

Market design in Germany

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Contents

1.	The EU's Clean Energy Package	3
2.	Capacity Mechanisms in Germany	6
3.	Proposed coal phase out	10

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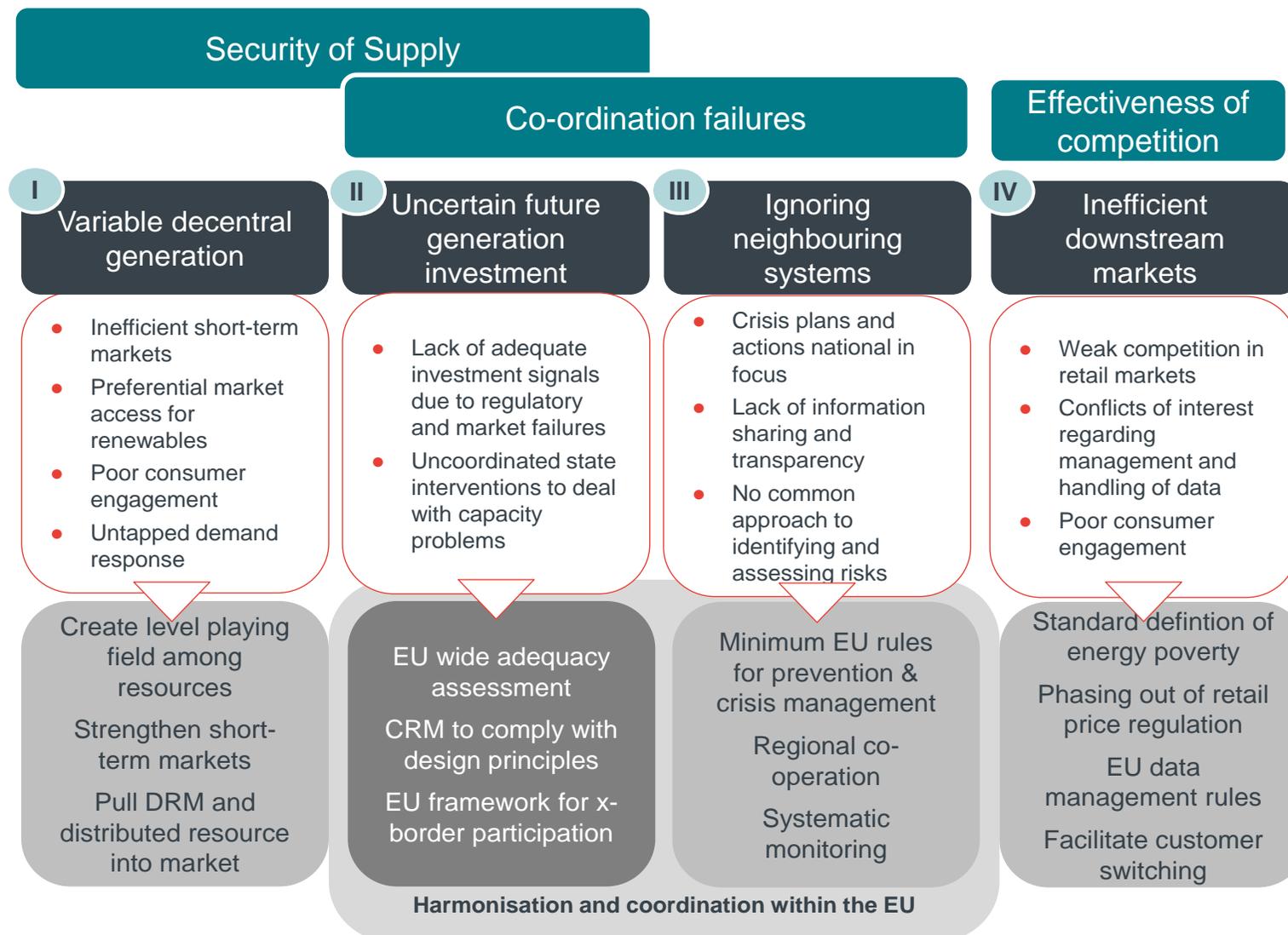
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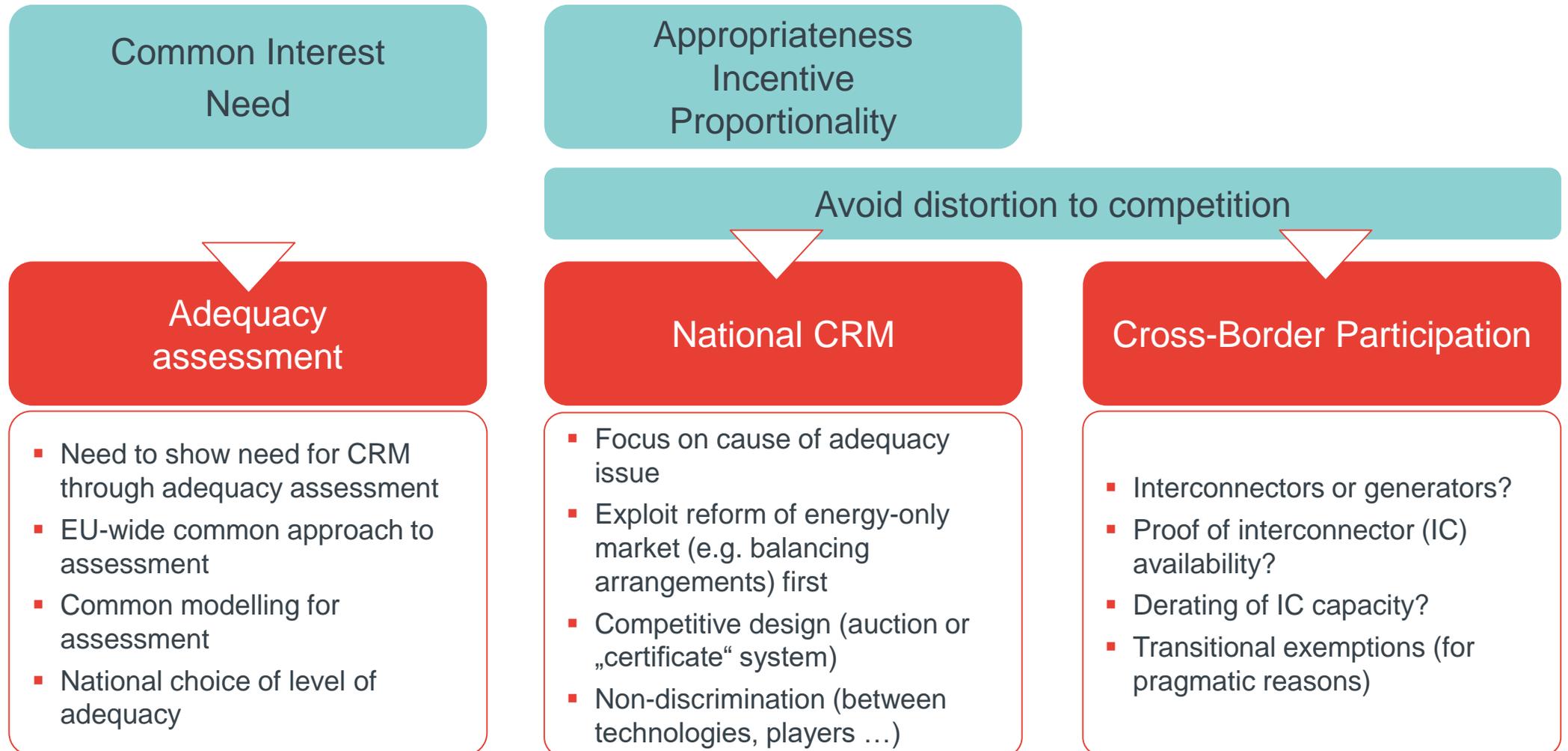
The Clean Energy package addresses selected externalities ...



