

# Climate Mitigation Policy and Goals

## 1 The relevance of Climate Mitigation

- More CO<sub>2</sub> was emitted **since 1988** than in the entire period from 1750 to 1988!
- Populations, economies and industry still rise, so does the cumulative level of GHG emissions
- Impacts of climate change are unpredictable in their scale
- Large areas of the world could become uninhabitable for humans



Figure 1: Fridays for future. Source: NiklasPntk [1]

➔ Drastic climate mitigation efforts are necessary today!

## 2 EU Climate Action

- June 2000: European Climate Change Programme (ECCP) launched
- Today: Key climate and energy targets are set in the
  - **2020 climate and energy package**
  - **2030 climate and energy framework**
  - **2050 long-term strategy**
- Januar 2020: **European Green Deal**
  - For 2050 the EU aims to have **zero net GHG emissions!**
  - Implementing Carbon Capture and Storage (CCS) for unavoidable emissions
  - Keeping global warming **at 1,5°C** compared to pre-industrial times
  - Ensuring energy security and sustainable, fair development
- March 2020: Proposal of the first **European Climate Law**
- October 2020: **A Renovation Wave for Europe**
- December 2020: **A new target (55%) for reduction net greenhouse gas emissions for 2030.**

EU targets and goals	2020	2018	2030	2050
GHG Emmissions total re- duction (compared to 1990)	20%	23%* (achieved)	40% ** <b>55% **</b>	100%
Renewable energy	20%		32%	
Energy efficiency	20%		32,5%	

\*/ - Before revising the target in 2020.

\*\*/ - The European Commissions proposal for the European Climate Law from March 2020 suggested increasing this target to 50-55%.

On 10/11 December 2020 the European Council endorsed a new target to reduce net greenhouse gas emissions in the EU by at least 55% by 2030.

## 2.1 Measurements

### Financial support:

- 20 % of EU budget are spent on climate related topics
- International development aid to tackle climate change globally
- EU Interreg projects on CO<sub>2</sub> reduction

### Regulations:

- EU Emission Trading System (EU ETS)
  - EU wide, reducing GHG from heavy energy installations like powerplants
- Member states 'Effort Sharing Decision'
  - National targets cover other sectors like building, transport and agriculture
- Obligations for member countries to support renewable energies and improve energy efficiency by implementing National Energy and Climate Plans (NECPs)

## 3 Progress and Trend

- EU overachieved its GHG emission target by 2018 with 23 % reduction compared to 1990.
- Emissions from the EU ETS decreased 4,1 % between 2017 and 2018, other emissions decreased by 0.9 % after three years of slight increase.
- Some countries are projected to stay below their 2020 goals, including Germany and Poland.
- Existing policies from the 2019 NECPs could lead to 25 % reduction (target 30 %) in ESD
  - ➔ To reach the 2030 and 2050 targets, additional measures have to be defined!

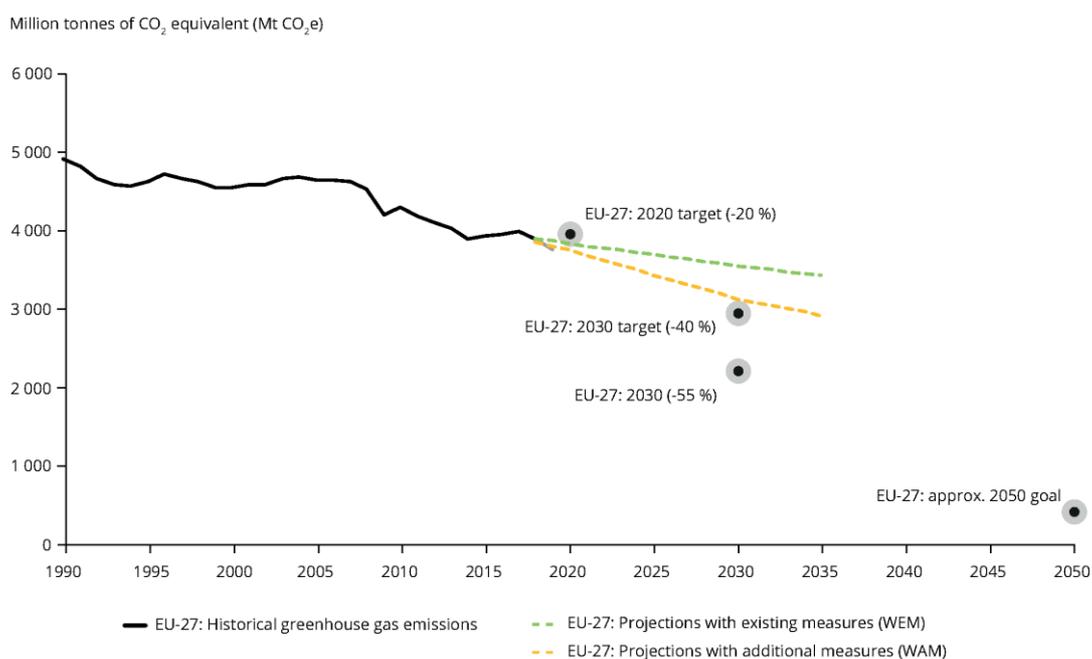


Figure 2: Progress and trend on CO<sub>2</sub> emissions. Source: European Environment Agency (EEA) [2]

## 4 References

- [1] NiklasPnkt. Pixabay. <https://pixabay.com/de/photos/fridays-for-future-klimastreik-4161573/>
- [2] European Environment Agency (EEA). Greenhouse gas emission targets, trends, and Member States MMR projections in the EU, 1990-2050. <https://www.eea.europa.eu/data-and-maps/figures/greenhouse-gas-emission-targets-trends>