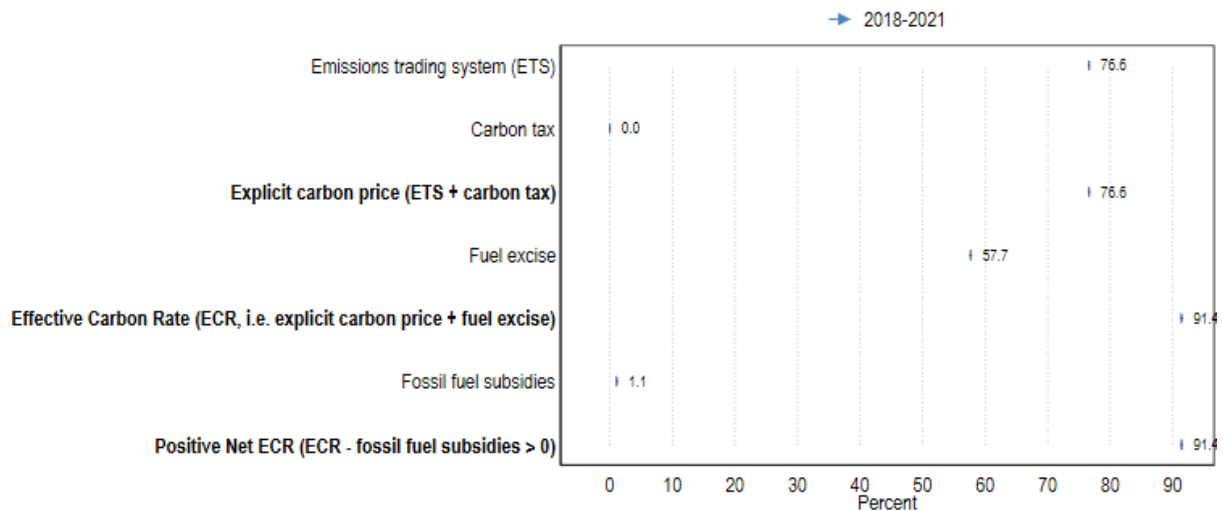


Carbon pricing in Korea

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

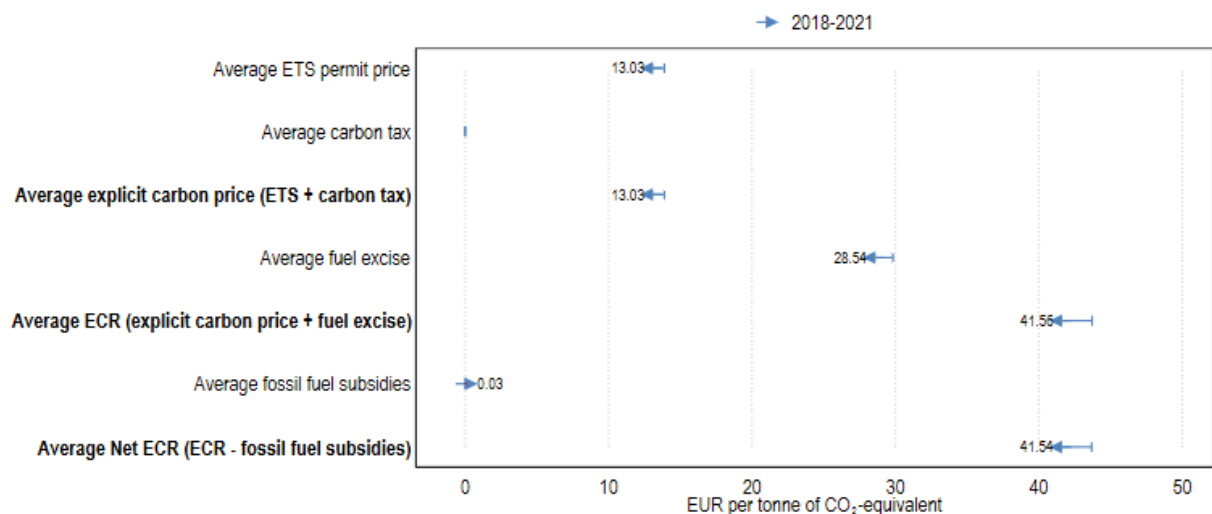
In 2021, explicit carbon prices in Korea consist of emissions trading system (ETS) permit prices, which cover 76.6% of greenhouse gas (GHG) emissions in CO₂e. In total, 91.4% of GHG emissions in Korea are subject to a positive Net Effective Carbon Rate (ECR) in 2021, unchanged since 2018. Fuel excise taxes, an implicit form of carbon pricing, cover 57.7% of emissions in 2021, unchanged since 2018. Fossil fuel subsidies cover 1.1% of emissions in 2021, unchanged since 2018. Due to data constraints, the recent changes of the Korean ETS that have increased coverage by around 2 percentage points (ICAP, 2021) are not modelled.



Note: Percentages are rounded to the first decimal place.

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

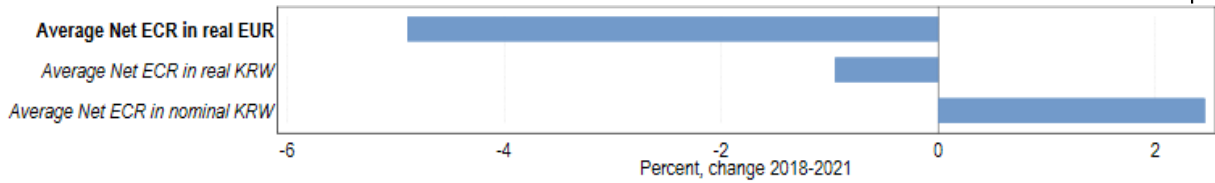
Explicit carbon prices have decreased to an average of EUR 13.03 per tonne of CO₂e, down by EUR 0.85 (6.1%) since 2018. In 2021, fuel excise taxes amounted to EUR 28.54 on average, down by EUR 1.28 (4.3%) relative to 2018. Fossil fuel subsidies have increased to an average of EUR 0.03 per tonne of CO₂e, up 50% since 2018.



