

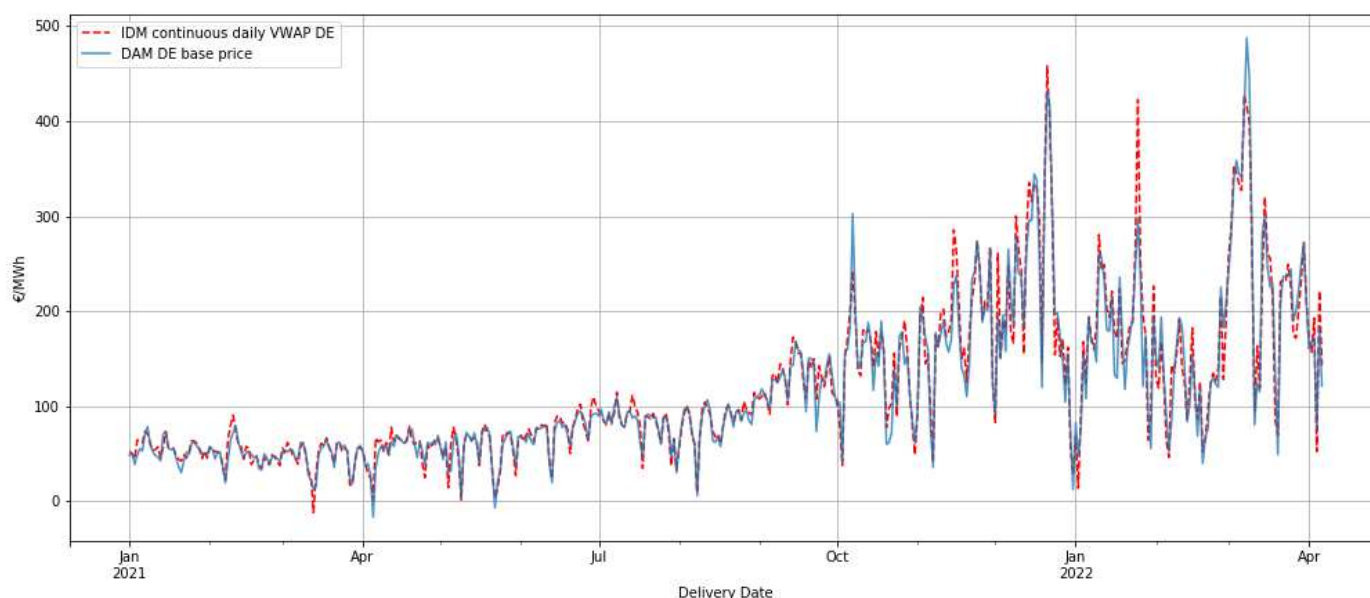
Safeguarding the benefits of the European power market

Prices are high, but the market works

In the past months, the global energy crisis has put in danger the welfare of many end-consumers and the business continuity of energy-intensive industries. **High energy prices are not the result of market failure**, as prices reflect tight demand and supply conditions in Europe. 24/7, the European electricity wholesale market has guaranteed security of supply and meaningful price signals. Currently, the gas market is the driver of high electricity prices. It would be pointless and counterproductive to modify the current electricity market design via price caps, a different pricing mechanism, or additional taxation. **By disrupting the meaningful price signal, we would put at risk security of supply and increasing our dependency to fossil fuels**, by disarranging production and consumption decisions and deterring investments in decarbonization. Still, solutions are needed to better protect consumers and industries: today through more effective social policies, tomorrow through larger investments in renewables, flexibility solutions, power grid, and cross-border connectors.

