



Denmark's response to consultation on electricity market reform

State of play

The EU's integrated and liberalised electricity market model has been carefully developed over two decades with the aim to ensure that electricity is produced and delivered to consumers at least cost. It does so by promoting prices that reflect underlying costs and therefore utilises resources most efficiently to the benefit of consumers. Marginal pricing provides investment incentives to producers, energy efficiency incentives for consumers, as well as incentives for flexibility that is essential to integrate renewable energy and reduce price spikes. When combined, these incentives overall put downward pressure on prices in the long run.

At the same time, 2022 gave rise to a period of enduring high electricity prices across the continent. This has largely been caused by a gas shortage combined with an unusually low availability of generation capacity – that is, a supply crisis. This supply crisis created distributive challenges in the short to medium term that have been addressed. There could be a need to assess possible regulatory measures that increase the possibilities for consumers to be shielded from sustained periods of high energy prices, while safeguarding security of supply and leaving long-term investment signals intact.

The supply shortage and resulting high electricity prices created a drive to act fast and to make interventions in the electricity market model. Market model changes can however have significant and wide-ranging consequences, some of which can be unintended and harmful to a market that has generally worked well terms of providing low prices and a cost-effective energy transition. **Changes need to be grounded in careful analysis and impact assessments.** Regulatory interventions at the pace seen last year should therefore not become the new normal, nor should the short-term interventions create the basis for upcoming long-term changes to the market model. In short, we should be careful not to introduce permanent changes to the long-term electricity market model based on short to medium term considerations.

Complementing short-term physical electricity markets with liquid forward markets

Stable and low electricity prices at all times should not be *an objective in itself* for the short-term physical electricity markets. The physical reality of a decarbonised electricity system is one of intermittent power production. This necessitates a correspondingly flexible demand and supply. Varying prices on an hourly, daily and monthly basis signal to market actors when they should consume less, produce more and, looking ahead, whether to invest in new capacity. Without prices that reflect the physical reality of a zero-emission power system, the consequence may ultimately be a compromised security of supply and a lack of investment into new

capacity. Not only in renewables' capacity, but also in the kind of flexible resources (demand response, storage, thermal peaking plants, power-to-X etc.) needed to match intermittent power production with demand to reduce price spikes across all time horizons.

At the same time, consumers and producers must be able to feel confident about future price developments. It is possible – indeed desirable – to attune market actors to an energy system where flexibility is valued. This does not mean, however, that e.g. consumers, particularly vulnerable consumers, should be unprotected during long periods of high prices. Shocks causing high prices may occur again in the future. A long-term priority must therefore be a more resilient interconnected European energy market that can withstand these shocks without putting an excessive burden on consumers.

Improvements in the financial electricity markets can provide price stability to consumers and producers without compromising price signals on short-term physical markets necessary for a cost-effective integration of renewable power. Power Purchase Agreements (PPAs) can have a role to play in this regard. PPAs are existing tools and the Renewable Energy Directive already includes a requirement to remove barriers to their use. Actively promoting physical PPAs risk introducing “produce-and-forget” incentives that are incompatible with system needs. Financial PPAs do not suffer from this shortcoming, but still risk draining liquidity from the forward markets.

Contracts-for-difference (CfDs) are also an existing tool today, but contrary to PPAs these should not be considered as an instrument to decouple consumers from short-term electricity markets. As long as the capacity on a CfD is inframarginal, the CfD does not mitigate the effect of short-term markets on the price for final consumers. In terms of supporting investments in new capacity, **promoting market-based deployment of renewable energy should be a first priority.** To the extent that public support is required, governments *can* use CfDs for new capacity, but governments should also consider alternatives. CfDs are not necessarily *in general* the best/efficient way to support new capacity. It is thus crucial that CfDs neither become mandatory nor applied to existing capacity.

We would generally recommend focusing on one single approach to mitigate the impact of short-term market volatility on consumers/producers. Simultaneously promoting a selection of instruments such as PPAs or CfDs risks draining liquidity from forward markets. Efforts should instead focus on promoting liquid forward markets while ensuring a level playing field for PPAs and best-practices for CfDs.