Note: Prices are rounded to the nearest eurocent.

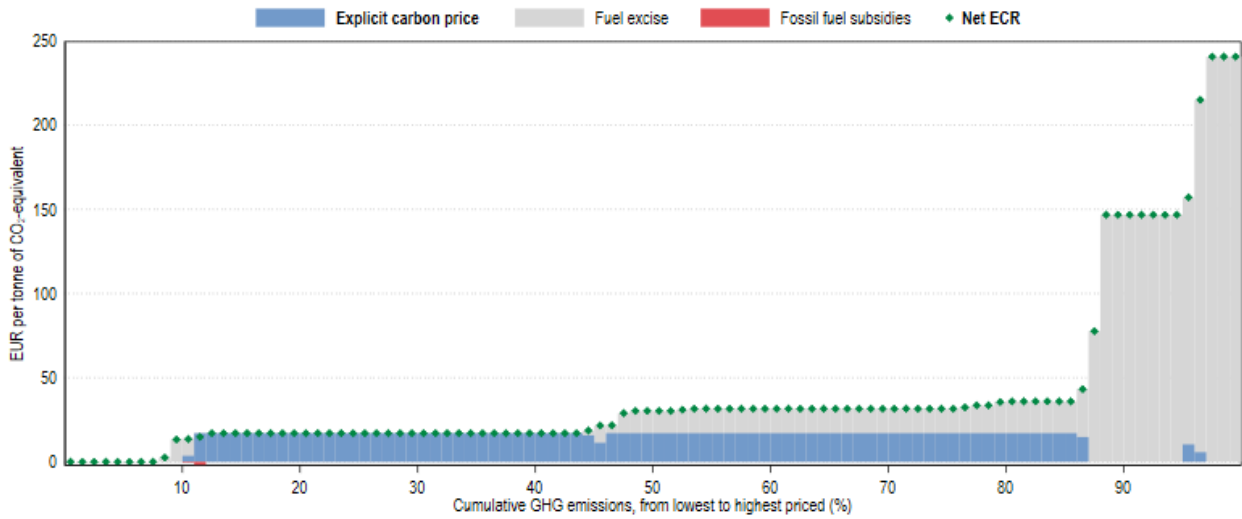
Percentage change in the average Net ECR by reference price, 2018-2021

The change in carbon prices in Korea was affected by exchange rate depreciation and inflation. The average Net ECR on GHG emissions has decreased by 4.9% since 2018 when measured in real 2021 euros. In real won (KRW), which has depreciated relative to the euro between 2018 and 2021, the average Net ECR has decreased by 1%. In nominal KRW, devalued by inflation, the average Net ECR has increased by 2.5% since 2018.



Distribution of effective carbon prices across GHG emissions, 2021

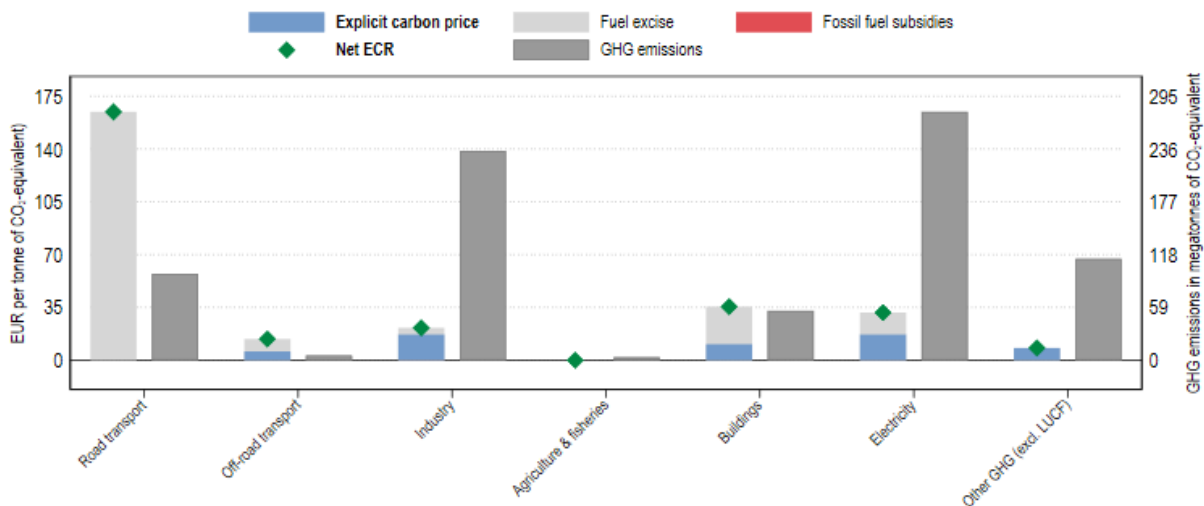
Less than 13.2% of GHG emissions have a Net ECR above EUR 60 per tonne of CO₂e, a mid-range estimate of current carbon costs.



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 12.3% of the country's total GHG emissions. The Net ECR is zero in the agriculture & fisheries sector. The agriculture & fisheries sector accounts for 0.4% of GHG emissions.



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>

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