD DIAGRAM: 18TH MARCH TO 30TH JUNE 2020 STATE OF EMERGENCY AND STATE OF CALAMITY

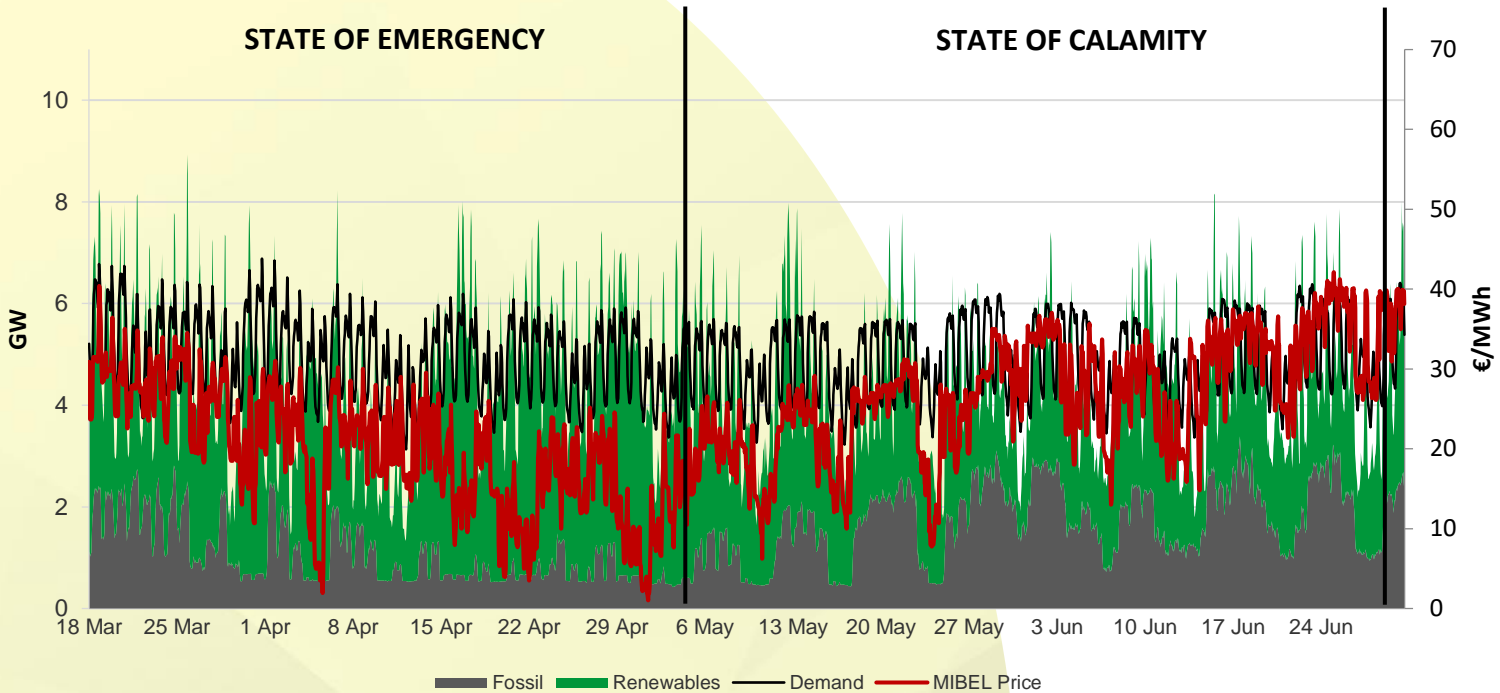


Figure 7. Load diagram for Mainland Portugal (18th March to 30th June 2020). Source: REN, APREN analysis.

