

START2030



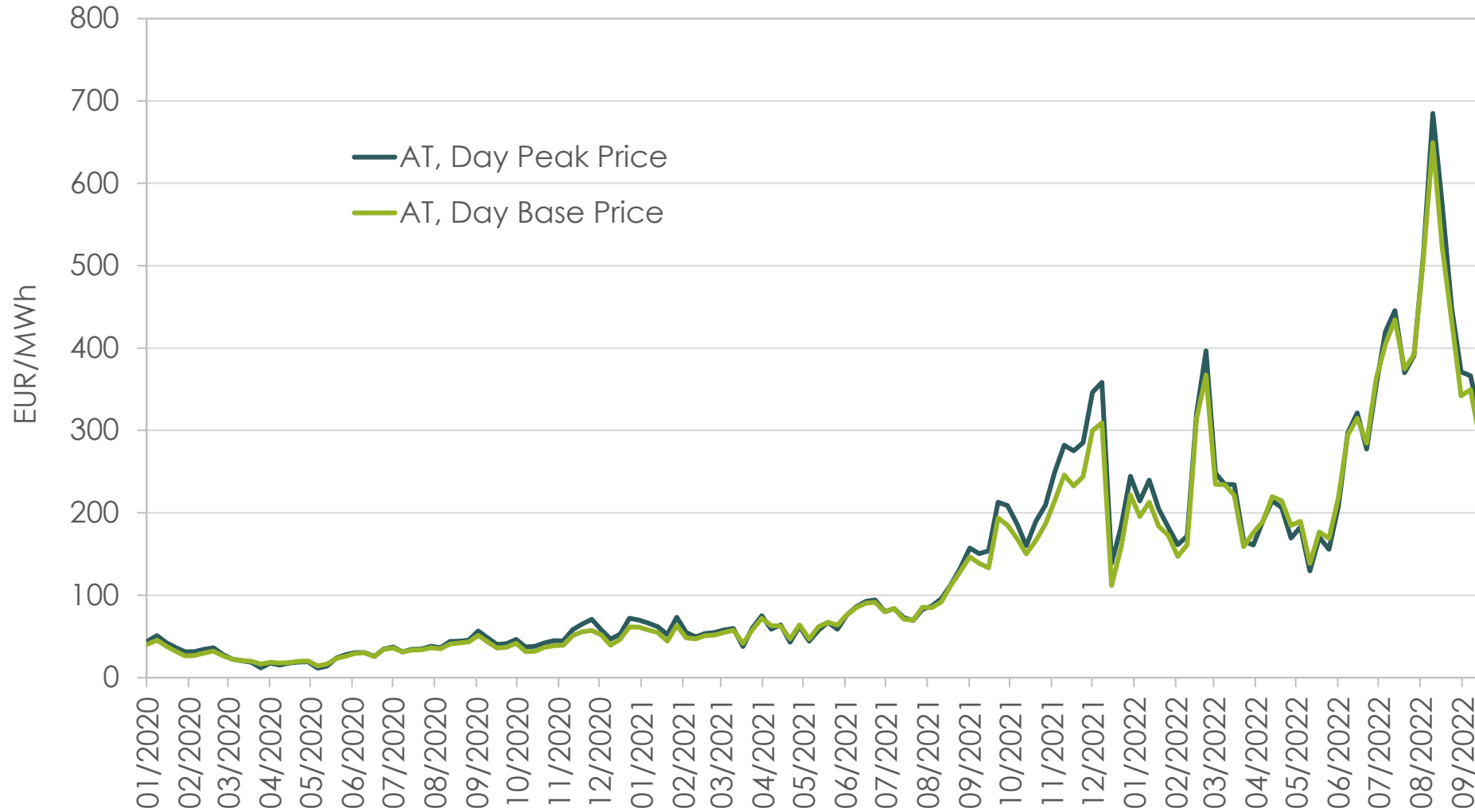
The EU Electricity Market – State of Play and Perspectives

