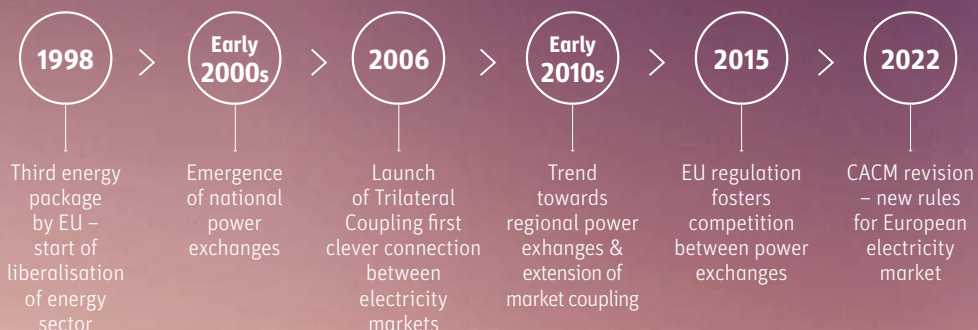


WHAT IS THE EU INTERNAL MARKET FOR ELECTRICITY?

- **In the early 2000s**, power exchanges operated mostly on national level – electricity flows across borders had to be traded manually and separately. This led to a lot of efficiency losses.
- **Since 2006**, power exchanges have implemented a solution to incorporate the – often scarce – interconnectors' capacities between countries into their price calculations. This solution is called **Market Coupling** and was co-developed with transmission system operators.
- **With Market Coupling**, the available transport capacity on the borders is used in the best way to minimise price differences between countries, and to increase competition.
- **The effect:** Offer and demand are now calculated on a European level across 27 countries. Market coupling provides optimal access to affordable and clean electricity for all Europeans.
- **The European Union** has embraced this innovation through regulation – with the so-called Guideline on Capacity Allocation and Congestion Management (CACM). Today, this is the backbone of the internal energy market.



Power exchanges: platforms for electricity trading

Power exchanges emerged in Europe in the early 2000s, as a result of liberalisation of the electricity sector. They are part of the so-called wholesale market for electricity: Power exchanges provide platforms where electricity can be traded in large amounts. Companies like electricity producers and energy suppliers use the power exchange to sell their production and cover their demand. Thanks to the aggregation of offer and demand of all these companies, the resulting price reflects the market situation of supply and demand and becomes a reference – an orientation for investments and all other trades of electricity, such as on futures markets or outside of the exchange.

Products traded on a power exchange

Power exchanges offer different contracts on several market segments.

Electricity is traded in three dimensions:

