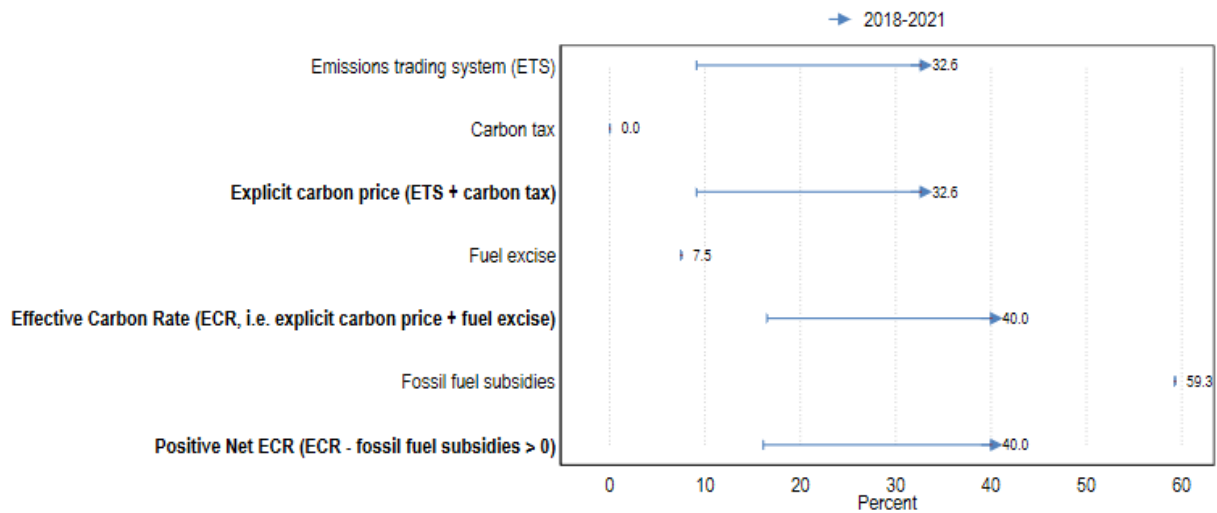


Carbon pricing in China

Share of greenhouse gas emissions subject to a positive price by instrument, 2018-2021

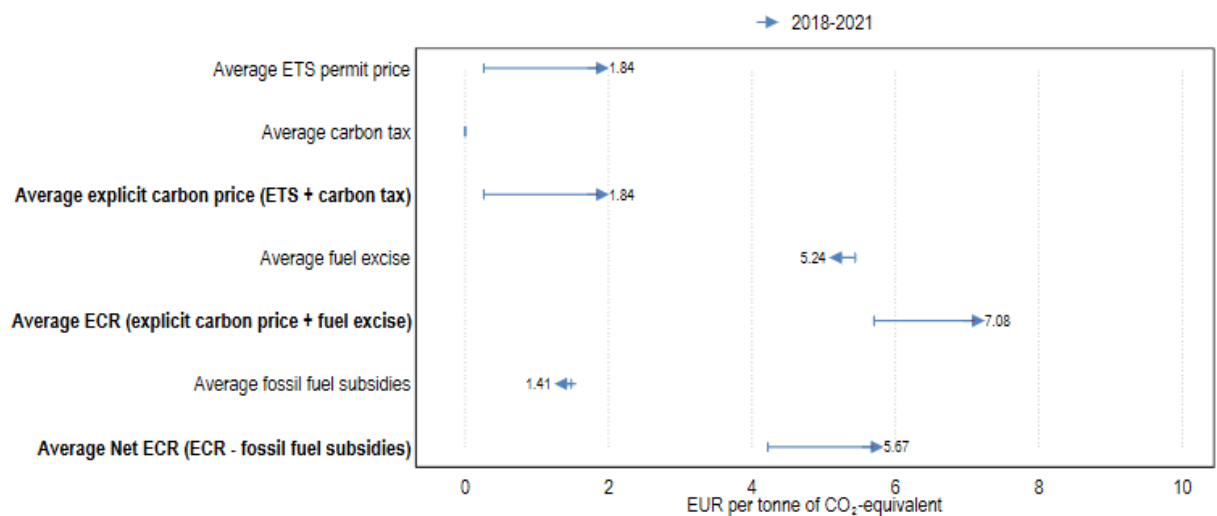
In 2021, explicit carbon prices in China consist of emissions trading systems (ETS) permit prices, which cover 32.6% of greenhouse gas (GHG) emissions in CO₂e. In total, 40% of GHG emissions in China are subject to a positive Net Effective Carbon Rate (ECR) in 2021, up from 16.1% in 2018. The share of emissions covered by an explicit carbon price has increased by 23.5 percentage points since 2018 following the introduction of the national ETS. Fuel excise taxes, an implicit form of carbon pricing, cover 7.5% of emissions in 2021, unchanged since 2018. Fossil fuel subsidies cover 59.3% of emissions in 2021, unchanged since 2018.