Claudia Kettner

START2030 Dissemination Workshop

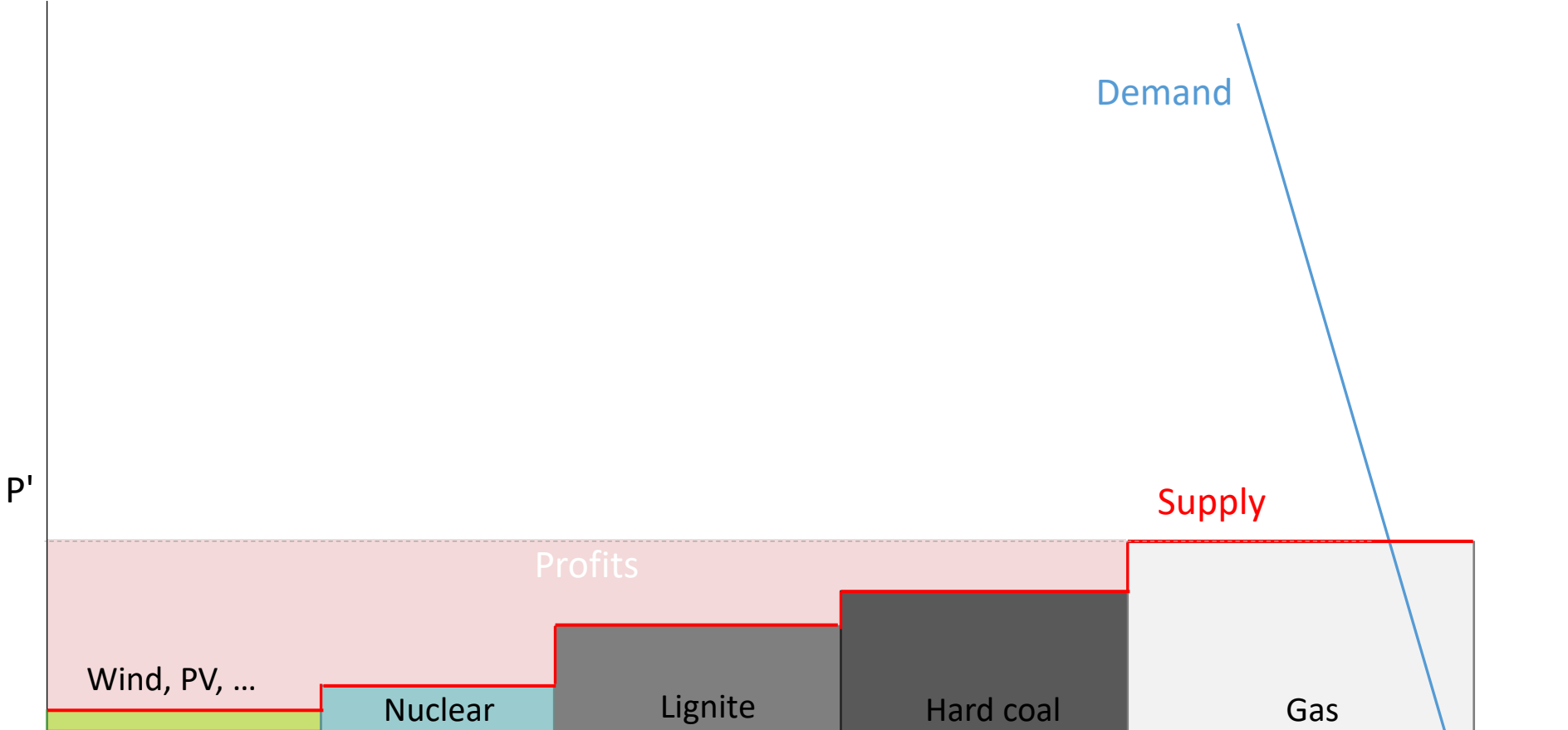
WIFO, 18 October 2022

- Since the liberalisation of the electricity market in the EU, the electricity price is formed on the market following a pay as clear approach
- Electricity prices in the EU are increasing in line with rising gas prices (due to the war in Ukraine) as well as lower electricity output from nuclear and hydro power plants since 2021
- Security of energy / electricity supply are increasingly questioned due to restricted gas imports from Russia
- Rising electricity prices represent a burden for electricity consumers
- Different approaches to solving these problems have been put forward in the EU
 - Infra-marginal revenue cap
 - Iberian model
 - Greek model



Source: EEX.