... while climate sustainability is addressed through separate policies



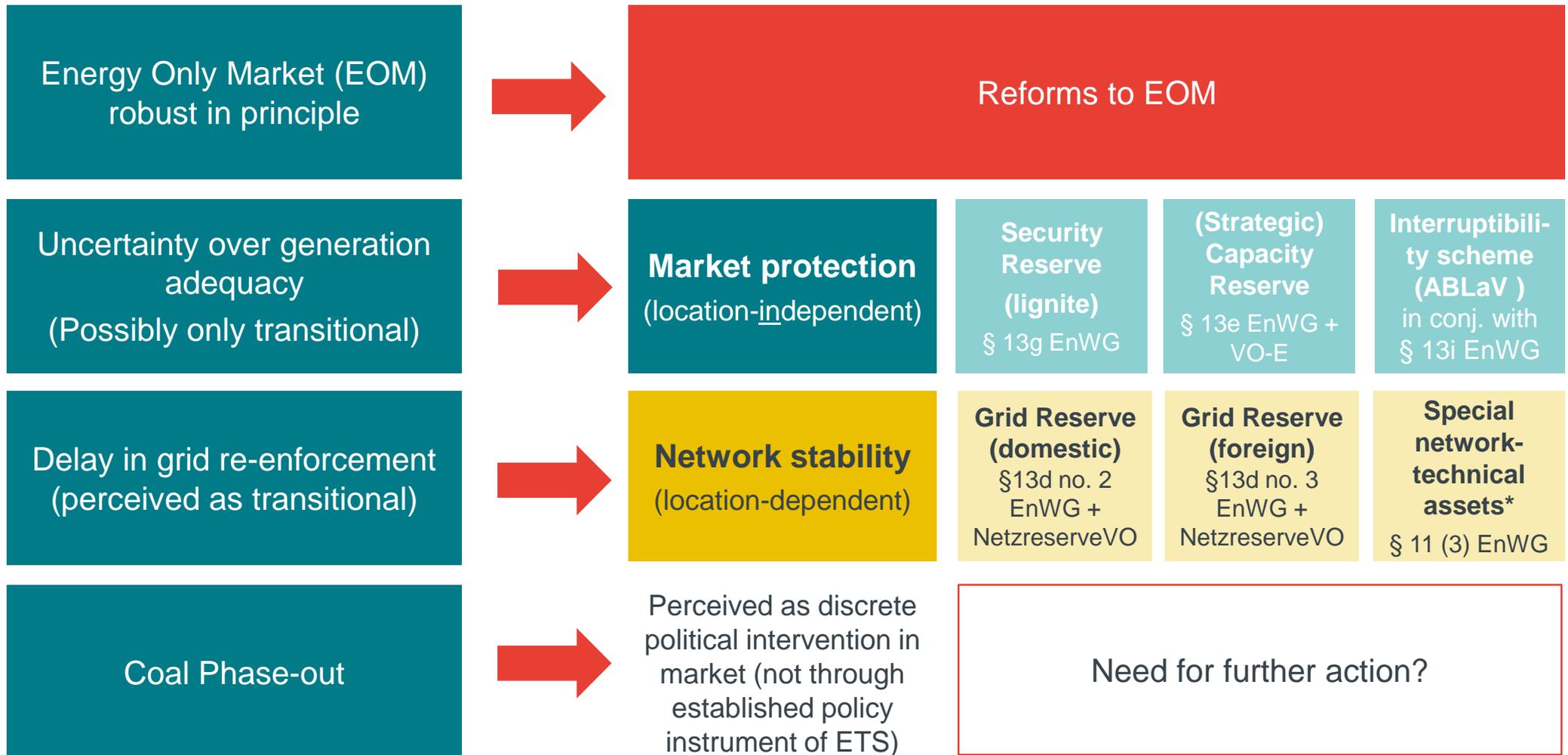
The EC's guidance – CRMs need to comply with EU State Aid Law



... and use CRMs as a last resort

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Germany strongly relies on the Energy (only) market and partial reserves



... but coal phase-out could pose new challenges

Various capacity reserve mechanisms exist in Germany



	Network stability (location-dependent)			Market protection (location-independent)			
	Redispatch § 13a EnWG	Grid Reserve (domestic) §13d no. 2 EnWG + NetzreserveVO	Grid Reserve (foreign) §13d no. 3 EnWG + NetzreserveVO	Special network- technical assets* § 11 (3) EnWG	Security Reserve (lignite) § 13g EnWG	(Strategic) Capacity Reserve § 13e EnWG + VO-E	Interruptibili- ty scheme (ABLaV) in conj. with § 13i EnWG
Capacity	2017: 20.4 GW	2017/18: 10.4 GW 2018-2021: 6.6 GW		1.2 GW	2.7 GW	2018/19: 2 GW	1.5 GW
Participa- tion	All power plants within the German market	Prior prohibition of plant closure	Expression of interest	Tendering	<ul style="list-style-type: none"> Lignite plants Subsequent obligation to close 	Tendering	<ul style="list-style-type: none"> Loads only Tendering
Participa- tion in energy market			 (in home market)			 (prohibition to re-enter the market)	
Compen- sation / Price	Cost based - Compensation compared to reference situation w/o redispatch	Cost based - compensation compared to situation with decom- missioning	Competitive bidding	Competitive price formation (?)	Compensation for foregone profits of energy market participation	Competitive price formation (capacity and energy price, penalty fee)	Competitive (with price caps for capacity and energy)

