



European Commission

July 2021

DECARBONISING OUR ENERGY SYSTEM TO MEET OUR CLIMATE GOALS

Reducing greenhouse gas emissions by at least 55% by 2030 requires **higher shares of renewable energy** and **greater energy efficiency** in an **integrated energy system**. This transformation will:

- improve our health and wellbeing
- create jobs and growth
- generate investment and encourage innovation
- address energy poverty
- facilitate consumer choice
- reduce dependency on energy imports and strengthen security of supply



75% of total greenhouse gas emissions in the EU comes from the energy sector

The Commission is proposing to **revise seven interlinked pieces of legislation**, which are **central to moving towards a climate-neutral energy system**:

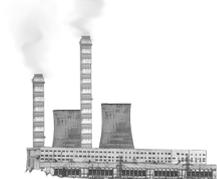


Renewable Energy Directive



Energy Efficiency Directive

EU Emissions Trading System



Energy Taxation Directive



ReFuelEU Aviation



FuelEU Maritime



Alternative Fuels Infrastructure Directive



REVISING THE RENEWABLE ENERGY DIRECTIVE

Renewables in the EU energy mix



19.7%
Current renewables share (in 2019)

32%
Current EU 2030 target

40%
New EU 2030 target

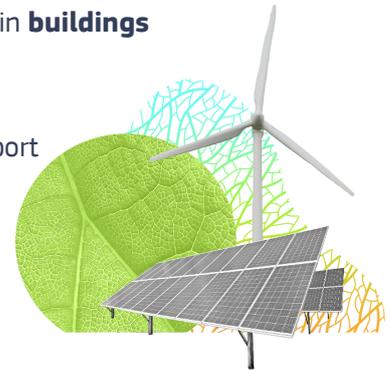


Stepping up the ambition for renewables in key sectors:

- Annual binding increase of **1.1 percentage point** renewables in **heating and cooling at national level**
- Indicative target of **2.1 percentage points** renewable energy and waste heat and cold in **district heating and cooling**
- New **13%** greenhouse gas intensity target in **transport**
- New indicative target of a **1.1 percentage point** annual increase in renewable energy use in **industry**
- New benchmark to reach at least **49%** renewable share in the energy used in **buildings**

Boosting the deployment of and investment in renewable energy:

- Measures to **boost electrification**, including a credit mechanism for transport
- Sub-targets and certification for **renewable hydrogen**
- Measures to facilitate renewable **Power Purchase Agreements (PPAs)**
- **Accelerated permitting** for renewable energy projects
- **Promoting cross-border cooperation**, including through the renewable energy financing mechanism



SUSTAINABLE BIOENERGY

Sustainable bioenergy reinforced criteria in line with the EU Biodiversity Strategy will:

- Prohibit sourcing **biomass for energy production from primary forests, peatlands and wetlands**
- **No support** for forest biomass in **electricity-only installations** as of 2026
- Prohibit national **financial incentives for using saw or veneer logs, stumps and roots** for energy generation
- Require **all biomass-based heat and power installations** to comply with minimum greenhouse gas saving thresholds
- Apply the EU sustainability criteria to **smaller heat and power installations** (equal or above 5MW)



Wood-based products



Extending their service life



Re-use



Recycle



Bioenergy



Disposal

Woody biomass should be used according to its highest economic and environmental added value in the following order of priorities:

REVISING THE ENERGY EFFICIENCY DIRECTIVE



17.0-17.4%

Current energy efficiency savings for primary and final energy consumption (in 2019)

32.5%

Current EU 2030 non-binding target (relative to 2007 projections)

36-39%

New EU 2030 binding target for final and primary energy consumption

9% increase compared to the ambition pledged by Member States in 2020 within their National Energy and Climate Plans



Introduce indicative **Member State contributions** to the EU-level energy efficiency target



Increased **annual energy savings obligation** of **1.5%** for all Member States



Require each Member State to ensure **1.7%** of **energy savings** per year **in the public sector**



Require Member States to renovate at least **3%** of the total floor area of **all public buildings annually**



Energy Efficiency First Principle to be applied in policy and investment decisions



Concrete measures to **alleviate energy poverty** and **boost consumer empowerment**

COMPLEMENTARY MEASURES IN EMISSIONS TRADING AND TRANSPORT

Strengthening EU Emissions Trading System, creating separate emission trading system for buildings and transport fuels, and improving transport rules will complement the measures in the Renewable Energy and Energy Efficiency Directives:



Revenues from an additional **2.5% of auctioned allowances** to fund the energy transition of lower-GDP Member States (Modernisation Fund)



New measures for **energy-intensive industries** to deploy innovative clean technologies



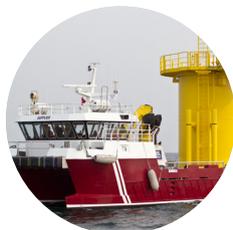
Free allowance allocation will be made conditional on decarbonisation efforts



Support measures to promote **energy efficiency in vulnerable households**



Accelerating electrification of **road transport through stricter CO2 emission standards** for cars and vans



Incentivising the uptake of cleaner fuels **in the maritime and aviation sectors** through two new initiatives **FuelEU** and **ReFuelEU**



Accelerating the shift to low-emission transport through the revision of the **Alternative Fuel Infrastructure Directive (AFID)**