The classification of fossil fuel subsidies:
A discussion at risk of going off the rails?

Fossil Fuel Subsidy Reform Group meeting, 18 July 2023

Ronald Steenblik
Senior Technical Advisor to the SJES Programme, QUNO
Strong centrifugal forces at work on subsidies

• The WTO is custodian of an internationally agreed definition of a “subsidy”.
• When approaching subsidies to particular sector, some subsidy estimators want to reinvent the wheel.
• Portrayal of the work of the OECD, IEA, World Bank, UNEP often stresses their differences.
• While the portrayal of the work of the IMF often glosses over how different it is from the others’ work.
A brief history of fossil-fuel subsidy measurement

- **Consumer Price Support (Dual Pricing)**
  - 1980: UNDP & World Bank
  - 1990: World Bank
  - 2000: IEA
  - 2010: IEA, IMF
  - 2020: Combined OECD & IEA

- **Total Subsidies**
  - WTO SCM Agreement

- **Subsidy subset**
  - IEA (Production of hard coal only)
  - OECD (Excluding Consumer price support)
  - Combined OECD, IEA, IMF “explicit”

- **Externalities**
  - IMF “post tax subsidies” — “implicit subsidies”
The subsidy “matrix” dates back to the OECD (2011)

![Matrix of support measures, with examples](image)

**Figure 1.1. Matrix of support measures, with examples**

<table>
<thead>
<tr>
<th>Tax revenue forgone</th>
<th>Other government revenue forgone</th>
<th>Transfer of risk to government</th>
<th>Induced transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax revenue forgone</td>
<td>Other government revenue forgone</td>
<td>Transfer of risk to government</td>
<td>Induced transfers</td>
</tr>
<tr>
<td>Production tax credit</td>
<td>Reduced resource-rent tax</td>
<td>Government buffer stock</td>
<td>Import tariff or export subsidy</td>
</tr>
<tr>
<td>Reduced rate of income tax</td>
<td>Under-pricing of a good, government service or access to a natural resource</td>
<td>Third-party liability limit for producers</td>
<td>Monopoly concession</td>
</tr>
<tr>
<td>Reduction in social charges (payroll taxes)</td>
<td>Under-pricing of access to government land, reduced royalty payment</td>
<td>Provision of security (e.g., military protection of supply lines)</td>
<td>Monopoly concession; export restriction</td>
</tr>
<tr>
<td>Investment tax credit</td>
<td>Government transfer of intellectual property right</td>
<td>Assumption of occupational health and accident liabilities</td>
<td>Wage control</td>
</tr>
<tr>
<td>Tax credit for private R&amp;D</td>
<td>Under-pricing of access to a natural resource harvested by final consumer</td>
<td>Credit guarantee linked to acquisition of land</td>
<td>Land-use control</td>
</tr>
<tr>
<td>VAT or excise-tax concession on fuel</td>
<td>Means-tested cold-weather grant</td>
<td>Credit guarantee linked to capital</td>
<td>Credit control (sector-specific)</td>
</tr>
<tr>
<td>Tax deduction related to energy purchases that exceed given share of income</td>
<td>Price-triggered subsidy</td>
<td>Deviations from standard IPR rules</td>
<td>Deviations from standard IPR rules</td>
</tr>
<tr>
<td>Unit subsidy</td>
<td>Government-subsidized life-line electricity rate</td>
<td>Unit cost of consumption</td>
<td>Regulated price; cross subsidy</td>
</tr>
<tr>
<td>Household cost of enterprise income</td>
<td>Government-subsidized life-line electricity rate</td>
<td>Household cost of enterprise income</td>
<td>Mandated life-line electricity rate</td>
</tr>
</tbody>
</table>

Source: OECD.
The IMF’s estimates of “explicit” and “implicit” fossil fuel subsidies

- Changed from “pre-tax” and “post-tax” to “explicit” and “implicit” in 2021.
- IMF looks exclusively at consumption-related externalities.
- Growth in externalities heavily influenced by population and GDP growth.
- Range of uncertainty around the externality estimates are greater than the “explicit” subsidies.
Vehicle externalities (traffic congestion, road accidents, road wear & tear) accounted for the bulk of externalities not reflected in the price of gasoline in the USA and diesel in NZ in 2020:

— **USA**: 83% (USD 180 bln) of the “implicit subsidies” for gasoline; 48% (USD 82 bln) for diesel.
— **NZ**: 73% (USD 1.77 bln) of the “implicit subsidies” for diesel
Take-aways

• The WTO’s ASCM Article 1 definition of a “subsidy” does NOT include the value of non-internalized externalities.

• Nor are they included in the OECD’s, IEA’s, UNEP’s (SDG Indicator 12.c.1 indicator), nor the World Bank’s country reports.

• The IMF’s “implicit subsidy” estimates do NOT show the environmental harm caused by the “explicit” subsidies. Rather, they quantify the non-internalized externalities generated by fossil fuel consumption.

• It is therefore tautological to refer to the IMF numbers as showing the environmental *effects* of fossil fuel subsidies.
Thank You!

Ronald.Steenblik@gmail.com