2. MARKET AND REGULATORY HIGHLIGHTS

This section includes a brief review of the main news and events with an impact on the electricity market that has become known or been published during the quarter under analysis.

2.1 Regulatory highlights

Royal Decree-Law 10/2022

The government has approved on 13 May the Royal Decree-Law 10/2022, which aims to reduce the wholesale electricity market price. On 8 June, the EC finally approved the measure, which came into force on 14 June. In no case shall the mechanism regulated in this Royal Decree-Law be applicable beyond 31 May 2023.

The main measure consists of the creation of a mechanism to adjust the production costs incurred by mainland fossil-fuel generation units (CCGT, coal and cogeneration without a remuneration regime). The share of energy nominated in bilateral contracts with physical delivery will not receive the adjustment.

This RD-L excludes cogeneration plants from the mechanism, claiming that these plants that generate electricity and heat simultaneously already have a regulatory framework through which they obtain retribution from the Ministry, even though although it has not yet been approved. According to Acogen, the decision harms cogeneration because recognises a gas price of 80 €/MWh for CCGTs but 50 €/MWh for cogeneration, altering and distorting competition and contravening national and European law.

The mechanism adjusts in an amount proportional to the internalisation of the higher cost of supplying the fossil fuels used by these facilities in electricity production. Thus, for the electricity generation facilities mentioned above, the amount to be received will be calculated as follows:

$$Y_i = \frac{P_{GN} - P_{RGN}}{0.55}$$

Y_i [€/MWh] is the daily amount of the adjustment per MWh; P_{GN} is the price of natural gas (provided by MIGAS); P_{RGN} is the reference price of natural gas, which will start at 40 €/MWh for the first 6 months and will increase by 5 €/MWh each month thereafter; the efficiency factor of CCGTs has been considered 0.55.

Therefore, these units will have to bid in the spot market with their best production forecast, internalising the adjustment. Therefore, bids are expected to be lower, reducing the price of the wholesale electricity market and then the remuneration of every electricity generating unit.

On the other hand, this cost will be paid by the utilities and direct consumers, discounting the part they have declared in bilateral contracts before 26 April. In other words, it will be paid only by the ones that directly benefit from the mechanism. Consumers with fixed price contracts or PPAs will have to incorporate the cost of financing the adjustment when renewing their contracts, with no obligation to do it before that moment.

At the same time, RD-L 10/2022 includes modifications to RD 413/2014 (calculation of the adjustment mechanism for deviations from the market price applicable to RECORE). The R_{inv} adjustment will be made considering a weighting of the actual market prices but also OMIP futures, including the value factors of each technology. The result of the change in methodology is the damping of the adjustment, which is expected to encourage forward energy contracts.

A particular request from the EC is to reduce the volatility of the PVPC and its exposure to the spot price. Therefore, the Government, before 1 October 2022, will make the necessary amendments to Royal Decree 216/2014 (which establishes the methodology for calculating the PVPC), to incorporate a price component based on a basket of forward, daily and intraday market products in the calculation of the price.

Although significant drops in the wholesale market price were expected, the entry into force of the mechanism was overshadowed by the increase in electricity demand (due to the heat wave that hit the Iberian Peninsula) and

high gas prices. In the first week of operation, this resulted in an average daily market price of €155.57/MWh and an average adjustment price of €90.28/MWh. Also, as a result, in the second half of June, electricity exports from Spain increased compared to the first half of June by about 27 GWh per day to France. With respect to Portugal, there are no notable differences.

Ministerial Order proposal to update the operating remuneration parameters

On 12 May, the MITECO published a proposal for an order updating the RECORE remuneration parameters for 2022, as the RD-L 6/2022 indicated mandatory within two months.

The R₀ becomes zero for almost all technologies, which is due to the increase in the market price assumed for 2022 (from 48.82 €/MWh to 121.9 €/MWh). Also, new methodology for updating the R₀ for plants dependent on fuel prices is applied: annual update considering the cost of CO₂.