MAIN IMPACTS

After the State of National Emergency was decreed on March 18th and later the State of Calamity from May 4th to June 28th, in response to the COVID-19 pandemic, a big part of the national businesses has stopped, which had serious repercussions in the electricity sector, such as:

- ↓
 - **Reduction on the electricity demand** by 8.8 % compared to June 2019, considering the necessary corrections on temperature and number of working days.
 - **Slight reduction on the CO₂ emission allowances price** by 7.6 % in comparison to June 2019.
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However, it is already possible to denote a slight price recovery in the electricity market and in the European market for CO₂ emission allowances, as a result of the reopening of a substantial part of national and European economic activity.

FINAL REMARKS

National Regulation

Capacity Auctions

A Clarification was published, on June 17th, on the Directorate General for Energy and Geology (DGEG) Portal, stating that the winners of the 2019 competitive procedure are exempted from paying any costs related to the clawback mechanism, the contribution to the Social Electricity Tariff and the Extraordinary Contribution on the Energy Sector. In APREN's interpretation, this exemption is only valid for the period of applicability of the remuneration determined by the auction (15 years), for either of the remuneration mechanisms available.

Guarantees of Origin (GOs)

On June 30th, a Communication was published on the DGEG Portal, announcing the extension of the transitional period for joining the electronic platform for issuing and managing GOs until July 31st.

Small Production Units (SPU) and Production Units for Self-Consumption (PUSC)

On June 3rd, a Clarification was published on the DGEG Portal regarding the changes to the prior registration for electricity production units, up to 1 MW and intended for the total sale of electricity to the network, according to which it is possible to make changes to the registration data regarding the location, without this implying a new registration.

The Dispatch No. 6453/2020 was published on June 19th, which determines the level of exemption to be applied to the costs of general economic interest payment, for self-consumption projects and / or energy communities which involve the use of the public service electricity network (PSEN) and start operating until the end of the calendar year 2021.

Clawback

On June 30th, the Dispatch No. 6740/2020 was published, establishing the amount of advanced payment to be applied in 2020 to the electricity producers covered by the competitive balancing mechanism, which assumes the value of 2.24 €/MWh.

Availability Regime for Power Plants

The Ordinance No. 158/2020 was published on June 25th, amending the Ordinance No. 172/2013, which establishes the regime for verifying the availability of power plants that benefit from remuneration mechanisms, subsidization or co-payment that take into account their availability, and which are not subject to any special availability verification regime.

Main Project for Green Hydrogen in Sines

The Dispatch No. 6403-A/2020 was published on June 17th, announcing the opening of the "call" to express interest in participating in the industrial-scale anchor project to produce green hydrogen in Sines.

POLICY AND REGULATION

National Hydrogen Strategy



On May 21st, the Council of Ministers approved the National Hydrogen Strategy. The public consultation process was open until July 6th on the Portal Participa.

Capacity Auctions



According to a Clarification from the DGEG, the winners of the 2019 competitive auction procedure are exempted from paying the clawback tax, the Social Electricity Tariff and the Extraordinary Contribution on the Energy Sector

Anchor Project for Green Hydrogen in Sines



It is now open the call to express interest in participating in the industrial-scale anchor project to produce green hydrogen in Sines.

PUSC



On June 19th, the Dispatch No. 6453/2020 was published, which determines the level of exemption to be applied to the costs of general economic interest payment, for self-consumption projects and / or energy communities which involve the use of the PSEN and start operating until the end of the calendar year 2021.

Clawback



The Dispatch No. 6740/2020 establishes 2.24€/MWh as the amount of advanced payment to be applied in 2020 to the electricity producers covered by the competitive balancing mechanism.

IN RESPONSE TO THE COVID-19 PANDEMIC



Economic recovery package for the EU



On May 27th, the European Commission presented the awaited European Strategy for economic recovery in response to the crisis and recession caused by the COVID-19 outbreak. This strategy is essentially made up of two distinct elements, a new European Union Budget for the period 2021-2027 and a new economic recovery fund, the “Next Generation EU”, which add up to a total investment of 1.85 trillion euros.

Information available in:

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