

ENVIROMENTAL PROTECTION AND CLIMATE CHANGE IN EUROPE

1. Greenhouse gas emissions:

- Europe is facing the impacts of climate change, rising temperatures, extreme weather events (floods, droughts, heatwaves), and ecosystem disruptions. The European Union has committed to ambitious climate goals. The goal is to reduce greenhouse gas emissions and transition toward a low-carbon economy.
- **European Green Deal (2019)** The European Commission has adopted a set of proposals to make the EU's climate, energy, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.
 - - **Transport:** The transport sector is one of the largest sources of greenhouse gas emissions in the European Union. The sector has shown little progress in the reduction of emissions in recent decades. Despite efforts to reduce emissions from transport, such as increasing the deployment of electric vehicles, emissions have not significantly decreased since 2005. Estimates of 2023 emissions indicate a small drop of 0.8% compared with 2022. Member States project that domestic transport emissions will only fall below their 1990 levels in 2032. International aviation and maritime emissions are projected to continue increasing.

2. EU Climate Law:

-Objectives:

- Set the long-term direction of travel for meeting the 2050 climate neutrality objective through all policies, in a socially fair and cost-efficient manner
- Set a more ambitious EU 2030 target, to set Europe on a responsible path to becoming climate-neutral by 2050
- Create a system for monitoring progress and take further action if needed
 - Provide predictability for investors and other economic actors
 - Ensure that the transition to climate neutrality is irreversible

3. Renewable Energy Transition:

The EU has proven that the clean energy transition doesn't have to come at the expense of economic growth and prosperity. In 2023, renewable energy accounted for 50% of the EU's electricity production. We steadily move away from polluting fossil fuels, replacing them with clean alternatives, while Gross Domestic Product continues to rise, showcasing what is possible on the path to achieving the European Green Deal.

-Methane emissions: Responsible for 30% of today's global warming – methane (CH₄) is second only to carbon dioxide (CO₂) in terms of its contribution to climate change, and it is 84 times more potent as a greenhouse gas but only has a lifespan of around 12 years in the atmosphere.

Due to existing technology, its low cost, and methane's short lifespan, cutting methane emissions offers the most immediate opportunity to slow global warming in the short-term, as the EU progresses towards its goal of full decarbonization by 2050.

4. Recycling:

Every year an estimated 11 billion tons of solid waste is collected around the world (much of this is thrown to land fields and oceans), and it is a main cause of climate change.

To reduce this the Parliament and Council reached an agreement, and MEPs approved a law in April 2024. The rules require EU countries to reduce total packaging waste per capita by 5%, compared to 2018, by 2030, 10% by 2035 and 15% by 2040.

In conclusion climate change is a huge problem in Europe that must be fixed, starting from the greenhouse gas emissions and if the prevision of Europe is correct, our continent should reduce greenhouse gas emissions a 55% by 2030, making Europe a climate-neutral continent.