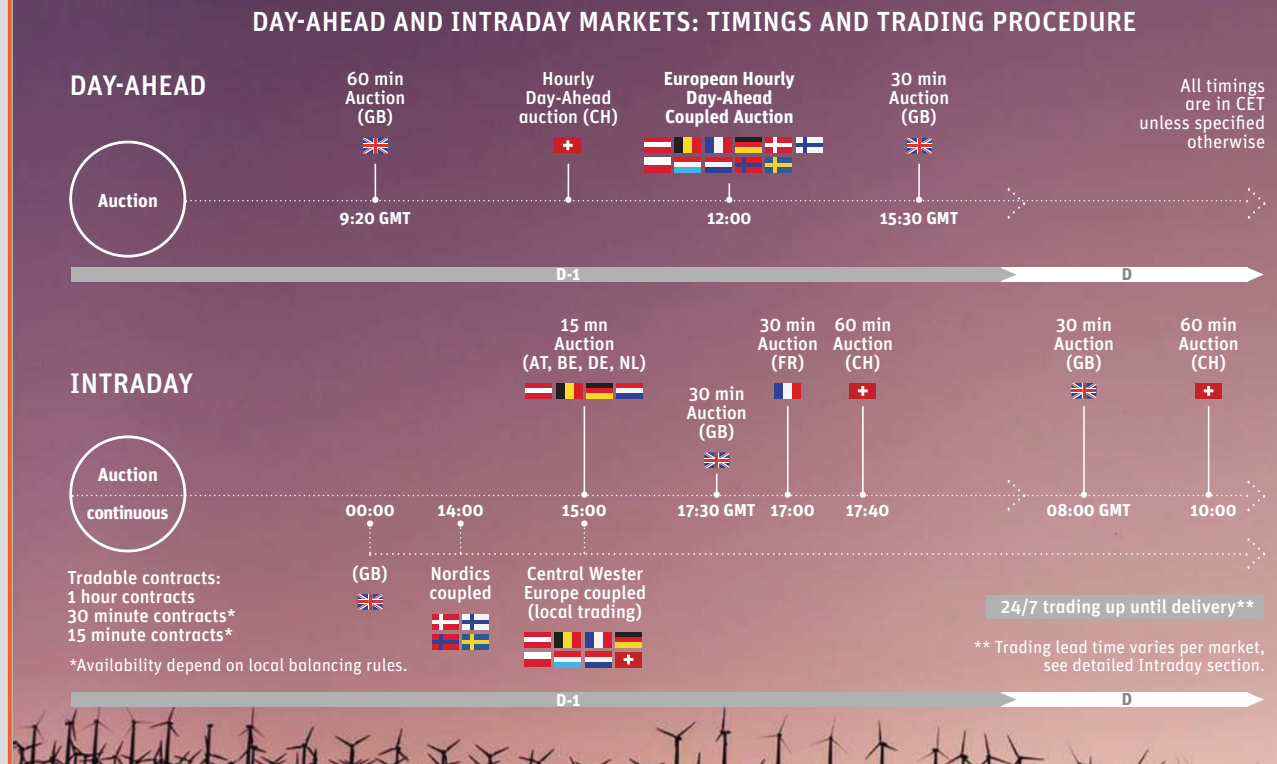
- in a certain quantity (in MWh),
- for a certain moment of delivery e.g., tomorrow,
- and for a certain duration, e.g., 15 minute or hourly contracts.

The types of market are determined by the moment when payment and delivery are due: If payment and delivery happen on the same day or one day after the trade, then we are talking of the short-term or spot market. If payment is due in weeks, months or even years, it is a futures market.

Day-Ahead markets are operated through an auction which takes place once a day, every day of the year. Electricity is traded for **each hour of the next day** and delivered on the following day.

Intraday markets are split between auctions, which take place at one specific moment, and continuous markets – where orders are matched permanently and as soon as they fit. On the Intraday markets, hourly contracts, half-hourly contracts and 15-minute contracts are tradable. On the continuous markets, electricity can be **traded up until the moment of delivery**.

Figure: Overview of the timeline of spot market segments of the European Power Exchange



Power exchanges: Fostering competition

When EPEX SPOT was created through the merger of the power spot activities of the French and German energy exchanges in 2008, a core idea had driven the process: that **electricity needs to be traded at European level**, regardless of national borders.

Before Market Coupling, electricity and **cross-border capacity had to be purchased separately**. With Market Coupling, power exchanges **integrate available cross-border capacity directly into the price calculation process**, to minimise the price difference between market areas. In so doing, market coupling maximises social welfare, increases competition, and sends the most relevant price signal for investment in cross-border transmission capacities.

The European Commission took the idea of Market Coupling and established a target model which has been laid down into the **Guideline on Capacity Allocation and Congestion Management (CACM)** in 2015.

The steps towards an internal electricity market in the EU

Market Coupling has been **co-developed between power exchanges and transmission system operators since 2003**. It was first implemented with the Tri-Lateral Market Coupling (TLC) in 2006. Today, the coupled area of the Single Day-Ahead Coupling covers **27 countries, representing about 90% of European electricity consumption**. 23 countries are coupled via the Single Intraday Coupling. The coordinated and efficient Day-Ahead and Intraday cross-border trading is a key pillar for the internal energy market.