MC



P'

Demand

Supply

Profits

Wind, PV, ...

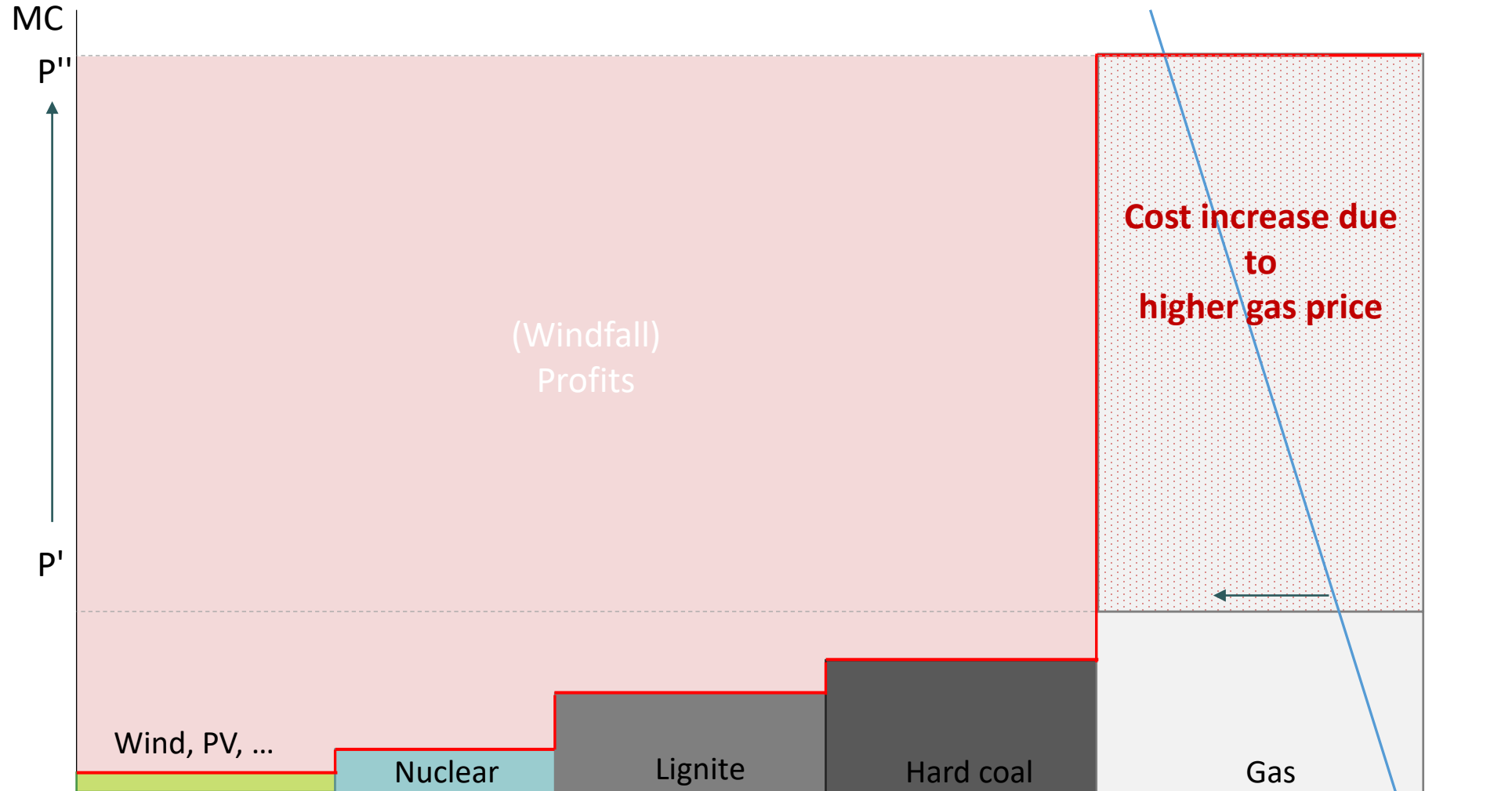
Nuclear

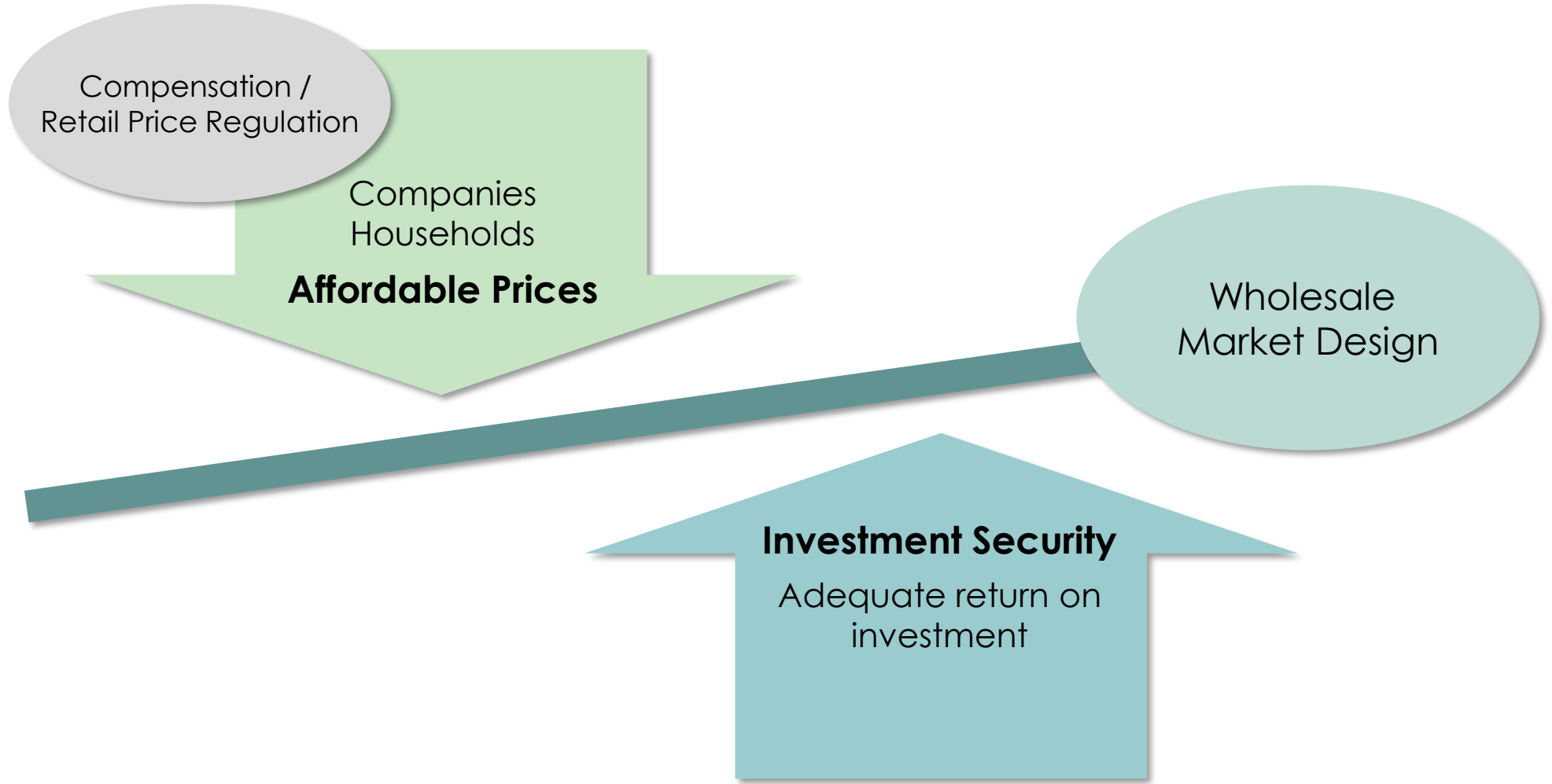
Lignite

Hard coal

Gas

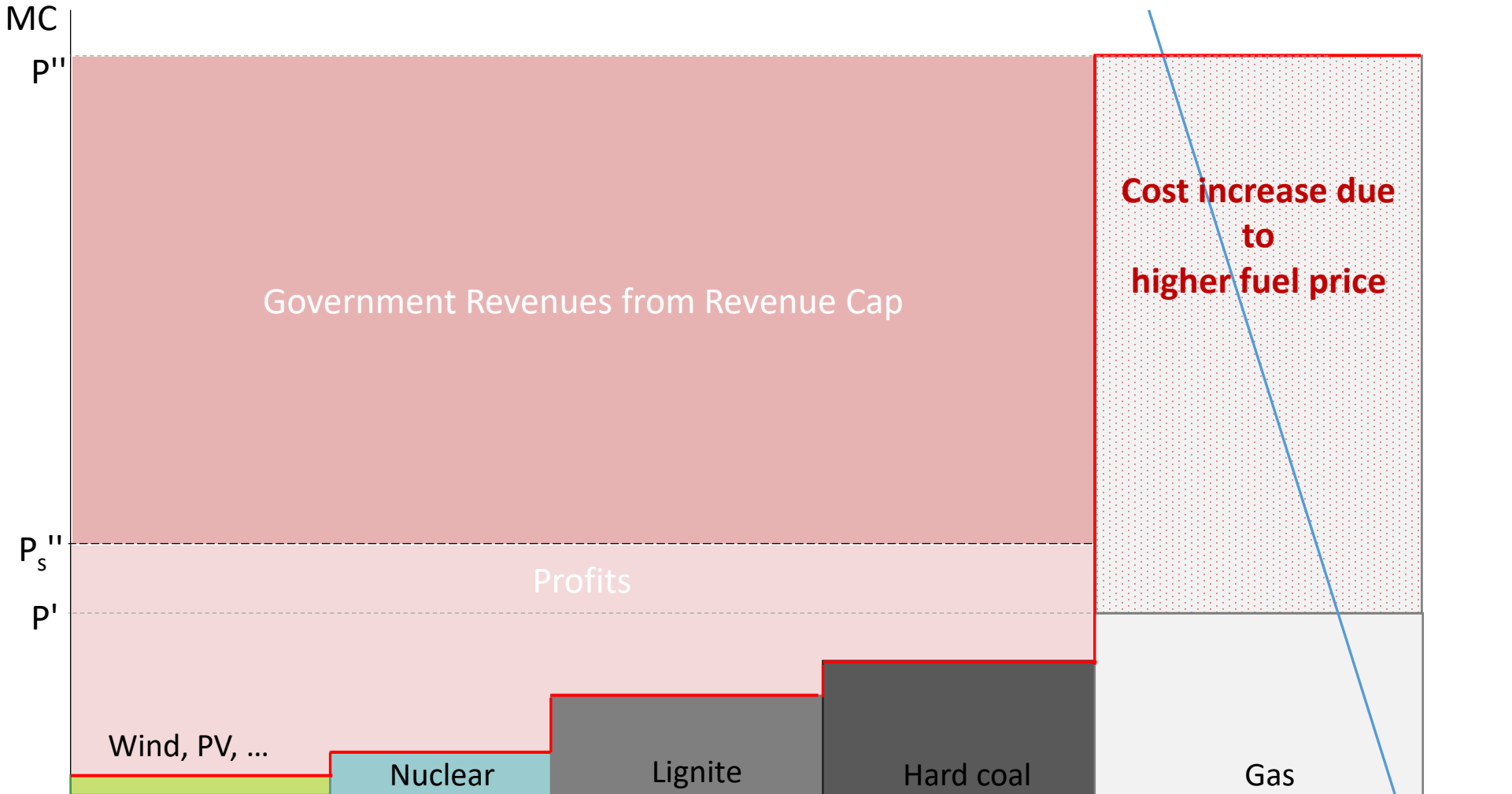
MW





- Council Regulation (EU) 2022/1854 on an emergency intervention to address high energy prices
 - Temporary interventions during energy crisis
 - Measures to reduce electricity consumption in the Member States, especially during peak load hours
 - Introduction of a solidarity contribution for the crude oil, coal, natural gas and refinery sectors
 - Inframarginal revenue cap for the electricity sector for electricity producers with low generation costs
 - Allowance to temporarily extend electricity price setting to small and medium-sized enterprises
 - Allowance of price setting below generation costs

