

### Interaction of ETS Law with other Legislation/Policies EU and Germany

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## Outline

- EU Climate & Energy Targets
- German Climate Policy Targets
- Relation of ETS Law to other Laws
  - Federal Immission Control Act
  - Renewable Energy Sources Act
  - Project Mechanism Act
  - "Coal Phase-Out Laws"



The Federal Ministry for the Environment, and Nuclear Safety

## Nature Conservation EU Commitments: International Law

- European Union is Party to
  - United Nations Framework Convention on Climate Change (UNFCCC) of 1992 Aim: "preventing dangerous anthropogenic interference with Earth's climate system"
  - Kyoto Protocol (KP) to the UNFCCC laying down "Quantified Emission" Limitation and Reduction Objectives" (QELROs) regarding six greenhouse gases for developed countries (EU: - 8 % between 2008 and 2012 compared to 1990; - 20 % until 2020)
  - Paris Agreement (PA) under the UNFCCC Aim: holding the global average temperature increase to "well below 2° C above pre-industrial levels and pursuing efforts to limit the temperature *increase to 1.5° C" (EU NDC: at least - 40 % 2030 compared to 1990)*



## **EU Climate and Energy Targets**

	GHG emissions reduction	Share of renewable energy	Improvements in energy efficiency
2050	– <b>80-95</b> %	To be defined	To be defined
2030	— 40 % (at least)	<b>32 %</b> (at least)	32,5 % (at least)
	➢ ETS: – 43 %*		To be reviewed in 2020
	Non-ETS: – 30 %*		
2020	<b>- 20 %</b>	20 %	20 %
	➢ ETS: – 21 %*		
	Non-ETS: – 10 %*		

(as compared to 1990 (\*2005) level)



#### Distribution of Climate Targets ETS

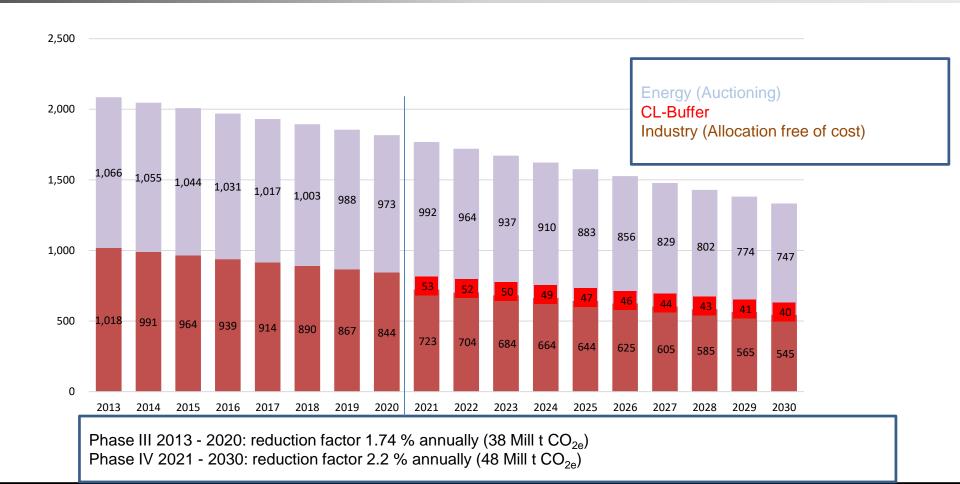
EU ETS covers about 40 % of the EU's total greenhouse gas emissions in the sectors energy, industry and aviation

- EU-wide targets compared to 2005:
  - 2020: 21 %
  - 2030: 43 %
- Sectors
  - Energy: Power and heat generation
  - Industry: Energyintensive sectors and sectors with process emissions
  - Civil aviation: intra-EEA flights
- Reduction target to be achieved within the covered sectors; no specific national targets

Greenhouse Gases Covered: CO<sub>2</sub> N<sub>2</sub>O PFCs



#### EU ETS Cap in Phase III & Phase IV





#### **Distribution of Climate Targets** Non-ETS (Effort Sharing)

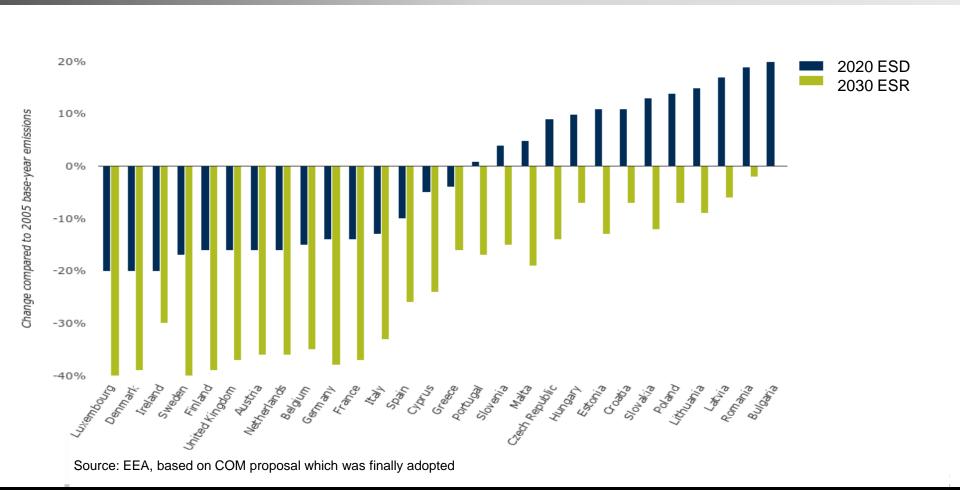
# Member States (MS) remain responsible for emission reductions not covered by the EU ETS

