

Pricing Greenhouse Gas Emissions

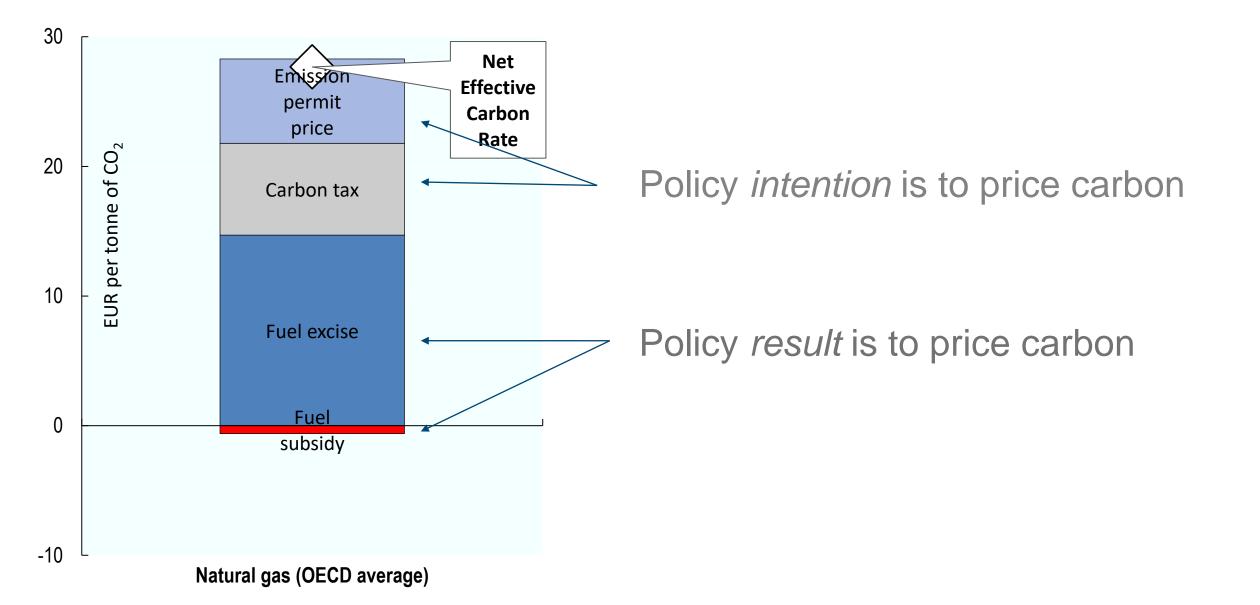
UNECE: 31st session of the Committee on Sustainable Energy

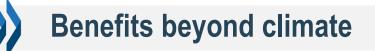
Jonas Teusch, jonas.teusch@oecd.org

22 September 2022



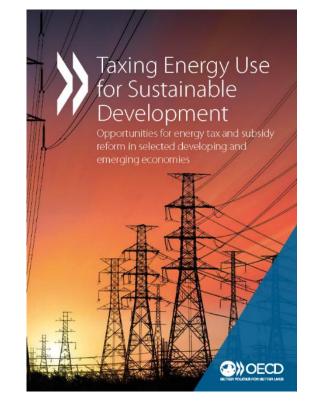
Carbon pricing provides incentives for the green transition





- » Powerful tool that can help countries meet climate targets
- **»** Benefits beyond climate:
 - » Reduces local pollution;
 - » Contributes to domestic resource mobilisation
 - **»** Can help to reduce informality.





