

Accelerating the EU's green transition

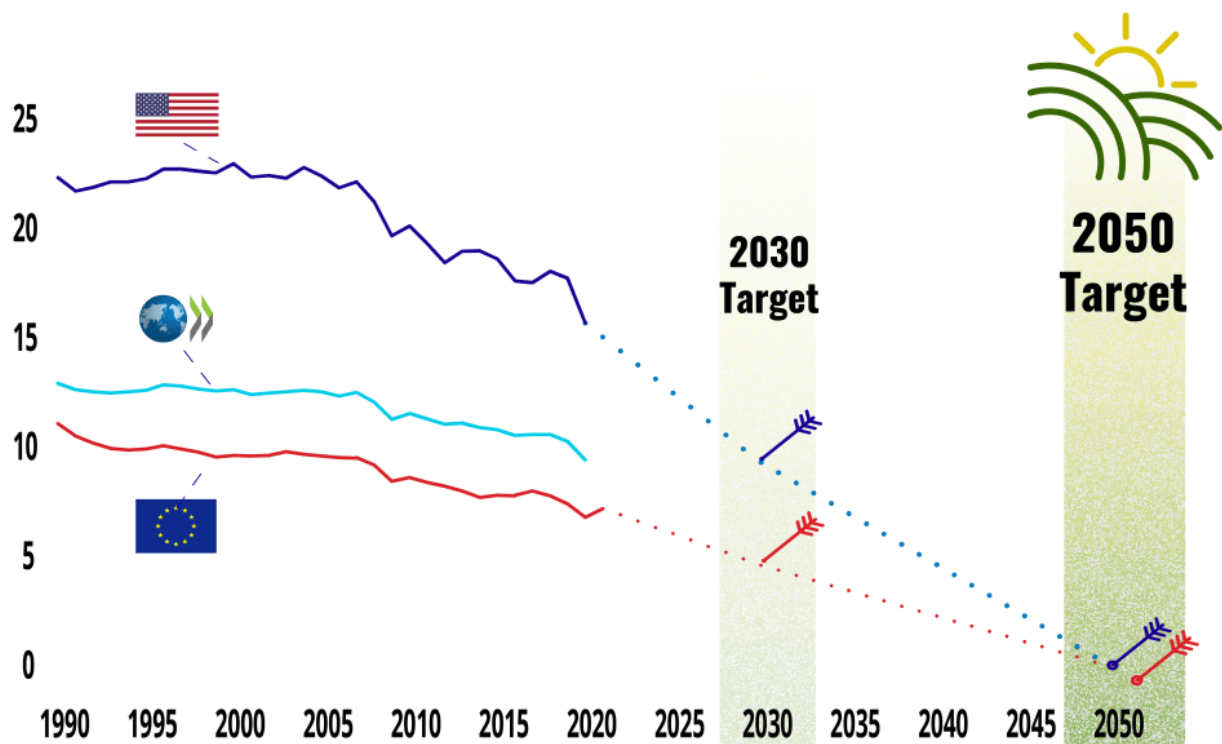
By Martin Borowiecki, Economics Department

The EU's Green Deal aims at achieving net zero emissions by 2050. Reaching this target will require a tripling of the rate of emission reductions relative to 1990 and 2020 (Figure 1). More action is needed across all sectors, but particularly in sectors not covered by emission trading, notably agriculture and transport. Reducing emissions in these sectors will rely on regulatory measures and a gradual alignment and raising of carbon prices. Also, more ambitious climate action will entail transition costs. The OECD Economic Survey of the European Union and euro area highlights four main challenges to reduce emissions more cost-effectively and equitably.

Figure 1. Reductions in greenhouse gas emissions need to accelerate

Greenhouses gases emissions

Tonnes of CO₂ equivalent per capita



Note: Greenhouse gas (GHG) emissions include those from the land use/land use change and forestry sector (LULUCF). Data on the EU's GHG emissions for 2021 are taken from the European Environment Agency (2022).

Source: Eurostat; OECD Environment database; OECD Population database; European Environment Agency; and OECD calculations.