- EU-wide targets compared to 2005:
  - 2020: 10 % (ES Decision 2009)
  - 2030: 30 % (ES Regulation 2018)
- National targets to contribute to the overall reduction target based on GDP/capita and cost effectiveness
- MS required to implement policies and measures to achieve national targets;





#### Distribution of Climate Targets ESD 2020 & ESR 2030





- Adopted by the Federal Government in 2016
- Laying down long-term and mid-term goals, including sectoral targets for 2030
- First "Programme of Measures 2030" to achieve the 2030 sectoral targets in the different sectors under development
- BMU to draft a "Climate Change Act" to be adopted in 2019



#### Germany Climate Action Plan 2050

Source: BMU Climate Action in Figures 2018

		Targets				
	Status quo*	2020	2030	2040	2050	
Greenhouse gas emissions						
Greenhouse gas emissions (compared with 1990)	27.7 % (2017)	min. -40 %	min. -55 %	min. -70 %	extensively green- house gas neutral	
Renewable energy sources						
Percentage of gross final energy consumption	14.8 % (2016)	18 %	30 %	45 %	60 %	
Percentage of gross electricity consumption	36.2 % (2017)	min. 35 %	min. 50 % EEG 2025: 40 to 45 %	min. 65 % EEG 2035: 55 to 60 %	min. 80 %	
Percentage of heat consumption	12.9 % (2017)	14 %				
Percentage of transport sector	5.2 % (2017)	10 %**				
Efficiency and consumption						
Primary energy consumption (compared with 2008)	-5.8 % (2017)	-20 %			-50 %	
Final energy productivity (2008–2050)		2.1 % per annum (2008-2050)				
Gross energy consumption (compared with 2008)	-3 % (2017)	-10 %			-25 %	
Primary energy requirement for buildings (compared with 2008)	-15.9 % (2015)				-80 %	
Heating requirement for build- ings (compared with 2008)	-11.1 % (2015)	-20 %				
Final energy consumption for transport (compared with 2005)	1.3 % (2015)	-10 %	-15 to -20 %		-40 %	

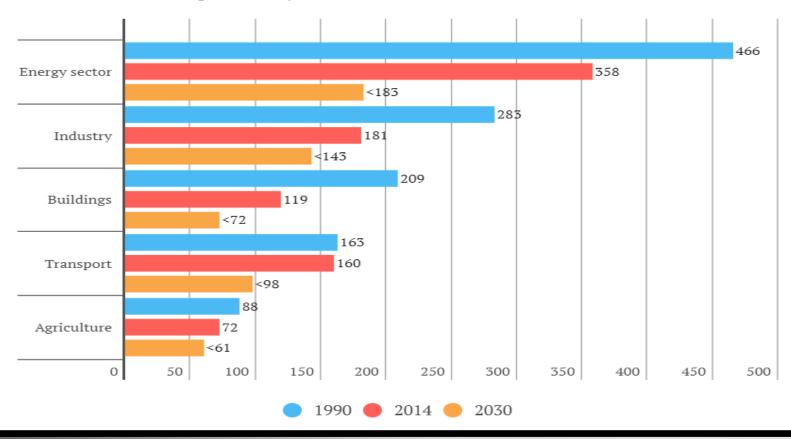
\* Latest available figures, as of: April 2018

\*\* Target per EU Directive 2009/28/EC



#### **Germany** Climate Action Plan 2050

#### Sectoral Targets by 2030





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#### GHG Emissions Trading Act vs. Federal Immission Control Act

- Federal Immission Control Act contains an obligation to use energy efficiently for installations subject to permitting
- Authorities could require operators to implement energy efficiency measures during the permitting process or even issue a subsequent order
- Exception for ETS installations,

"(...) the obligation to ensure efficient energy use must not lead to requirements related to carbon dioxide emissions based on combustion or other processes in the installation that go beyond the requirements laid down in the Greenhouse Gas Emissions Trading Act.



#### GHG Emissions Trading Act vs. Project Mechanism Act

- Project Mechanism Act regulates the recognition of CDM and JI projects in Germany
- **Germany** decided to allow for **JI Projects** beeing implemented within its territory
- JI-Projects could lead to direct or indirect emission reductions of installations covered by the ETS (double counting)
- Project Mechanism Act stipulates that such reductions have to be part of the baseline emissions when determining the additional emission reduction of the project activity



#### GHG Emissions Trading Act vs. Renewable Energy Sources Act

- Renewables in Germany have originally been promoted mainly by guaranteed feed-in tariffs
- Besides wind and solar also plants using exlusively renewable fuels like biomass/biogas could be subject
- In the EU ETS the emission factor for (sustainable) biomass is "0"
- To avoid double promotion, the GHG Emissions Trading Act excludes combustion plants exclusively using renewable fuels from the ETS



### Emissions Trading Directive vs. "Coal Phase-out Laws"

- Phasing-out coal is considered by various MS within the EU
- German Government established a "Commission on Growth, Structural Change and Employment" in June 2018 which shall, by December 2018, develop a roadmap to phase-out coal
- Coal phase-out measures could impact demand of allowances and might even lead to raising emissions in other sectors ("waterbed effect")
  - Market Stability Reserve might help to reduce negative impacts
  - Emissions Trading Directive allows Member States to cancel allowances for electricity producing installations that ceased operation



# Thank you for your attention

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#### BACKUP