RÉGIMEN ECONÓMICO DE ENERGÍAS RENOVABLES
(Economic Regime for Renewable Energy)

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Hugo Lucas Porta
Head of Cabinet State Secretary for Energy
Spain has adopted **ambitious targets** with respect to the deployment of renewable energy sources in its **National Integrated Energy and Climate Plan (PNIEC) 2021-2030**, which implies the deployment of around **5,000 MW/year** of new capacity in the next decade.

### Energy context

<table>
<thead>
<tr>
<th>Technologies (MW)</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind (on-shore and off-shore)</td>
<td>28.033</td>
<td>40.633</td>
<td>50.333</td>
</tr>
</tbody>
</table>

#### % generation of renewable energy in the electricity system

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
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<tbody>
<tr>
<td>%</td>
<td>42%</td>
<td>60%</td>
<td>74%</td>
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</table>
On the need for a new renewable energy support mechanism...

- Ambitious **international commitments** in renewable energy.
- **Cost reductions** for electricity generation. Technologies such as wind and PV can compete in the market (low operating costs).
- **Expected reduction of the price of the electricity market** in the hours with greater renewable electricity generation ("price cannibalisation" effect).
- **Difículties in the financing of projects** as a result of the risks on future revenues.
- Possible **loss of interest for investors** due to the expected reduction of the revenues.
- The **Specific Remuneration Regime** provides revenues to installations which are additional to the ones they receive for the sales of electricity in the market.
On the need for a new renewable energy support mechanism...

- **Facilitate the financing** of new projects, avoiding the risk of “price cannibalisation” in order to comply with the targets.
- Immediately transfer the **cost savings** of electricity generation from renewable energy sources to consumers.
- Boost the green economy and facilitate the **economic recovery**.
- Facilitate **planning** through a schedule which provides certainty to the whole value chain, avoiding shortage periods.
- To partially transpose **Directive (UE) 2018/2001** on the promotion of the use of energy from renewable sources.
Introduction to REER.

- Intended for **new renewable installations**.
- It allows **the enlargement** of existing installations and **hybridisation** of technologies.
- It can be awarded through an **auction** mechanism.
- It consists of the **collection of a price for the energy** sold in the market during a given period.
- **No** possibility to generate a **deficit** and **no burden** for the country’s general budget.
## Regulatory outline

<table>
<thead>
<tr>
<th>ACT/LAW</th>
<th>Parliament (18-24 months)</th>
<th>Law 24/2013 Marginalist</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROYAL DECREE LAW</td>
<td></td>
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</tr>
<tr>
<td>ROYAL DECREE</td>
<td>Council of Ministres (6-...)</td>
<td></td>
</tr>
<tr>
<td>MINISTERIAL ORDER</td>
<td>Minister (weeks)</td>
<td></td>
</tr>
<tr>
<td>RESOLUTION</td>
<td>Secretary of State (days)</td>
<td></td>
</tr>
</tbody>
</table>
Regulatory outline

Royal Decree Law 23/2020

HABILITATION OF REER

DESCRIPTION OF THE SUPPORT MECHANISM AND THE AUCTION

Order A
  Resolution of the call A1
  Resolution of the call A2
  Resolution of the call A3

Order B
  Resolution of the call B1
  Resolution of the call B2
  Resolution of the call B3

Order C
  Resolution of the call C1
  Resolution of the call C2
  Resolution of the call C3

SEVERAL ORDERS WITH THEIR OWN PARAMETERS FOR EACH TYPE OF AUCTION ACCORDING TO THE TECHNOLOGY, REQUIREMENTS, SPECIFICITIES...

SUCCESSION CALLS OF EACH TYPE OF AUCTION ACCORDING TO THE NEEDS OF THE ELECTRICITY SYSTEM
• **Auctioned product:** energy, capacity or a combination of both.
• **Commitment made:** to deliver energy in a maximum term.
• **Supply variable:** price per unit of electricity (€/MWh) to be delivered.
• **Retribution:** payment of a price, based on the result of the auction, for the energy negotiated.
• **Form of delivering:** through the sale of electricity in the daily market, intradaily market and adjustment services.
• **Type of auction:** sealed bid, pay as bid, with reserve prices (mandatory) and minimum price (facultative).
General features

