

Toward a market design that supports Europe's Net Zero agenda: the role of long-term contracts

CEEM conference – Hybrid electricity markets: recent developments and key research questions

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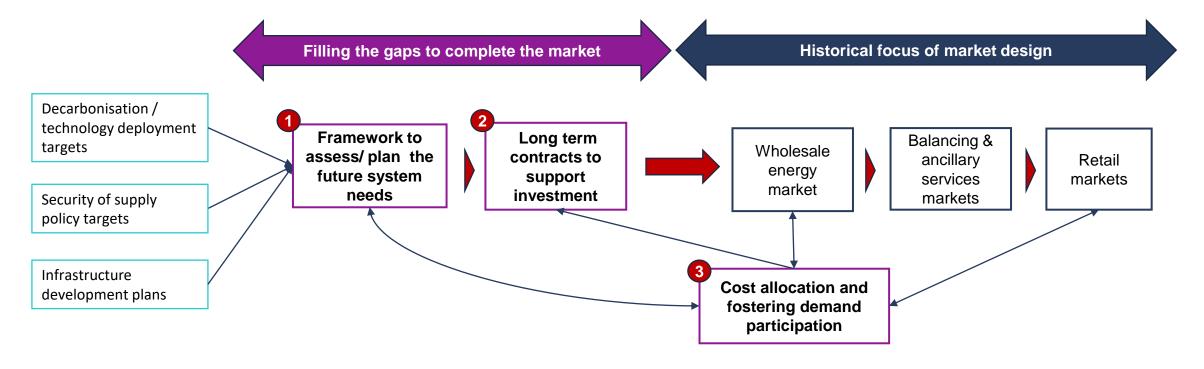
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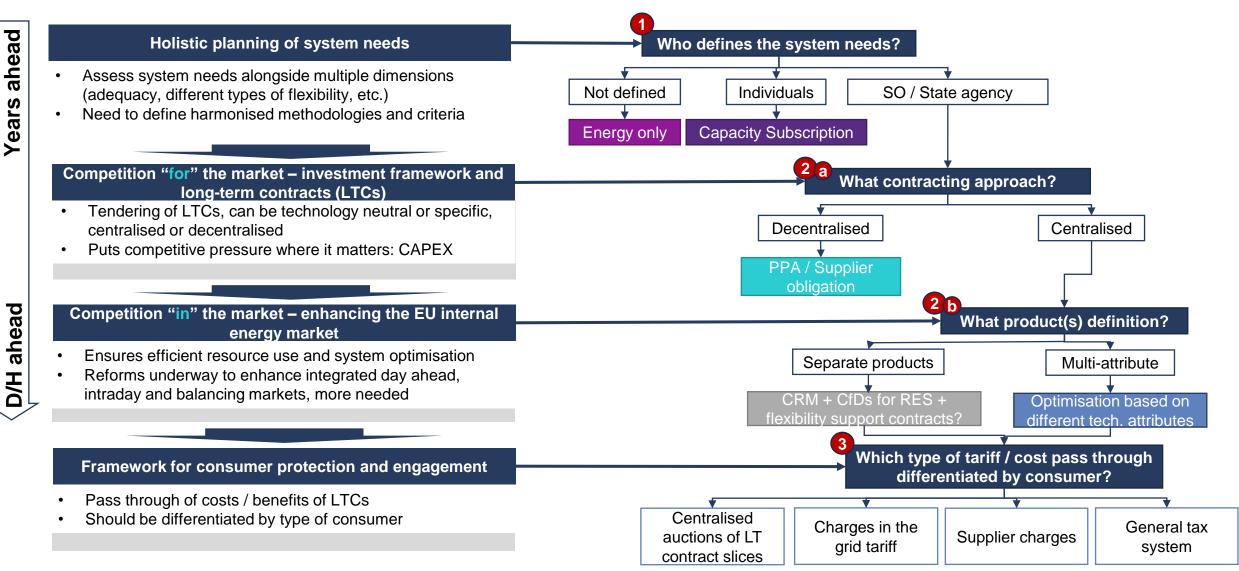
Combining electricity markets and long term contracts to deliver policy objectives

