PROGRESS WITH CARBON PRICING IS STRONG BUT UNEVEN

Jonas Teusch, Economist, Centre for Tax Policy and Administration

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Carbon pricing is a powerful tool that can help countries meet climate objectives and support a green recovery.

New OECD report takes stock of how carbon prices have evolved across G20 economies between 2018 and 2021.

It estimates carbon prices resulting from carbon taxes, emissions trading systems, and fuel excise taxes.

G20 countries account for approximately 80% of global greenhouse gas emissions.
G20 countries are increasingly using carbon taxes and emissions trading systems

Share of G20 emissions covered by carbon pricing, by instrument, 2018-2021

- Explicit carbon price (ETS, carbon tax): 16% in 2018, 28% in 2021
- Fuel excise tax: 29% in 2018, 29% in 2021
- Effective carbon rate (sum of the above): 37% in 2018, 49% in 2021
Coverage changes are concentrated in the electricity sector

Share of G20 emissions covered by effective carbon rate, % by sector, 2018-2021

<table>
<thead>
<tr>
<th>Sector</th>
<th>2018</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>31%</td>
<td>64%</td>
</tr>
<tr>
<td>Buildings</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>Industry</td>
<td>23%</td>
<td>24%</td>
</tr>
<tr>
<td>Agriculture &amp; fisheries</td>
<td>23%</td>
<td>24%</td>
</tr>
<tr>
<td>Off-road transport</td>
<td>40%</td>
<td>41%</td>
</tr>
<tr>
<td>Road transport</td>
<td>57%</td>
<td>57%</td>
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<td>94%</td>
<td>94%</td>
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</tbody>
</table>
Explicit carbon prices have doubled on average, but the variation across countries is large.

Average explicit carbon price, by country, EUR/tCO₂
Overall carbon prices increasingly diverge across G20 countries

Average effective carbon rate, by country, EUR/tCO₂

2021 | 2018
Uneven carbon prices exacerbate carbon leakage and competitiveness concerns

Average effective carbon rate, EUR/tCO₂, 2021

low  high
Diesel and gasoline are taxed the most

Average effective carbon rate across G20 economies, by selected fuel, 2021, EUR/tCO₂
The revenues from carbon price reform could support a just transition

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

- Current revenues from fuel excise taxes: 0.77%
- Current revenues from explicit carbon prices (ETS, carbon tax): 0.10%
- Revenue potential from EUR 60/tCO₂ carbon price floor on all CO₂ emissions from fossil fuels: 1.48%
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.
- Pricing raises 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.
Would you like to know more?

» The report, country notes, and the underlying data are available at: [http://oe.cd/carbonpricing-g20](http://oe.cd/carbonpricing-g20).

» Taxing Energy Use 2022, additionally covering non-G20 OECD countries and selected developing and emerging economies, will be released in 2022.

» Any further questions on the report? [CTP.Contact@oecd.org](mailto:CTP.Contact@oecd.org).
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