- Inframarginal revenue cap: 180 €/MWh
- Applicable for all infra-marginal technologies, most notably renewables, nuclear and lignite
- Revenues resulting from the revenue cap should be passed on to electricity consumers
- Eligible measures include
 - financial compensation to final electricity customers for reducing their electricity consumption
 - direct transfers to final electricity customers, including proportional reductions in the network tariffs
 - compensation to suppliers who have to deliver electricity to customers below costs following a State intervention in price setting
 - lowering electricity purchase costs of consumers, including for a limited volume of electricity consumed
 - promoting investments by final electricity customers into decarbonisation technologies

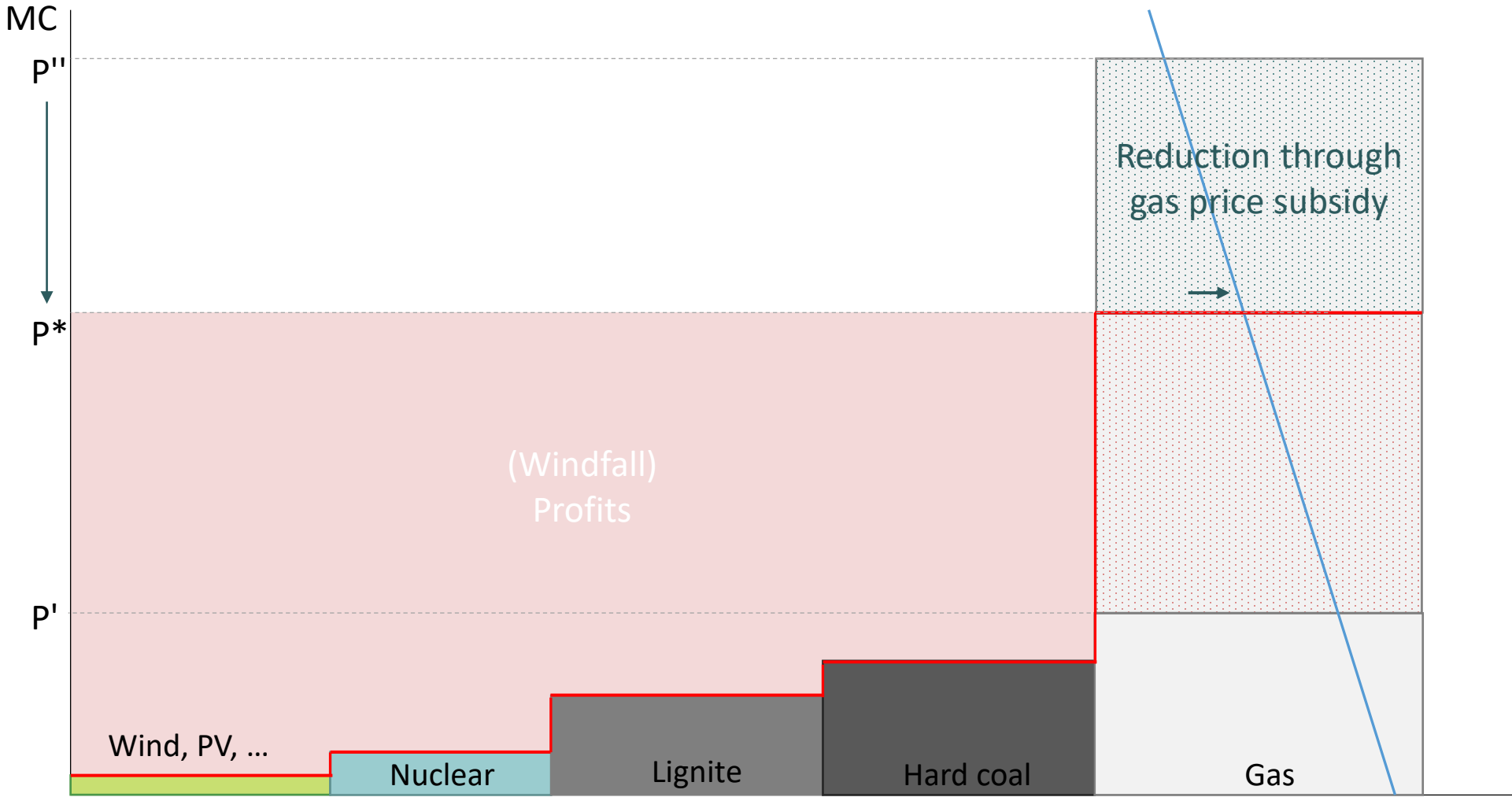


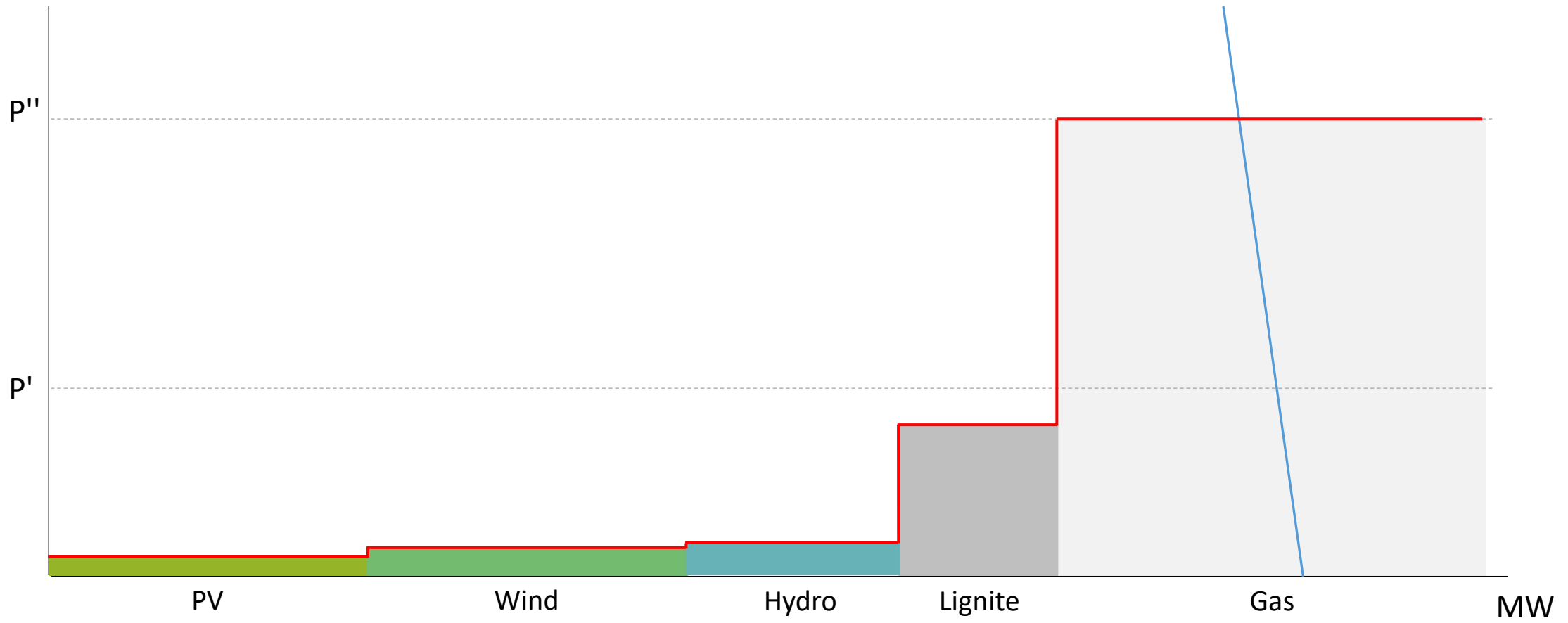
➤ "Iberian Model"

