



Desenhos de Mercado Grossista de Energia Eléctrica

Workshop GESEL / ISEG

Lisboa, 9 de Fevereiro de 2017

Para p3. Seguidamente prima F5

1. Pressione a tecla F5

2. Prim4. Confirme premindo o botão

Definir Default

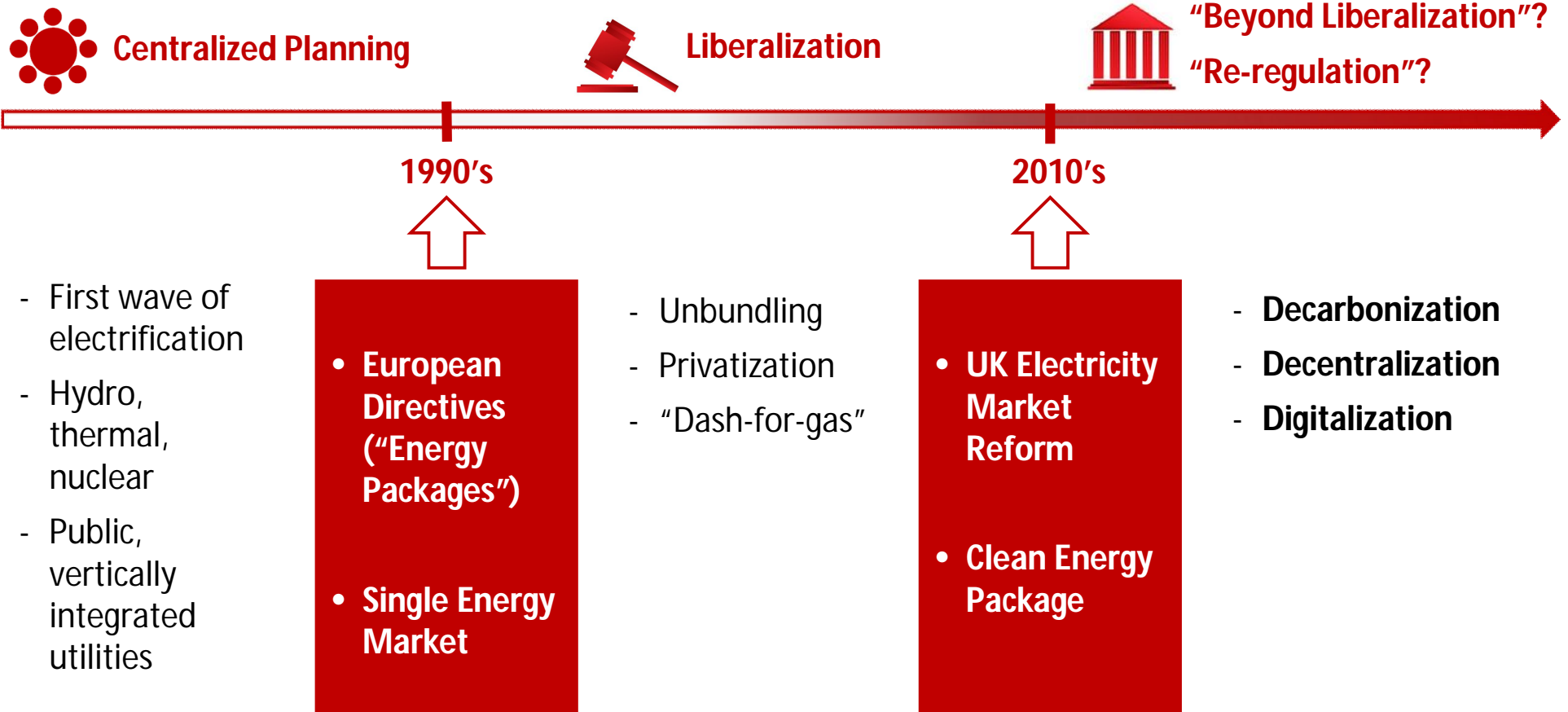
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EDP Produção

Administrador

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Timeline overview: are we entering a third phase?