- **Settlement of the mechanism:** settlement in the market by OMIE.
- **Penalties:** foreseen due to non-compliance and renunciation to the mechanism, proportional to the volume of energy pending delivery.
- **Entities participating in the auction:** OMIE is responsible for the auction and CNMC is responsible for the supervision.
- **Organismos participantes en el mecanismo:** OMIE and REE are responsible for the energy sold and its settlement.
- To achieve an **ordered development** which allows a significant **integration** of renewable energy, a distinction can be made in the auction calls between the different generation technologies as a function of their technical characteristics, dispatchability levels, location criteria, technological maturity and others which ensure the transition towards a decarbonised and consideration of the particularities of renewable energy communities.
Energy of the auction: energy delivered by each installation adhered to the retribution of the mechanism in the daily and intra-daily market.

Minimum energy of the auction: minimum volume of energy of the auction to be delivered. It is the commitment made by the installation. If it is not reached, a penalty applies. When it is reached, the installation may voluntarily abandon the mechanism.

Maximum energy of the auction: maximum volume of energy of the auction which can be delivered. When it is reached, the installation must abandon the mechanism.

Maximum delivery deadline: period within which it is mandatory to deliver the energy committed. When the deadline is exceeded, the installation leaves the mechanism and can participate freely in the market. Different deadlines can be set for different technologies.
Auctions – Control parameters

**Reserve price:** maximum price over which bids are excluded, it may be confidential. The aim is to control the maximum price which can be awarded to a project.

**Risk price:** minimum price below which bids are excluded, it may be confidential. Its use is facultative. The aim is to remove reckless bids, whose variability is uncertain, avoiding failed allocations.

**The minimum relation required** between the volume of the auctioned product and the volume of product being offered in order to ensure the effective competition in each auction.

**Maximum percentage limit** of the volume of product being awarded to a corporate group or technology with respect to the total volume of the product being auctioned, in order to ensure competition, diversification and a higher guarantee of success of each auction.
The market exposure of the awarded installations is guaranteed through the following provisions:

• The installations have the **obligation to bid** in the daily and intra-daily markets with their best production forecast.

• The installations **will be able to participate in the adjustment and balancing services** according to the applicable regulation, that is, on a level playing field with the rest of technologies.

• The installations only sell under the REER a part of their energy, the so-called Maximum Energy of the Auction. After exiting the retributive mechanism, the rest of the energy which is generated by each installation during its useful lifetime can be sold **in the market and at market prices.**
Additionally, the royal decree envisages that, in **given calls**, it will be possible to include an **additional element of market exposure**, through a parameter called **percentage of market adjustment**.

The energy sold is remunerated at the price obtained on the basis of the award price from the auction and the market price. The aim is to encourage production in the hours of the day with the highest prices in order to reduce the price in those hours.

- Default value: 0% - Maximum of 50%.
- Beneficial for dispatchable technologies and storage.

The price which is perceived by the installations depends on the award price from the auction, the market price and the percentage of market adjustment.

\[
\text{Precio percibido en Mercado Diario} \quad PpMD = PAdjud + \%Ajus \times (PMD - PAdjud)
\]

\[
\text{Precio percibido en Mercado Intradiario} \quad PpMI = PAdjud + \%Ajus \times (PMD - PAdjud)
\]
Settlement of the mechanism

The installation: bids with its best production forecast in the daily and intradaily market, at a free price.

OMIE: settles for each installation the sold energy according to the difference (negative or positive) with the price resulting from the market in each negotiation period.

OMIE: distributes the economic deficit or surplus generated everyday among the national acquisition units as a proportion of its final programme (daily settlement). Storage installations not adhered to the REER are excluded.
The Electronic Registry of the REER is created. It has two statuses for installations: Pre-allocation and Exploitation.

After the result of the auction is known, installations will have a deadline to deposit the pre-allocation economic guarantee and ask for the registration in pre-allocation status.

Once registered in Pre-allocation, the economic guaranteed to participate in the auction is cancelled and there is a maximum deadline to register under Exploitation.

After the installation is built, the sale of electricity to the market starts (outside the mechanism) and, then, the registration under Exploitation is requested. Compliance with all the established requirements needs to be demonstrated.

Once the installation is registered under Exploitation, the guarantee deposited under pre-allocation is cancelled and the perception of the retributive regime starts.

A delay in the registration under Exploitatión is allowed. However, this will lead to a penalty on the pre-allocation guarantee which will be proportional to the delay incurred.
Thank You