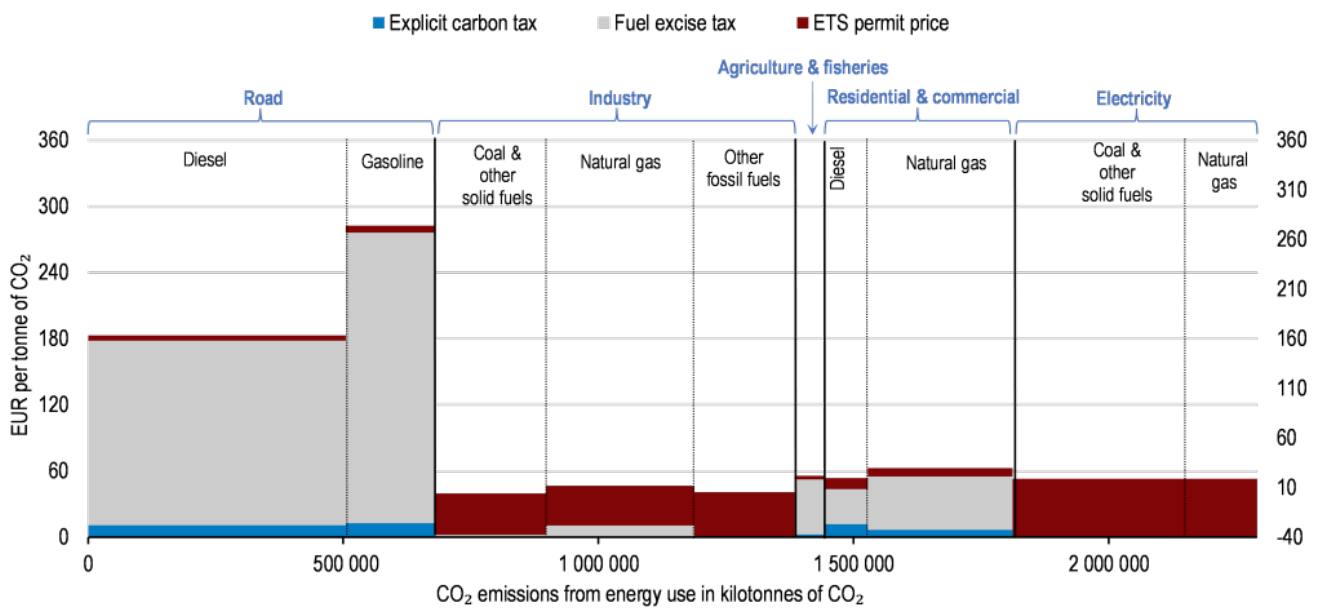
Towards more efficient mitigation policies

First, climate change mitigation policy is currently based on a combination of regulations and carbon prices that vary across sectors (Figure 2). The EU's Emission Trading System (ETS) sets an EU-wide carbon price, but only for energy generation and energy-intensive industry. Other sectors are not covered by the EU-wide carbon price. The uneven coverage of the ETS across sectors imposes heterogeneous abatement incentives across activities, leading to higher costs of achieving climate targets. Moreover, industry continues to receive most emission allowances free of charge. The

consequence is that polluters do not necessarily pay the cost of pollution. Addressing the challenge of reducing greenhouse gas emissions requires a gradual alignment and raising of carbon prices together with adopting and implementing standards and regulations.

Figure 2. Carbon pricing differs across sectors and energy uses

Effective energy tax rates across sectors, 2021



Note: Data refers to EU member countries that are also members of the OECD (22 countries). Effective carbon rates (ECRs) have been averaged by sector and energy category. Year of coverage is 2021, taxes as of 1st April 2021. ETS coverage estimates are based on OECD, with adjustments to account for recent coverage changes. Instrument coverage: specific fuel excise taxes, explicit carbon taxes, ETS (Emission Trading System) permit price includes German National ETS besides EU-ETS. No fossil fuel subsidies or other GHG are accounted for. The ETS permit price is the price of tradable emission permits in mandatory emissions trading and cap-and-trade systems representing the opportunity cost of emitting an extra unit of CO₂ equivalent, regardless of the permit allocation method.

Source: OECD (2022), Pricing Greenhouse Gas Emissions: Turning

Climate Targets into Climate Action, OECD Series on Carbon Pricing and Energy Taxation, OECD Publishing, Paris, <https://doi.org/10.1787/e9778969-en>.

To make polluters pay, the OECD recommends to continue expanding the ETS, including to agriculture. In addition, bringing forward the phase-out of free emission allowances would align effective costs of polluting in the ETS.