Two opposing views

A

Claims

“Renewables are now mature – they should participate in the market without subsidies”

Key Beliefs

- > **Any additional remuneration** on top of the wholesale price **is a subsidy**
- > Current **marginalist market model can remunerate new investments** and ensure efficient dispatch
- > No structural flaws exist, **only incremental improvements needed** (no caps/floors, real-time, meaningful CO₂ prices)

B

“The current market design is not fit for purpose – long term contracting is needed”

- > **Decarbonization requires CAPEX-only technologies** which are pure price takers in current market design, creating unmanageable risks for investors
- > **Wholesale price unable to promote new investments**, even with high CO₂ price, as RES growth structurally pressures it down
- > **Ex-ante auctions for long term contracts** ensure cost efficiency and visibility



A Some recent supporting evidence ...

Bloomberg

Offshore Wind Farms Offer Subsidy-Free Power for First Time

April 13, 2017

- “EnBW, DONG bid to build projects in Germany with no support
- Record low price for power is below prevailing market rate”

Expresso

Vem aí uma corrida ao sol no Alentejo

15/04/17

“Vaga de grandes centrais solares vai sair do papel, já com licenças para produzir, mas sem subsídios”

A ... but is there more than meets the eye?

Bloomberg

Bloomberg reported that a **number of pension funds are reconsidering their stakes in DONG**, as the company won OW projects without any subsidy.

The development makes an investment in DONG riskier, which **requires a better price**.

Industriens Pension, which has reportedly invested DKK1 bn in DONG's projects, is also concerned that **stable cash flows are threatened** (...).

April/2017

Expresso

(...) De facto, os projetos que avançarão no regime geral de produção (isto é, sem tarifa subsidiada) **só conseguirão financiamento se apresentarem garantias sólidas**, nomeadamente **contratos de venda da energia** (...)

(...) A <promotor> está a **negociar contratos de venda de energia a cinco, dez e quinze anos**, devendo os preços rondar €40 a €50/MWh (...)

15/04/2017

B The need for a market redesign is already recognized by mainstream media



Source: The Economist
EDP Produção



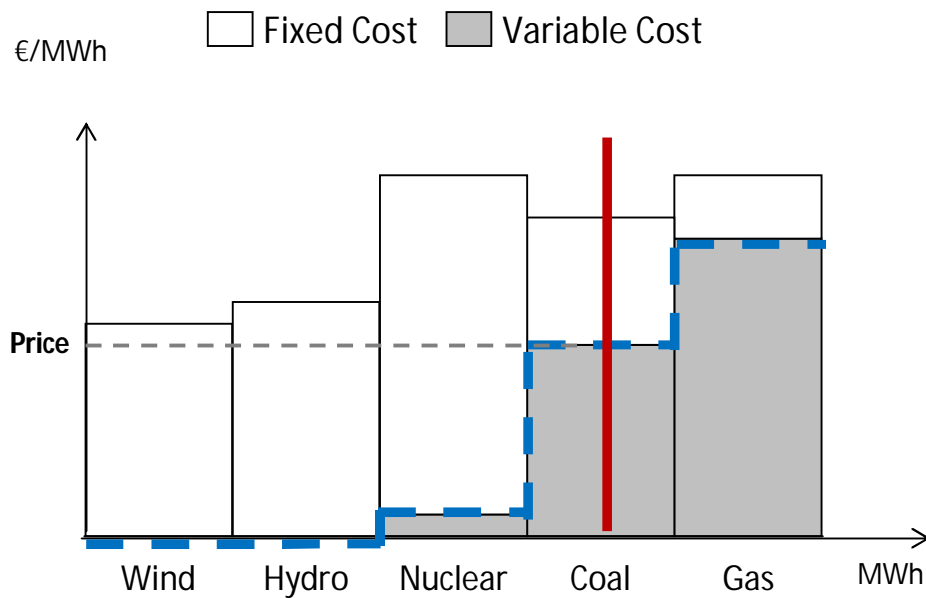
“Green energy has a dirty secret. **The more it is deployed, the more it lowers the price of power from any source.**”

“Policymakers are already seeing this inconvenient truth as a reason to put the brakes on renewable energy.”

