

# Europe's 2030 climate and energy targets

## RESEARCH & INNOVATION ACTIONS

The **European Green Deal** aims to make Europe **climate neutral by 2050**. To help meet this target, the EU has agreed to **reduce its net greenhouse gas (GHG) emissions by at least 55% by 2030**, compared to 1990 levels. This **increased level of ambition** requires action in all sectors of the economy.

To achieve this, the **European Commission's latest Green Deal proposals** recognise the **importance of research and innovation**, and of the **Innovation Principle**, in promoting **smart, future-oriented policies** and encouraging **technological and social innovation**.



### HEALTHY AND CLEAN PLANET

**Horizon Europe's** actions on 'Climate, Energy, Mobility' & 'Food, Bioeconomy, Natural Resources and Environment' with a **joint funding of around €25 billion**, will underpin the implementation of Europe's 2030 climate and energy targets benefiting people, planet, and prosperity.

The four **Green Deal missions** on climate adaptation, healthy oceans, seas, coastal and inland waters, climate-neutral and smart cities, and soil health and food, will develop innovative and inspiring solutions to systemic challenges..

**The EU Bioeconomy Strategy** will help to increase carbon sequestration in soil, blue carbon, and forests, substitute natural materials for fossil-based in plastics, energy and textiles, and **create up to 400,000 new green jobs in rural and coastal areas**.

## BUILT ENVIRONMENT

The 'Climate-Neutral and Smart Cities' mission aims to deliver **100 climate-neutral and smart cities in Europe by 2030**. These cities will be experimentation and innovation hubs for all Europeans. They will act as platforms for social innovation and citizen engagement.



## TRANSPORT

**The Zero-Emission Waterborne Transport (ZEWT) Partnership**, with **almost €4 billion** in funding, will lead to innovative technologies and operations to **eliminate all harmful environmental emissions**, including water and noise pollution, and to support full climate neutrality of the maritime sector by **developing solutions for all main ship types by 2030**.

**The Towards Zero-Emission Road Transport (2Zero) Partnership**, with **over €1.2 billion** in funding, aims to **accelerate the development of zero tailpipe emission road transport**, in close cooperation with the Batteries (BATT4EU) Partnership.

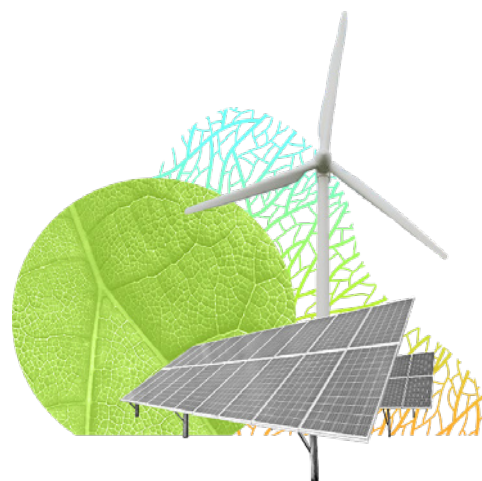
**The Clean Aviation Joint Undertaking** will invest **€3 billion** to deliver on **reducing aviation's GHG emissions** and expects to produce innovative solutions that **decrease GHG emissions by at least 30%** by 2030.



## ENERGY

With **over €800 million** in funding, the **Clean Energy Transition (CET) Co-funded Partnership** will contribute to **reaching renewable energy targets** by developing, scaling up and implementing solutions for cost-efficient, decarbonised technologies and energy systems.

The **Clean Hydrogen Partnership**, with **over €2 billion** in funding, will **maintain and strengthen the competitiveness of the EU clean hydrogen value chain**.



## INDUSTRY AND CIRCULAR ECONOMY

**The Clean Steel Partnership**, with an **investment of €1.7 billion** over the next decade, will focus on acceleration and deployment of the most promising solutions for achieving climate neutral steel production.



# BACKGROUND

## Research & Innovation (R&I) policy contributions

### EU EMISSIONS TRADING SYSTEM (ETS)

is a 'cap and trade' system. It is a major tool to meet GHG reduction targets, helping to combat climate change in a cost-effective and economically efficient manner.

➤ ETS revenue, via the **Innovation Fund<sup>1</sup>**, is used to support market entry of clean-tech investments in energy intensive industries, renewables, energy storage, and carbon capture, use and storage.

### EFFORT SHARING REGULATION (ESR)

sets annual GHG emission targets for Member States, and covers the transport, buildings, agriculture and waste sectors.

➤ **Horizon 2020<sup>2</sup> Green Deal Call** invested €1 billion to kick-start the necessary transitions in these key sectors and others like clean energy, circular economy, and biodiversity.

### RENEWABLE ENERGY DIRECTIVE (REDII)

establishes an overall policy for the production and promotion of energy from renewable sources in the EU, and sets rules to achieve the renewables target.

➤ **Horizon Europe<sup>3</sup> will develop renewable energy technologies** to boost market uptake and deployment of innovative solutions at scale.

### ENERGY TAXATION DIRECTIVE (ETD)

lays down minimum taxes for certain energy products and electricity, helping to stimulate market uptake of renewable energy solutions.

➤ **Under Horizon 2020, the EU allocated €124 million** to support renewable energy market uptake, with Horizon Europe Work Programme 2021-2022 earmarking a further €10 million.

### ENERGY EFFICIENCY DIRECTIVE (EED)

establishes a binding energy efficiency target. Greater energy efficiency can help to reduce energy poverty, boost energy security, and promote the EU's technological leadership.

➤ The **Horizon Europe mission on 'Climate-Neutral and Smart Cities'** can lead the way in demonstrating how to involve citizens in energy management plans.

### REGULATION ON CO<sub>2</sub> EMISSION STANDARDS FOR CARS AND VANS

incentivises the uptake of zero-emission cars and vans, and will help to make the automotive industry more modern and sustainable.

➤ **Under Horizon 2020, the EU invested €1.5 billion in automotive research. This figure is set to almost double in Horizon Europe**, supporting higher ambitions for zero-emission vehicles and their infrastructure.

### REGULATION ON LAND USE, LAND USE CHANGE AND FORESTRY (LULUCF)

sets targets to put land use, forestry and agriculture on the path to climate-neutral food and biomass production in the EU.

➤ **A sustainable and circular bioeconomy, supported by R&I, can help the sector contribute further to climate targets.**

<sup>1</sup> The Innovation Fund is one of the world's largest funding programmes for the demonstration of innovative low-carbon technologies.

<sup>2</sup> Horizon 2020 is the EU's Research and Innovation framework programme 2014-2020.

<sup>3</sup> Horizon Europe is the EU's Research and Innovation framework programme 2021-2027.