Most capacity reserve mechanisms in Germany do not foresee foreign participation



	Network stability (location-dependent)		Market protection (location-independent)		
	Network Reserve §13d no. 2 and 3 EnWG + NetzreserveVO	Special network- technical assets* § 11 (3) EnWG	Security Reserve (lignite) § 13g EnWG	(Strategic) Capacity Reserve § 13e EnWG + VO- E	Interruptibility scheme (ABLaV) in conj. with § 13i EnWG
State Aid decision (duration)	<ul style="list-style-type: none"> Dec. 2016, SA.42955 Approved until June 2020 	<ul style="list-style-type: none"> No control by EC Previously proposed regime was not cleared 	<ul style="list-style-type: none"> May 2016, SA.42536 Commitmt. to close plant within 4Y 	<ul style="list-style-type: none"> Feb 2017, SA.45852 Limited to 6 years 	<ul style="list-style-type: none"> Oct.2016, SA.43735
Foreign participation foreseen					
Reasoning (regarding international participation)	<ul style="list-style-type: none"> Foreign participation can help relieve grid constraints in DE Wholesale market not significantly affected 	<ul style="list-style-type: none"> Very specific assets to be installed within the grid of the respective TSO 	<ul style="list-style-type: none"> Climate policy benefits: Shut down domestic ignite power plants in order to reach German climate targets Payment to plants is for foregone profits 	<ul style="list-style-type: none"> Foreign participation requires reserving interconnector capacity: inefficient. Foreign plants could no longer sell power in their home market: creates SoS risks there 	<ul style="list-style-type: none"> Beneficiaries are large industrial users. In their respective sales markets, they do not gain a significant competitive advantage through ABLAV

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The German government intends to honour recommendations of Coal Commission to close all coal plants by 2035-38 – with compensation

Kohleausstieg

Empfehlungen der Kohlekommission



Ausstieg aus der Kohleverstromung bis spätestens 2038



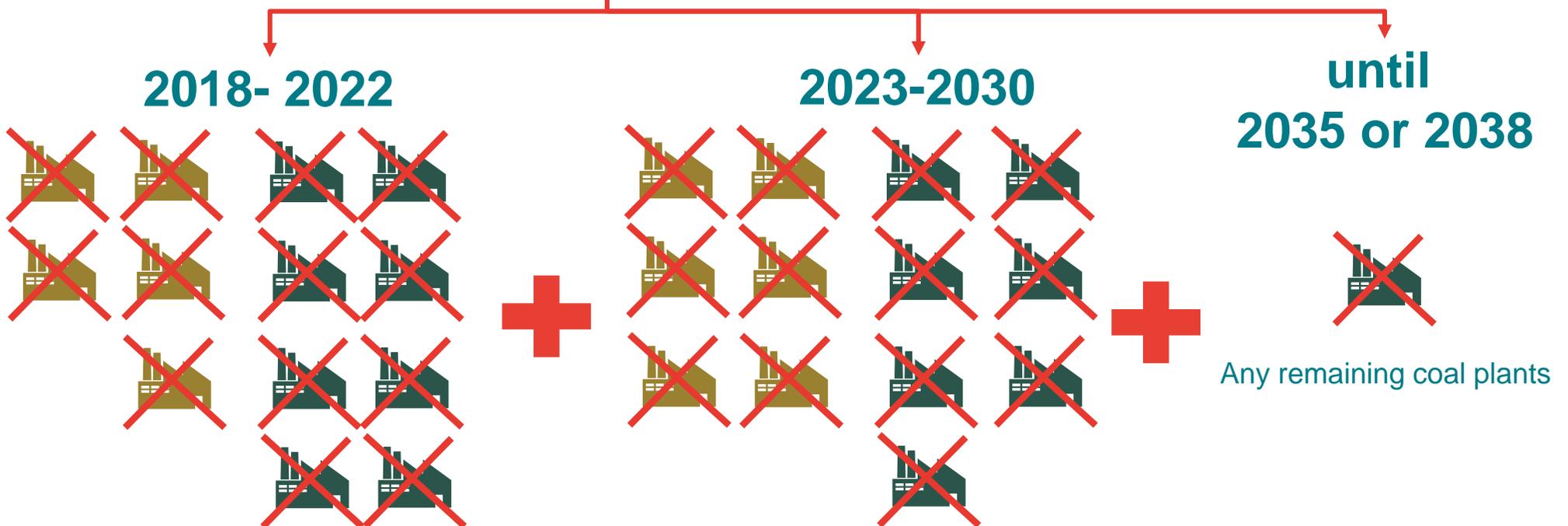
Kohle-Regionen erhalten vom Bund 40 Mrd. Euro für Strukturwandel



Anstieg von Strompreisen vermeiden



Source: Bundesregierung





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