Note: Percentages are rounded to the first decimal place.

Average effective carbon prices by instrument, real 2021 EUR, 2018-2021

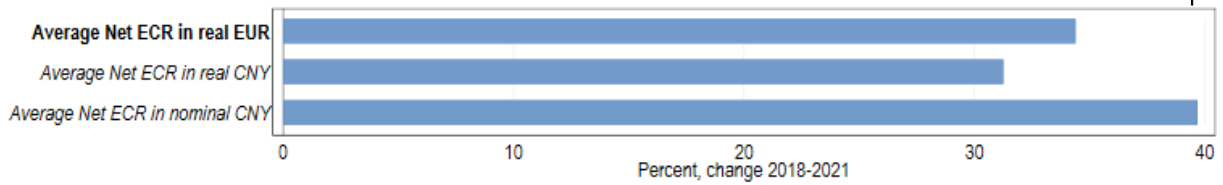
Explicit carbon prices have increased to an average of EUR 1.84 per tonne of CO₂e, up by EUR 1.58 (607.7%) since 2018. In 2021, fuel excise taxes amounted to EUR 5.24 on average, down by EUR 0.2 (3.7%) relative to 2018. Fossil fuel subsidies have decreased to an average of EUR 1.41 per tonne of CO₂e, down 4.7% since 2018.



Note: Prices are rounded to the nearest eurocent.

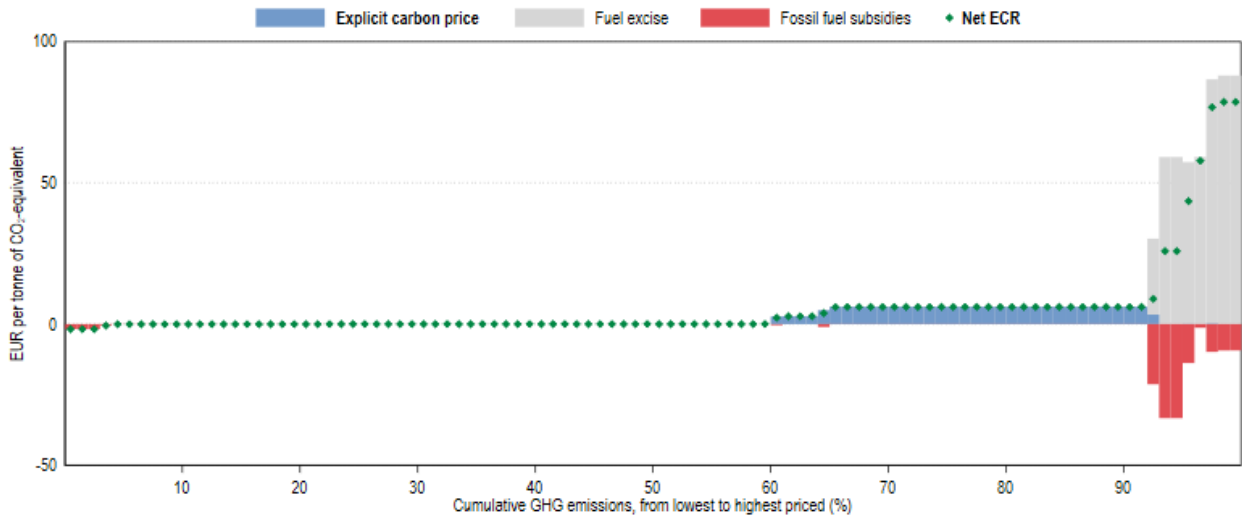
Percentage change in the average Net ECR by reference price, 2018-2021