A change of the current pricing model in the power market would not lower energy prices, but would deoptimize the energy system and endanger decarbonization efforts

- Today, the price formation mechanism in the European Day-Ahead auction follows a pay-as-clear model based on marginal pricing. Via this mechanism, the cheapest generation capacities are always activated first (in the so-called “*power generation merit curve*”), ensuring demand is always met at the lowest possible cost. This mechanism gives investment signals in new clean technologies and allows power generators to cover their costs, eventually ensuring security of supply.
- An alternative market setup, as implemented on the Intraday continuous market (an adjustment market complementing the Day-Ahead reference market), is ‘pay-as-bid’. This means that sellers submit bids and as soon as a buyer accepts, the transaction is executed. The market reference price would then be seen as an “average bidding price” set by the market participant, as opposed to the marginal price set by generation costs.
- If the pay-as-bid mechanism was applied in the Day-Ahead market, players would try to anticipate the market clearing price and bid above their marginal costs in order to maximize their profits. Hence, the power generation units activation priority would be **based on the traders’ ability to best forecast the market price, instead of on their economic and environmental efficiency**.
- A shift from marginal pricing would generate negative consequences **but not lower energy prices**. This is illustrated in the graph below, which shows similar price fluctuations in the German Day-Ahead auction (pay-as-clear with marginal pricing) and Intraday continuous markets (pay-as-bid).



Intraday continuous weighted average daily price; Day-Ahead auction weighted average daily price – Germany. Source of data: EPEX SPOT

Price caps only limit the price artificially, putting at risk security of supply while increasing Europe reliance on fossil fuels

- Today, price signals indicate that gas is scarce, expensive, and, therefore, should progressively be removed from the energy mix. A price cap would reverse this process, making gas artificially cheaper and thus increasing Europe's dependence on it. Conversely, decarbonized power generation resources (e.g., renewables, hydropower, nuclear) would be made less competitive and at risk of being "pushed out" of the *merit curve*.
- Especially if applied only by few EU Member States, the cap would distort cross-border flows of electricity, **putting at risk security of supply and the optimisation of the European electricity system**. Through Market Coupling, shortage of supply in one country raises the price, attracting power from the neighbours. A price cap would hide such supply shortage signal by making prices artificially 'normal'. Not only, the capped power, now cheaper, may start to be exported to neighbouring countries, aggravating the supply shortage.
- In addition, the cap would burden taxpayers' finances. End-consumers would pay not only for the compensation power plants receive – namely the difference between the "real" price of the commodity and the artificial price cap; but also, for investments in renewables, which, due to limited market revenues, would become mainly dependent on state subsidies.

The Iberian exception – an additional auction disrupting the local and European wholesale market

- The Iberian proposal consists of a €30 MW/h cap on gas price and an additional auction mechanism in the Iberian Day-Ahead wholesale electricity market. For the reasons described above, such measure would disrupt the meaningful price signal and Market Coupling mechanism at European level, and endanger the decarbonization path not only in Iberia, but in the whole European market.
- In particular, such additional auction mechanism is technically complex to implement. Any minor implementation flaw would even not guarantee a price decrease. Given its complexity, a similar project would require years rather than weeks to get into operation.
- **The market could risk being manipulated:** market participants could engage in strategic bidding either between the first and additional Iberian auction, or, within the same auction between compensated or non-compensated producers.
- The interruption of cross-border Intraday trading between France and Spain, although necessary, could **endanger security of supply in the Iberian peninsula**.
- In the futures market, the meaningful Day-Ahead price index underlies the price of derivatives. With two auctions, it becomes unclear which of the two prices would be adopted. The futures market will then be at risk to become illiquid, **preventing market participants to hedge against price volatility**.

While not directly affecting the price signal, the consequences of redistribution measures (such as taxation on inframarginal rents) need to be carefully considered

- Inframarginal rents are the profits that energy producers gain when the market price reaches a higher level than their marginal production cost. Today, these profits are often qualified as "excessive", as renewable generators, which have marginal costs close to 0 EUR, are currently paid the market price set by fossil fuels generators.
- Nonetheless, the definition of 'excessive profits' does not find reference in reality. In fact, fixed costs covering the initial investment – typically high for decarbonized generation technologies – have to be recovered. Further, generators may have sold electricity on forward markets at not necessarily high margins.
- Redistributions measures can be effective to shield consumers when they are applied ex-post and do not cause distortion in the market – such as targeted lump-sum payments. Conversely, taxation measures should not **disincentivize the investment in renewable energy**, endangering the transition to decarbonization and the achievements of the EU Green Deal and Fit-for-55. It should also not disincentivize the development of innovative and market-based solutions contributing to climate goals: sub-hourly trading products to fine-tune renewable portfolios, Local Flexibility markets to avoid costly grid congestions, and spot auctions for Guarantees of Origin.