







- 1. The root cause
- 2. How to deal with impacts? Environmental law and its relation to the energy sector
- 3. The EU's approach
- 4. Activities of the Energy Community in the field of environment and climate





#### 1. The root cause

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#### Environmental impacts and the oil sector



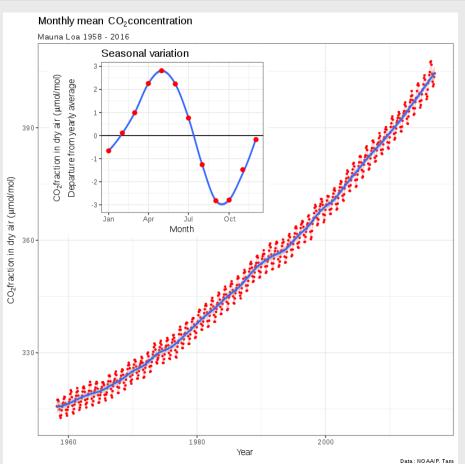


- Emission related to the mining transport conversion / transmission / use
- Emissions into
  air
  water
  soil (waste)
- Climate change (greenhouse gas emissions)

of energy (upstream / downstream)

## Increase in greenhouse gas concentration





Source: NOAA





Gas	Tropospheric concentration (1000-1750)	Trophospheric concentration (recent)	Atmospheric lifetime (years)	100 year global warming potential (GWP)
Carbon- dioxide	280 ppm	400 ppm	50-200	1
Methane	0.7 ppm	1. 875 ppm	12	25
Nitrous oxide	0.270 ppm	0.321 ppm	114	296
Perflouro- methane	40 ppt	80 ppt	>50 000	5700
Sulfur- hexafluoride	0	4.2 ppt	3200	24 000

Source: IPCC

#### Effects of climate change





- More extreme weather events (floods/draughts, thunderstorms, etc.)
- More constraint on the energy sector
- Freshwater use
- Feedback loops (e.g. permafrost methane, deep sea methane)
- To avoid the most severe negative effects → the imperative of the energy transition





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#### Ex ante and ex post approaches

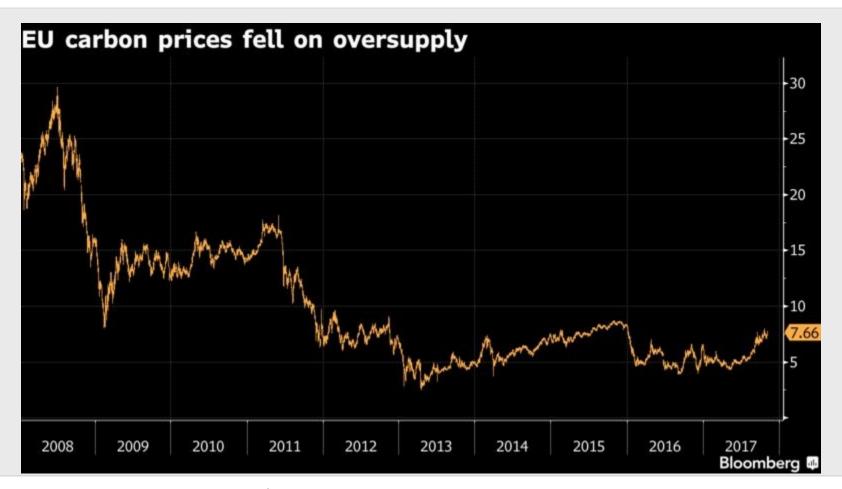




- Ex ante: environmental impact assessment / strategic environmental assessment
- Ex post: measures for the limitation of emissions (mitigation) or to cope with the results (adaptation)
- Mitigation measures: can be regulatory ("command and control") or market-based
- Adaptation: e.g. flood protection, agriculture (irrigation), etc.

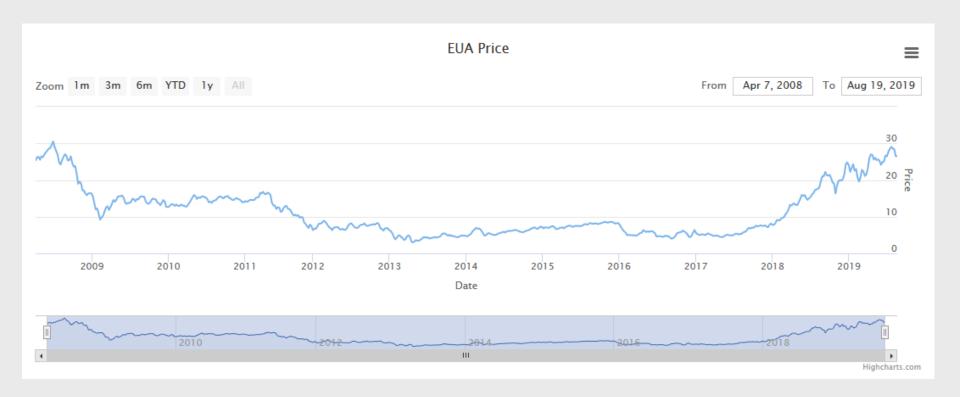
## The carbon price





# Fixing the problem









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#### Green Deal (the political level)





- Ursula von der Leyen's Political Guidelines (A Union that strives for more) → first of the six headline ambitions
- Major commitment → present European Green Deal in first 100 days of office (by February 2020)
- "This will include the first European Climate Law to enshrine the 2050 climate-neutrality target into law."
- Extension of the ETS in transport → maritime traffic + reduction of free allowances in air traffic
- Carbon border tax (carbon leakage) → direct consequences for EnC
- Just transition → social / employment dimension
- Financial planning → role of EIB
- Timmermans' hearing yesterday at the ENVI Committee

#### Is this new? Well...





- COM Communication Nov 2018: "A Clean Planet for all - A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy"
- Full decarbonisation of energy supply
- Transport → EVs and automated systems
- Financial instruments
- Energy efficiency (approx. 50% reduction by 2050)
- Circular economy w/ industrial modernization
- Carbon sinks + CCS

#### Where there is a will (and finance), there is a way





- Next level → turn political ambitions / strategies into action (and legislation)
- Proposals (and fierce debates) to be expected soon
- Compensation forms in the just transition process → crucial





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#### The environmental and climate dimension





#### **Environment**

- EIA Directive after entry into force
- SEA Directive as of 1 March 2018
- Sulphur in Fuels Directive as of 1 January 2012
- LCP Directive (2001/80/EC) as of 1 January 2018
- Art. 4(2) of the **Wild Birds** Directive (79/409/EEC) after entry into force
- Endeavour to accede/implement: **Kyoto Protocol; IPPC Directive** (96/61/EC)
- Chapter III and Annex V of IED (2010/75/EU) as of 1 January 2018 for new plants (2013 decision), as of 1 January 2028 for existing plants (2015 decision)

#### **Climate**

- Monitoring Mechanism Regulation
- National Energy and Climate Plans

#### Energy transition and climate





- Several recommendations regarding new acquis (SEA, ELD,
   FQD, IED Ch. II and IV, AQD, ETS)
- Integrated energy and climate planning the cornerstone of the energy transition
- Policy Guidelines of the Secretariat on the development of National Energy and Climate Plans (June 2018)
- NECPs cover the period from 2021 to 2030, including a perspective until 2050 → consistency with long-term relevant policy objectives at EU, UNFCCC and Energy Community level
- Current situation: macroeconomic context, greenhouse gas emissions, energy mix, situation in each subsector of the energy system
- Coal regions in transition