There is a growing literature on hybrid power markets (e.g., Roques & Finon, 2013, 2017; Keppler et al, 2021; Joskow, 2022, etc.) that puts forward different alternatives to address the various market and institutional failures affecting electricity markets:

- Additional "modules" to internalize policy interventions to define the generation mix, the level of security of supply though the introduction of complementary planning and long-term hedging / contracting mechanisms...
- ...whilst preserving efficient competition in energy markets, and introducing further hedging instruments to protect consumers



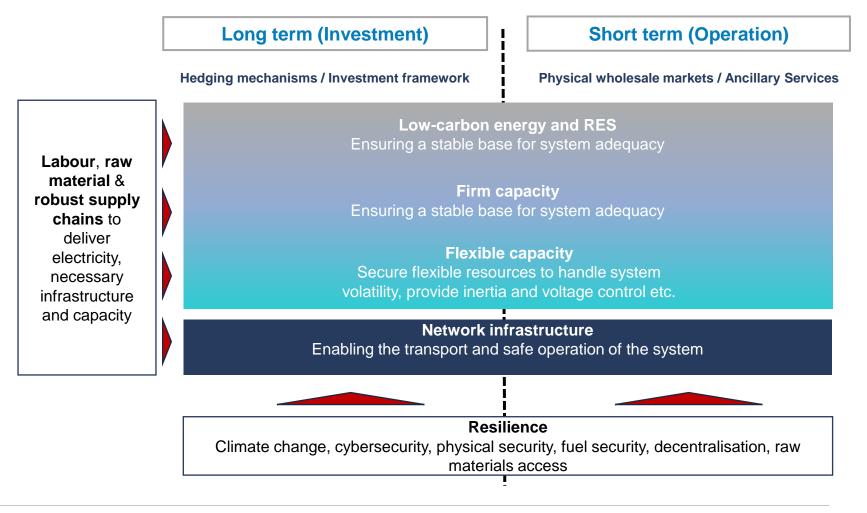
The key design choices of hybrid markets with long term contracts



1 Key issue 1 - The assessment of power system needs

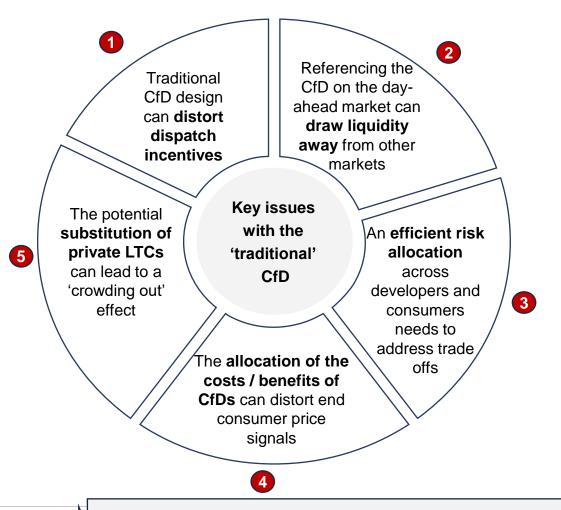
Scope of system needs across timeframes

- In addition to reaching decarbonisation targets, system needs include security of supply concepts across several dimensions, including firm capacity, flexible capacity, and network infrastructure
- The European framework already includes flexibility considerations, but so far mostly focuses on adequacy. The current metrics are designed to quantity firm capacity.
- Despite several initiatives across Europe (ENTSOE, TSOs...), there are not yet precise guidelines or mandate around the evaluation of flexibility needs.