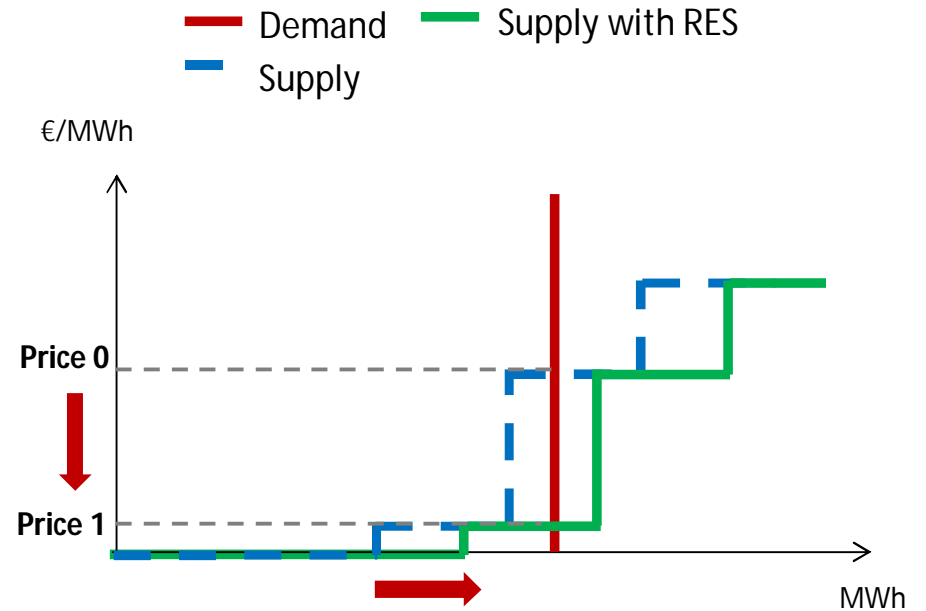
“In short, policymakers should be clear **they have a problem and that the cause is not renewable energy, but the out-of-date system of electricity pricing.** Then they should fix it.”