The spot price increase implies that most generation units obtain EBITDA>0 only with market revenues, which generates a surplus of market revenues to repay the initial investment, which translates into a drop in the R_{inv}. If they reach their reasonable profitability, they lose the R_{inv} from 2022, and will therefore suffer a loss of revenues that they will not be recovered in the future.

CNMC report on the proposed order

On 10 May, the CNMC published a report with updates to the Ministerial Order proposal regarding R_{o} calculation methodology for the second half of 2020 and 2021.

It recommends abandoning the Henry Hub price index and using TTF or PVB (Mibgas). It also urges to adapt the methodology to the use of gas tolls and to update the prices of CO_2 emission rights every 6 months.

Royal Decree-Law 11/2022

On 26 June the Royal Decree-Law 11/2022 was published, extending measures to respond to the consequences of the war in Ukraine, to deal with situations of vulnerability, and for the recovery of the island of La Palma.

In the field of energy, the measures of RD-Law 17/2021 (windfall profits) are extended until 31 December 2022: article 17 maintains the temporary suspension of the IVPEE for the third and fourth quarters of 2022; article 18 fixes VAT at 5% for consumers below 10kW and/or vulnerable consumers (which was already reduced a year ago from 21% to 10%); the Special Tax on Electricity (IIE), will stand by the minimum of 0.5%.

2.2 Other regulatory events

<u>Draft ministerial order to call for a competition for access capacity, published for public information.</u>

On 10 June, the MITECO (Ministerio para la Transición Ecológica y el Reto Demográfico) opened for public information the proposed order to call a tender for access capacity in the electricity transmission grid, with a period of 2 weeks for allegations.

The tender will allow 5,844 MW of access capacity to be awarded at 17 different nodes for new electricity generation facilities using renewable energy sources and/or electricity storage.

The deadline for submitting applications to the tender referred to in section one of this order shall be two months from 1 October 2022.

The projects submitted shall be awarded based on time, technology-related, socio-economic and environmental criteria. Thus, more points will be given to those that bring forward the start-up of the project the most. Those with a higher degree of self-consumption, storage, hybridisation, repowering, etc. will also be taken into account. Finally, the number of jobs that will be created and the environmental impact of the projects will also be considered.

REE publishes new access capacity

On 20 June, REE published the new access capacities of the nodes that make up the transmission grid for the connection of future renewable generation facilities.

This update considers the scenarios set out in the Electricity Planning with a 2026 horizon approved in March 2022.

The published access capacity (maximum power that new electricity generation facilities can inject), considers technical aspects of electricity system operation in order to integrate as much renewable generation as safely and reliably as possible.

CAPACIDAD DE ACCESO DISPONIBLE PARA SOLICITUDES DE GENERACIÓN A LA RED DE TRANSPORTE Y ACEPTABILIDADES				CAPACIDAD DE ACCESO LIBERADA PARA SOLICITUDES DE AUTOCONSUMO SEGÚN EL REAL DECRETO-LEY 6/2022	
Capacidad de acceso disponible para MGES RdT [MW]	Capacidad de acceso disponible para MPE RdT [MW]	Capacidad de acceso disponible para MGES o MPE no conectado al primer nivel de transformación RdD [MW]	Capacidad de acceso disponible para MPE RdD [MW]	Capacidad de acceso disponible para MGES [MW]	Capacidad de acceso disponible para MPE [MW]
18.049	9.739	65.146	48.131	8.970	6.972

ACER publishes its Final Assessment of the EU Wholesale Electricity Market Design

On 29 April, ACER published a report (Final Assessment of the EU Wholesale Electricity Market Design), which analyses energy price levels and drives, the impact on retail markets and how to protect consumers and looks at current wholesale electricity market design.

ACER argues, as usual, that the market design will not be changed because it has worked properly, even if it may have some inefficiencies in a situation like the current one.