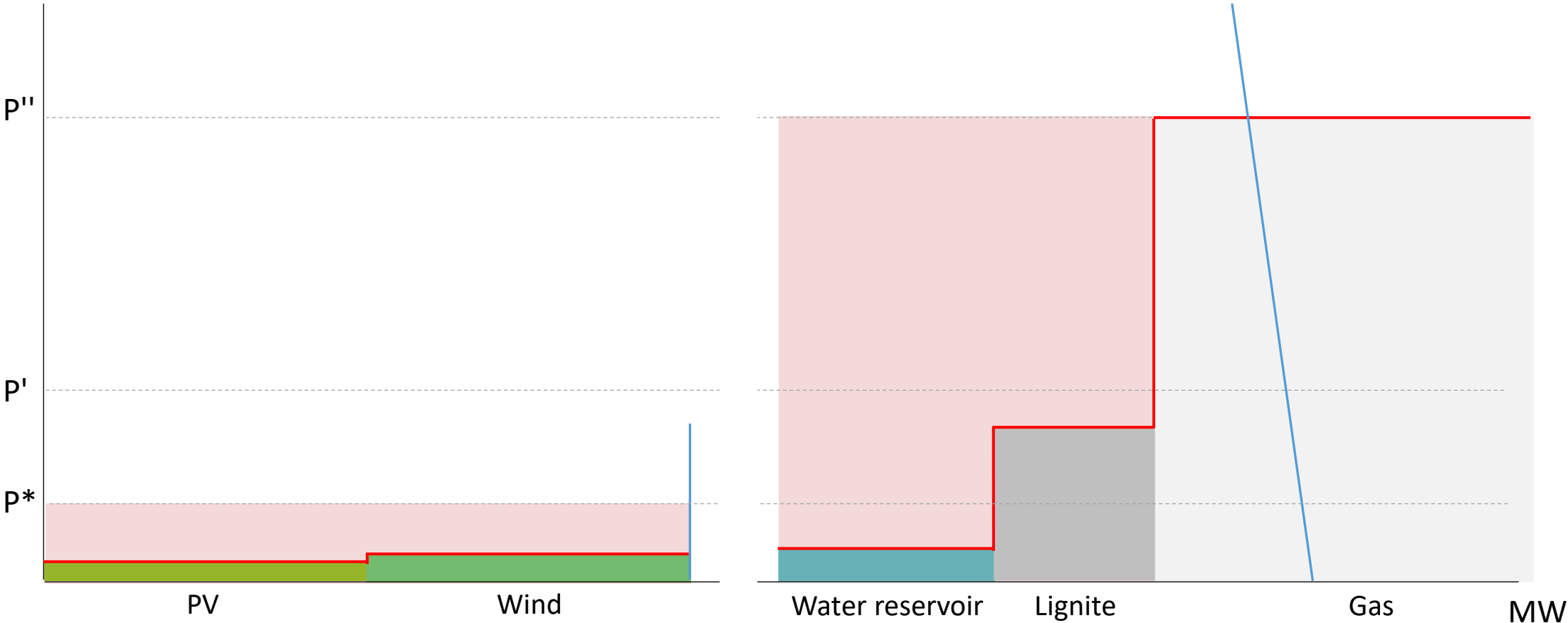
- Spain and Portugal capped the price for gas used in electricity generation to lower electricity prices
- Operators of the fossil fuel power plants receive payments to cover a part of their fuel costs (partly financed by income from the Spanish transmission system operator (TSO) and an extra tax levied on consumers)

➤ "Greek Model"

- Two different markets and prices: one for variable RES-E generation (i.e. 'resources that operate when available and not-on-demand') and one for other – mainly fossil – technologies (i.e. 'on-demand resources')
- Not-on-demand generators have to submit volume-based bids for their generation (not economic bids)
- For the volume-based offers remuneration is provided based on contracts for differences
- The remaining load is met by on-demand technologies at market prices
- Suppliers and consumers pay the weighted sum of the remuneration in the two markets







	Electricity market intervention	Investment security	Electricity price reduction	Gas Saving Incentives
Revenue cap	not applicable (does not impact design)	medium / high (cap considerably higher than expected prices)	not applicable (does not reduce electricity price but raises money for compensation measures)	medium / high (no change to pre-market-intervention equilibrium)
Iberian model	not applicable (indirect – focuses on gas price)	high	medium / high (direct influence on MC)	low (lower price for consumers + generation costs of gas plants potentially lowered below oil plants)
Greek model	medium (regulated price for RES-E)	medium	medium / low (share of / market price for fossil electricity)	medium (lower price for consumers due to split market + no inference in merit order of fossil power plants)

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Thank you!

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