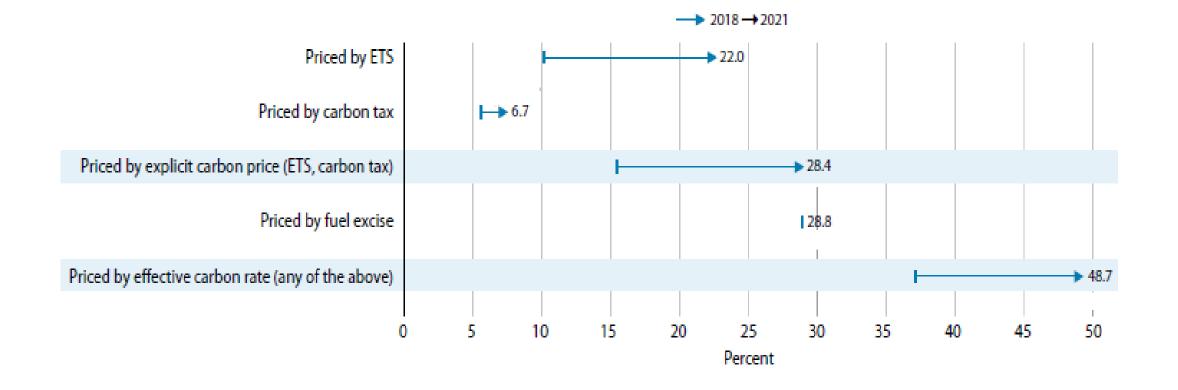
http://oe.cd/TEU-SD

Energy category	Equivalent of EUR 30 per tonne of CO ₂
Coal and other solid fossil fuels	6.24 eurocent per kilogramme
Fuel oil	8.94 eurocent per litre
Diesel	7.99 eurocent per litre
Kerosene	7.58 eurocent per litre
Gasoline	6.86 eurocent per litre
LPG	4.75 eurocent per litre
Natural gas	5.13 eurocent per cubic metre

Source: OECD (2019), Taxing Energy Use 2019: Using Taxes for Climate Action, OECD Publishing, Paris, https://doi.org/10.1787/058ca239-en.

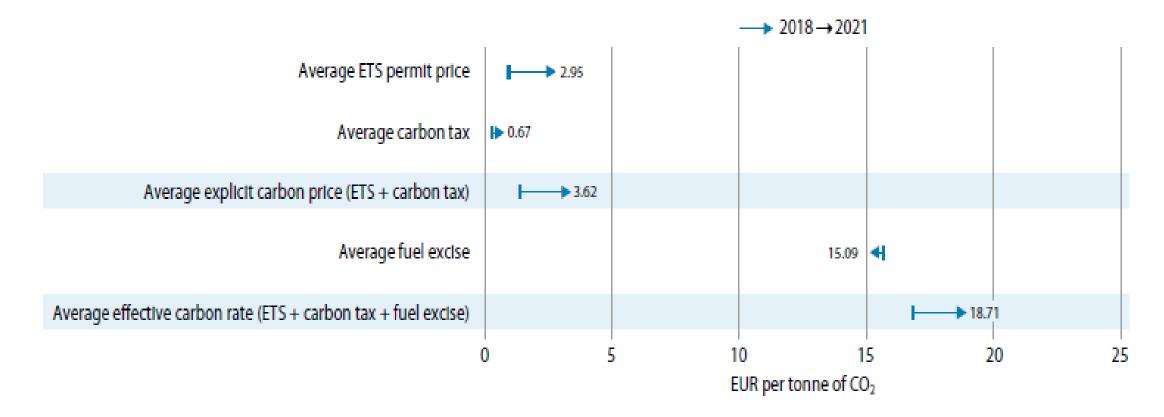
Countries are increasingly using carbon taxes and emissions trading systems

Share of CO₂ emissions from energy use covered by instrument, G20 countries, 2021



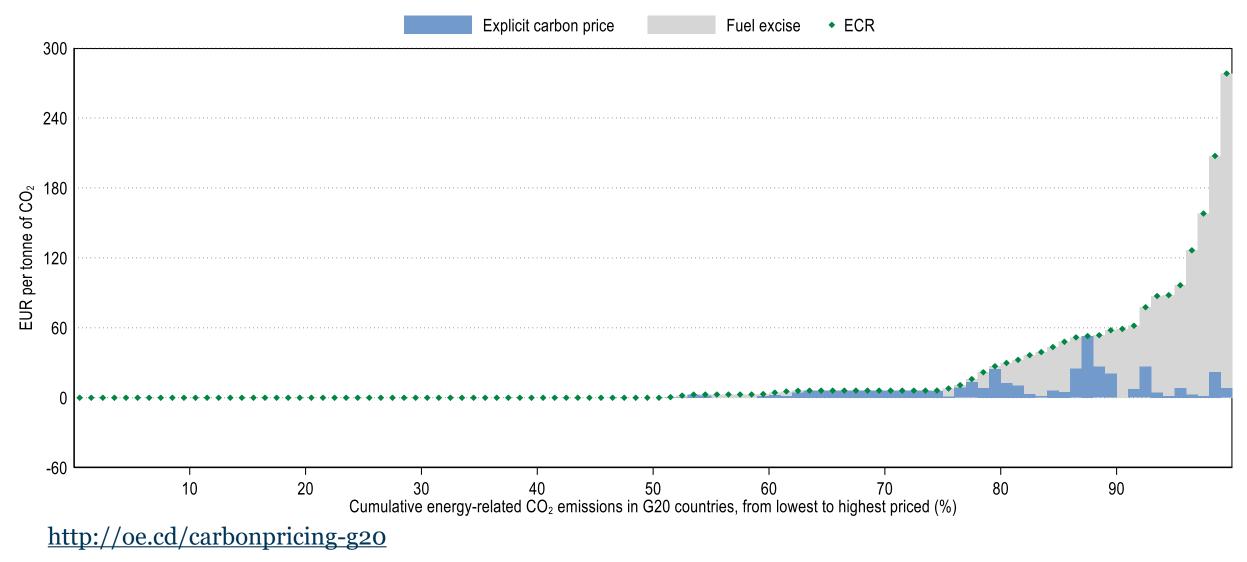
The average ECR has risen modestly but remains relatively low