The Agency for the Cooperation of Energy Regulators believes that the energy crisis is a consequence of the impact of the gas price on the electricity price. With a very rapid economic recovery in 2021, gas demand recovered to pre-pandemic demand levels and outstripped supply. Although LNG imports to Europe increased, falling Russian supplies, geopolitical uncertainty and finally the Russian invasion in Ukraine have resulted in gas and electricity prices never seen before.

Resolution of the Secretary of State for Energy of 3 June 2022.

On 3 June, the Secretary of State for Energy published a resolution establishing the minimum content and format for the submission of annual and multi-annual investment plans by companies owning electricity distribution facilities.

2.3 Market Outlook

Fundamental (GAS, EUAs)

In early April, the gas price decreased significantly, from 118 €/MWh on 2 April to 72 €/MWh on 16 April) due to several reasons. Firstly, the normalisation of the war in Ukraine, which had a strong impact at the beginning of the war.

Secondly, national electricity demand in April was around 19,500 GWh, 2% lower than in the same month last year. Moreover, it was a good month for renewables, which covered 50.1% of generation (71.3% emission-free).

Throughout May and the first half of June it remained at "stable" values of around 77 €/MWh, until 10 June when it began to escalate, mainly due to a fire at the Freeport LNG Terminal (Texas, USA), one of the largest LNG terminals in the country, which left the plant completely shut down. According to the owner, the terminal will be shut down for about three weeks

so it will stop sending gas to Europe (around 70% of its production went to the United Kingdom and the European Union in recent months).

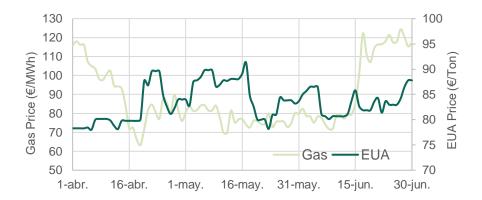


Figure 2.1: 2022-Q2 Gas and EUA price evolution.

Thus, Q2 closes with an average of 88.29 €/MWh, 8.28 €/MWh less than Q1 even though it has risen sharply in the last two weeks of June. This Q2 average is far from the forecasts that MIBGAS showed for Q2 at 112.50 €/MWh.

Forward MIBGAS products indicate that high prices may continue with 2022-Q3 at 123.46 €/MWh and Yr-2023 rising at 95.38 €/MWh.

As for CO₂ prices, the price has remained stable and high throughout the entire quarter. It ended with an average of 83.45 €/Ton and no major changes are expected in the medium term.

Spot-Market price

The electricity market price has remained high and following the gas price. In the range from 85 to 265 €/MWh, the average daily market price was 182.80 €/MWh, 20% lower than in Q1 at 229.30 €/MWh. For prices from 15

June onwards, the extra cost resulting from the gas price adjustment mechanism should be considered for some consumers, so it has been added to the chart:

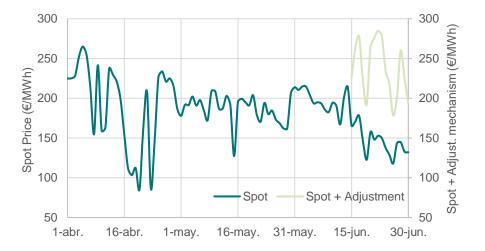


Figure 2.2: 2022-Q2 Electricity spot price evolution.

During 2022-Q2, although nuclear produced 20.3% and CGTs produced 18.3%, the leading technology in the generation mix was wind generation (21.8% of total). With the mechanism established by RD-L 10/2022, CCGT production soared, reaching approximately 27% of generation mix in June.

As for futures, 2022-Q3 stands at 177.32 €/MWh and Year-23 goes up to 170 €/MWh (352.79 €/MWh for France), an increase of 24.5% compared to the price at the end of Q1.

Relations with Russia appear to have finally broken down and the European Union is facing a time of great uncertainty and as a result, markets remain high and unstable.