B Clean energy's dirty secret – a.k.a the merit order effect

Marginalist market model

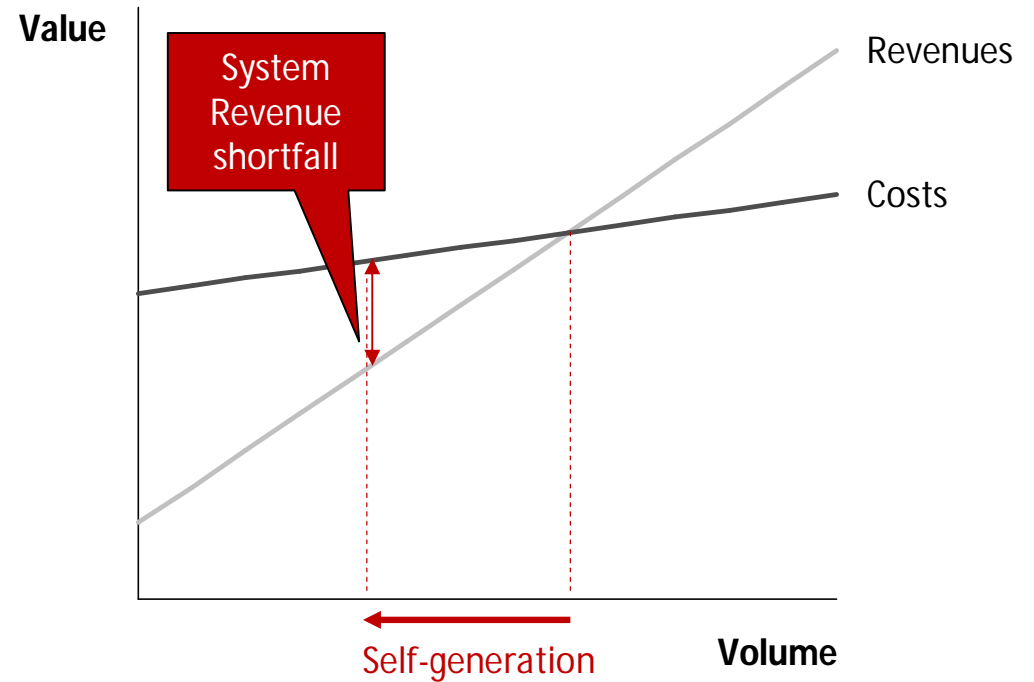
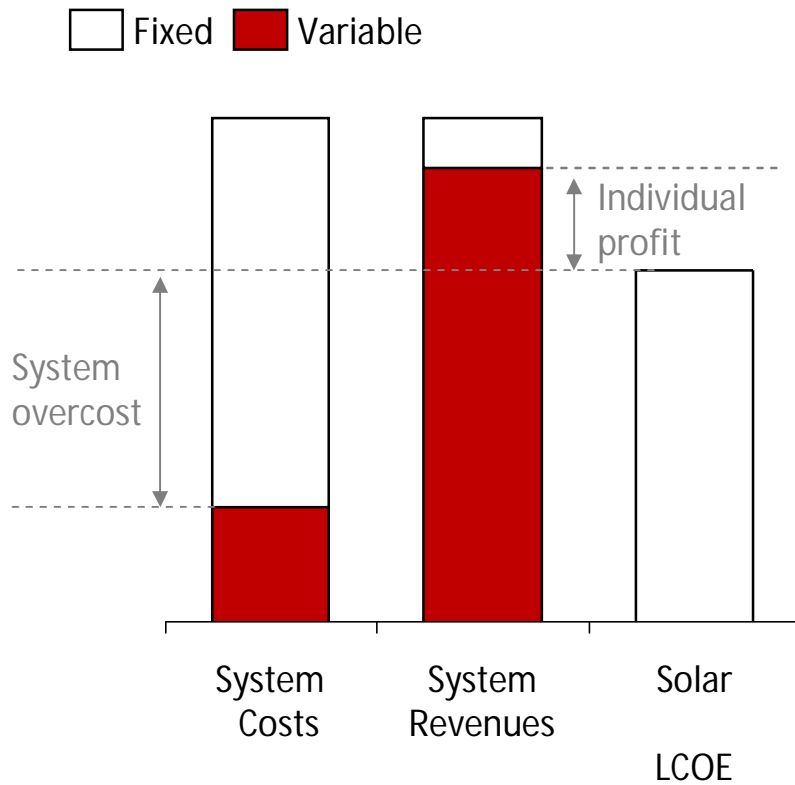


Impact of RES in price clearing



B The retail version of clean energy's dirty secret – a.k.a the consumer divide and the death spiral

Cost structures¹



1. Revenues data for Portugal calculated for all voltage levels; Cost and revenue data for Portugal refer to 2016



Key elements of a future market design

At the wholesale level

- > Evolve towards ex-ante auctions for long term contracts for CAPEX-only technologies (mostly RES)
- > Remunerate back-up capacity
- > Improve short term market to ensure efficient short term dispatch
- > Rebalance the ETS to ensure a meaningful CO₂ price

At the retail level

- > Increase share of fixed component in end-user tariffs, aligning it with the cost structure
- > Share decarbonization costs across all energy sectors, avoiding making electricity – the privileged decarbonization tool – less competitive





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