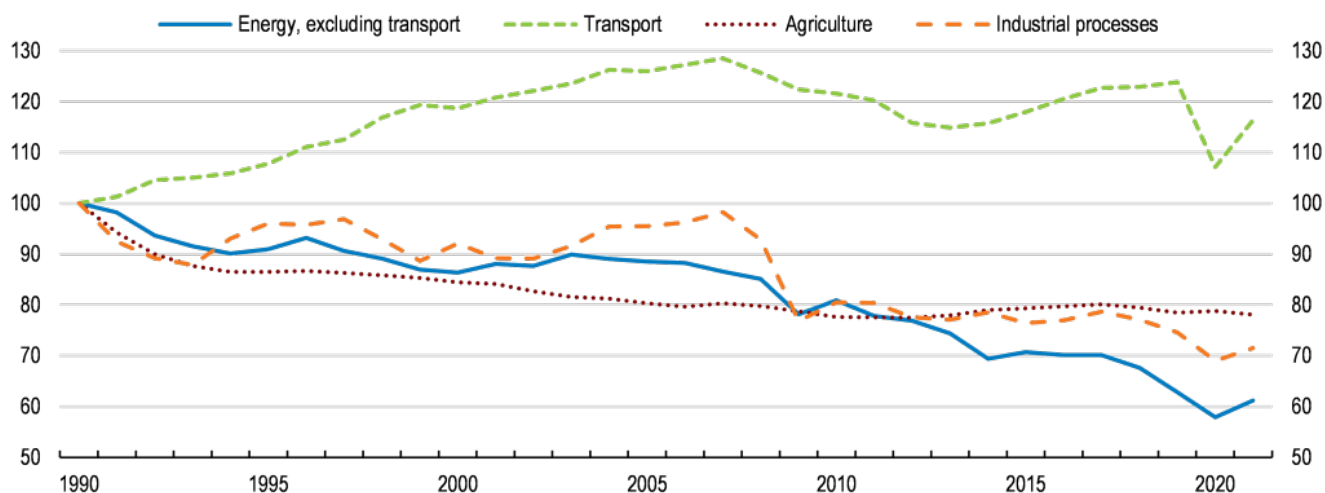
Ramp up mitigation in agriculture and transportation

Second, agriculture and transport have contributed little to emissions reduction during the last decade (Figure 3). Reducing emissions in these sectors calls for phasing out environmentally harmful subsidies. In agriculture, direct payments to farmers keep livestock numbers high and promote the agricultural use of drained peatlands, despite their negative impact on the climate. In transportation, more stringent EU vehicle emission standards and an extension of the ETS carbon price to transportation fuels from 2027 will help reduce emissions. However, reduced tax rates and tax exemptions for environmentally harmful fossil fuels, including aviation and maritime fuels, continue to undermine decarbonisation efforts.

Figure 3. Agriculture and transport have contributed little to emissions reduction

GHG emissions by source sector

index 1990 = 100



Note: Excluding land-use, land-use change and forestry (LULUCF).

Source: OECD Environment Statistics database.

To reduce emissions in agriculture, support for the agricultural use of drained peatlands should be removed, and direct payments for high livestock numbers gradually withdrawn. Withdrawing coupled payments may lead to higher meat prices, which may have an impact on food affordability for low-income households. Hence, withdrawing direct payments should be done gradually. To reduce emissions in transport, minimum tax rates for transportation fuels should be based on energy content and environmental performance, and the tax base broadened by phasing-out exemptions and reduced rates.

Accelerate the energy transition

Third, more integrated wholesale electricity markets are key for the energy transition and achieving energy security. For instance, countries with excess supply of wind and solar can export electricity to meet demand in other countries where supply is short. However, insufficient investment in cross-border electricity grids hampers such integration. Moreover, retail electricity prices are regulated for affordability reasons, often to below-cost levels. Low regulated prices discourage investment in much-needed clean technologies and reduce energy saving incentives.

An important element of the energy transition is affordable and secure clean energy, which requires more integrated electricity markets. To this end, the OECD recommends to increase investment in cross-border grid connections. In addition, the EU should ensure EU countries phase out regulated retail electricity prices to recover costs in the energy sector and encourage investment in clean energy. To help low-income households, government could use well-targeted affordability measures.

Limit the reallocation costs from the green transition

Finally, the green transition will also involve transition costs, including those arising from the reallocation of workers across sectors or regions. EU funding aims to help most affected regions manage the employment effects of the green transition. However, funding for mobility and training could be better tailored to local labour market needs. As regions develop their “Just Transition Plans”, greater efforts are needed to identify and address the drivers of low training and job-to-job transitions.

Concentrating future EU funding on mobility support and training, and making it conditional on labour market outcomes would help to alleviate the socio-economic impacts of the green transition.

References

OECD (2023), *OECD Economic Surveys: European Union and euro area 2023*, OECD Publishing, Paris