Average effective carbon price by instrument, G20 countries, 2021



One reason for the low average ECR is the large proportion of unpriced emissions

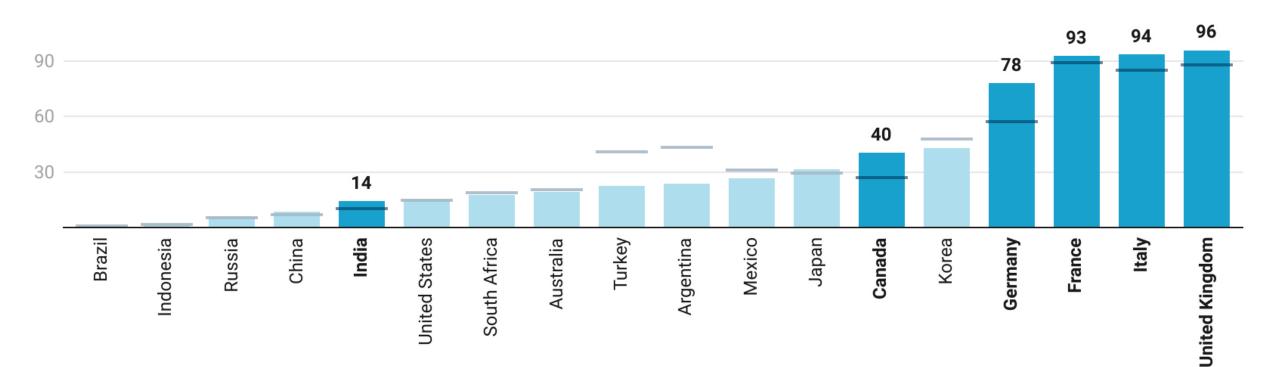
The distribution of effective carbon prices across CO₂ emissions from energy use, G20 countries, 2021



Overall carbon prices increasingly diverge across countries: Is this a problem?

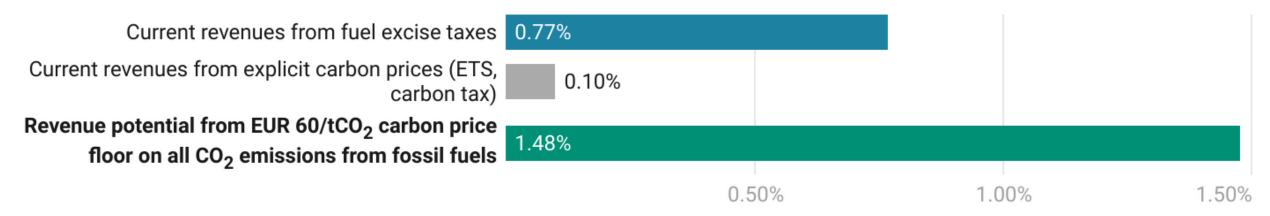
Average effective carbon rate, by country, EUR/tCO2

2021 2018



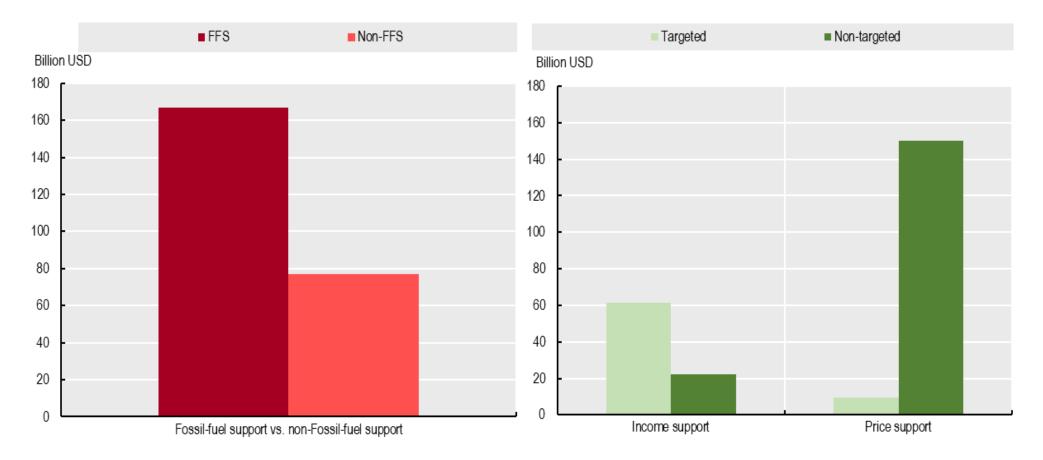
The revenues from carbon price reform could support a just transition