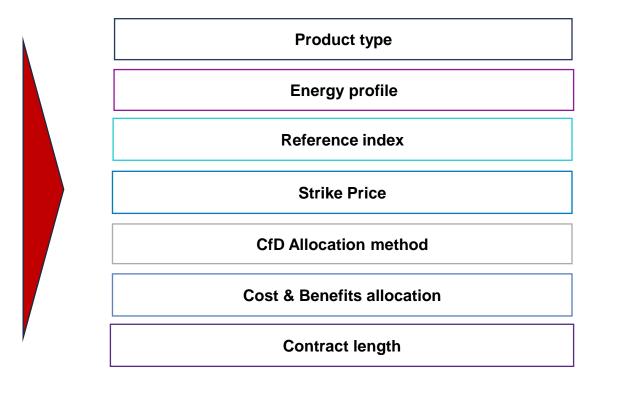


Wey issue 2 - The design of the LTCs matters – The case of CfDs

The 'traditional' two-sided CfD design faces multiple design issues...



... for which a range of options are available to improve CfD design along key contractual feature dimensions



The different options available imply trade-offs to resolve issues with the 'traditional' CfD. For example, the choice of energy profile, reference index and strike price in the CfD design should balance dispatch incentives with risk exposure

3 Key issue 3 - Which approach to pass through the costs ?

There are different options to allocate the costs and benefits of CfDs to consumers with central/ governmental counterparties

Levies or charges embedded in grid tariff	Supplier charges, passed on to consumers
Resale of electricity to suppliers/consumers via centralised auctions of long-term contract slices	General tax system (State budget)

Depending on the LT contracts cost and benefit allocation method downstream, distortions could be created in the retail market price, affecting consumers and suppliers



Impact on consumer price signal



Risk allocation impact on

suppliers

Reduce incentives for flexible assets

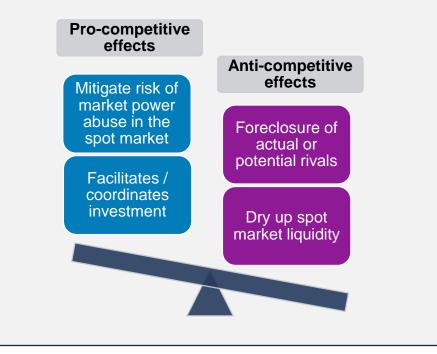
Retail market distortion and the dynamics of retail competition

- If costs and benefits of LT contracts complement energy prices on consumer bills, it may affect consumer price signals, and affect competitiveness, electrification and energy efficiency decisions or purchasing power.
- Allocating costs and benefits through suppliers **introduces additional uncertainties and risks** for them, which would in turn negatively impact consumers (complexity, risk of bad debt...)
- If costs and benefits of CfDs are applied to flexible load such as storage assets or some flexible loads in demand, it may reduce incentives for them to optimise their consumption/flexibility as price spreads between peak and off-peak may be reduced.
- LT contracts allocating costs and revenues through suppliers can create negative interferences with the retail market and creating distortions between competitors – for example by allocating costs and benefits without controlling for consumer switching

Key issue 4 - Competition issues associated with long term contracts: do we need to revisit the historical approach?

The historical approach to assessing Long Term contracts is the balancing test weighing pro- and anti-competitive effects

- Competition authorities perceived long term contracts in the 2000s as standing in the way of liberalisation
- Under specific pre-conditions, the European Commission conducts an in-depth case-by-case assessment of the potential anti-competitive effects of the contracts



With the historical approach, the assessment of long-term contracts on a case-by-case basis could create substantial uncertainty and delays

- Assessing the effects on competition of a long-term contract requires a comprehensive assessment of pro- and anti-competitive effects.
- This could create substantial uncertainty regarding presumptions of legality and regarding the methodologies to be used for assessing effects

Fostering the development of long-term contracts will require to clarify presumptions of legality and define guidelines for assessing effects

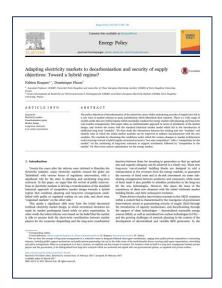
- Two areas may benefit from more guidance to enhance predictability in the outcome of the competitive assessment :
- 1 The identification of situations where long-term contracts are less likely to trigger competition concerns (or should be presumed procompetitive).
- 2 The identification and qualification of concrete efficiencies brought about by long-term contracts relevant for the competitive assessment:



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Thank you for your attention

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