Carbon pricing in transport

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What is carbon pricing?

Carbon Pricing

Direct (explicit)
- e.g., carbon taxes, emissions trading systems, crediting mechanisms

Indirect (implicit)
- e.g., fuel (excise) taxes, fuel subsidies, VAT differentials.
What is carbon pricing?

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23% of global GHG emissions covered
ETS prices hit record highs

2008 Financial crisis
Black Monday stock market crash, 2011
WHO declares public health emergency in response to COVID-19 virus
EU ETS Reforms agreed
EU 55% target agreed
New Zealand abolishes price cap
Russia invades Ukraine
Rep of Korea proposes more ambitious emissions target
NZ ETS
California Cap-and-Trade
Rep. of Korea ETS
RGGI
Tax rates also increasing
...but prices remain below the levels needed.

<4% of global GHG covered by a carbon price within the range needed by 2030.
Most carbon taxes cover transport

Carbon taxes are often charged via carbon content on fuel.

- Europe
  - Denmark, France, and Ireland
- Latin America
  - Argentina, Mexico, and Colombia
- East Asia Pacific
  - Japan, Singapore*
- Africa
  - South Africa*

*includes liquid fuels at covered installation

Based on World Bank internal analysis

Proportion of implemented carbon taxes covering road transport (24 out of 35)
ETSs also cover road transport.
ETTs also cover road transport
And domestic aviation
“Indirect” carbon pricing can play an important role

Source: OECD (2022), Pricing Greenhouse Gas Emissions: Turning Climate Targets into Climate Action, OECD Series on Carbon Pricing and Energy Taxation
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Challenges extend beyond unpriced carbon externality...

- Imperfect information
- Network, coordination failures
- Relatively inelastic demand
- Public and political resistance
- Knowledge ‘spillovers’

Non-price market failures

Other Challenges

High-Level Commission on Carbon Prices. 2017
Carbon Pricing is just one tool

<table>
<thead>
<tr>
<th>Policy category</th>
<th>Policy examples</th>
<th>AVOID</th>
<th>SHIFT</th>
<th>IMPROVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic/pricing</td>
<td>Carbon price (ETS or tax)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>Vehicle pricing policies (e.g., fees, taxes on inefficient vehicles, and tax credits for fuel-efficient vehicles)</td>
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<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>Activity pricing policies (e.g., tolls, congestion pricing, PAYD insurance/registration rates)</td>
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<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Regulatory</td>
<td>Vehicle efficiency standards (fuel consumption or CO₂ based)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td></td>
<td>Fuel standards (low carbon or renewable)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Research, information, infrastructure and planning</td>
<td>RD&amp;D initiatives (e.g., Research grants)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<td></td>
<td>Modal shift policies (e.g., access to, or subsidies for, public transport, new infrastructure)</td>
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<td></td>
<td>Urban Planning (compact development, green planning)</td>
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<td>Improving existing system efficiency (e.g., education, HOV lanes)</td>
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<td>☐</td>
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</tbody>
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