Revenues from carbon pricing across G20 countries, estimates in % relative to GDP



Responses to the energy crisis have focused on non-targeted fossil fuel price support

Government responses to the energy crisis, March 2021 to May 2022

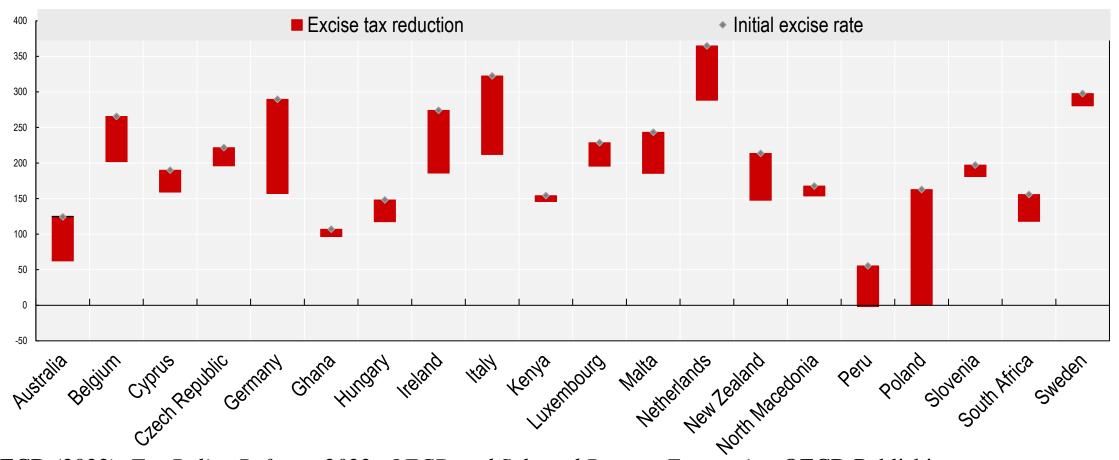


Policy brief, June 2022, "Why governments should target support amidst high energy prices"

Special feature in the report Tax Policy Reform 2022, September 2022, "Policy responses to rising energy prices"

Excise tax cuts translate into significant reductions of effective carbon prices

Carbon price equivalent of excise tax reduction and subsidies in EUR/tCO₂



OECD (2022), *Tax Policy Reforms 2022: OECD and Selected Partner Economies*, OECD Publishing, Paris, <u>https://doi.org/10.1787/067c593d-en</u>.

Newly established OECD series on Carbon Pricing and Energy Taxation

- New OECD report titled *Pricing Greenhouse Gas Emissions*, scheduled to be launched on 5 October 2022, tracks how carbon prices, energy taxes and subsidies have evolved across 71 economies between 2018 and 2021.
- The 71 countries, including all OECD members and many countries from the UNECE region, account for approximately 80% of global greenhouse gas emissions.
- The report estimates positive carbon prices resulting from carbon taxes, emissions trading systems, and fuel excise taxes, and negative carbon prices from fossil fuel subsidies.
- The new OECD report is the first of the newly established OECD series on Carbon Pricing and Energy Taxation that brings together two longstanding OECD series, Taxing Energy Use and Effective Carbon Rates



https://www.oecd.org/tax/tax-policy/tax-and-environment.htm

More needs to be done using the full range of policy tools



- Comprehensive policy packages are needed to pave the way for an inclusive and sustainable low-carbon economy.
- The distributional and competitiveness impacts of all mitigation policies, but in particular pricing policies, will continue to shape policy responses.
- Carbon pricing and fossil fuel subsidy reform raise revenue (other policies do not), creating space for combined pricing and spending packages to strengthen public support.
- Regulations and technology support are needed to complement, and as necessary replace, carbon pricing.



Thank you

For any comments or questions, please contact:

jonas.teusch@oecd.org

Jonas Teusch Economist, Tax Policy & Statistics Division OECD Centre for Tax Policy & Administration