The change in carbon prices in China was affected by exchange rate appreciation and inflation. The average Net ECR on GHG emissions has increased by 34.4% since 2018 when measured in real 2021 euros. In real Yuan renminbi (CNY), which has appreciated relative to the euro between 2018 and 2021, the average Net ECR has increased by 31.2%. In nominal CNY, devalued by inflation, the average Net ECR has increased by 39.7% since 2018.



Distribution of effective carbon prices across GHG emissions, 2021

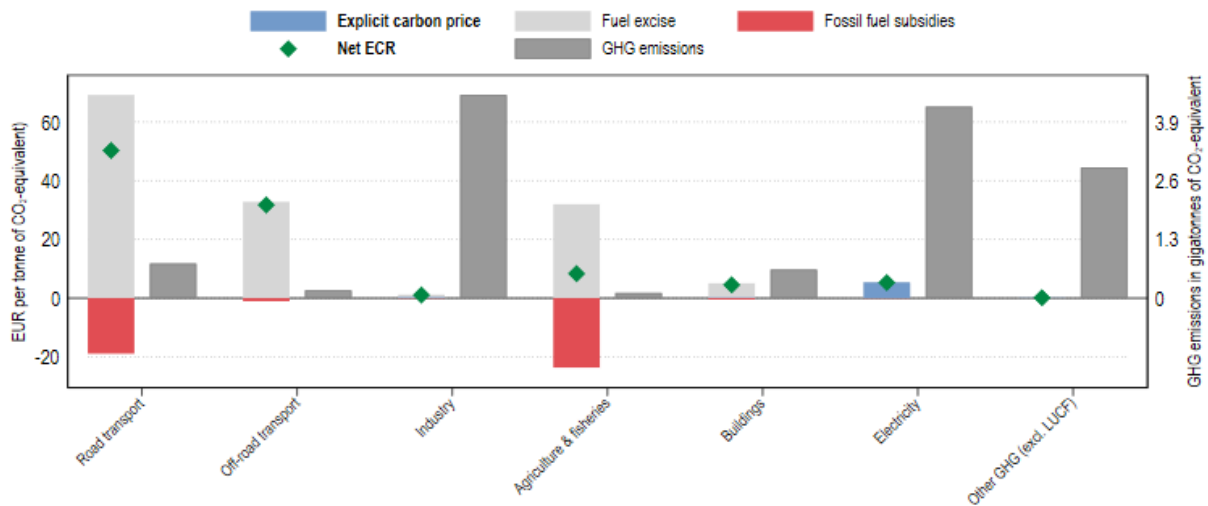
Less than 3.1% of GHG emissions have a Net ECR above EUR 60 per tonne of CO₂e, a mid-range estimate of current carbon costs.



Note: Simplified for illustration (the average price for each percentile bracket is shown).

Average effective carbon prices (left axis) and GHG emissions (right axis) by sector, 2021

Net effective carbon rates are highest in the road transport sector, which accounts for 5.8% of the country's total GHG emissions. The Net ECR is positive in all sectors.



Want to know more?

- Access the report *Pricing Greenhouse Gas Emissions* (OECD 2022): <https://oe.cd/pricing-greenhouse-gas-emissions>.
- Which domestic policy instruments are included as carbon pricing instruments? View the background information: www.oecd.org/tax/tax-policy/carbon-pricing-background-notes.pdf
- Access the data shown in the country notes: <https://stats.oecd.org/Index.aspx?DataSetCode=ECRS>

<https://oe.cd/tax-and-environment>

ctp.contact@oecd.org

[@OECDtax](https://twitter.com/OECDtax)

[OECD Tax](https://www.linkedin.com/company/oecd-tax)