

SDG Indicator 12.c.1

Fossil fuel subsidies

Introduction

Goal 12:	Ensure sustainable consumption and production patterns
Target 12.c :	Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities
Indicator 12.c.1	Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels

Definition

Fossil fuel:

- Include secondary commodities (electricity and heat) based on the definition provided in the IEA Statistics manual
- Include non-energy uses of fossil fuels
- Definitions by the IEA, IPCC, OECD and most of the G20 peer-review include secondary commodities

Definition

Subsidies:

- WTO definition of subsidies in the Agreement on subsidies and countervailing measures with four classifications of subsidies
- WTO definition is the most widely recognized and is legally binding for WTO members

Definition

Product and consumption:

- Use OECD definition (producer support estimate; consumer support estimates; general services support estimate)
 - Monitor data on production and consumption separately; but could be reported together
 - OECD definition makes a statistically clear distinction between consumer and producer subsidies
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Estimating fossil fuel subsidies

- Use a combination of a price-gap and inventory approach while taking measures to avoid double counting
- Both approaches are necessary to provide a more complete picture

Sub-indicators

Subsidy category	Data availability	Complexity	Acceptance	Recommendation for SDGs	
				National	Global
Direct transfer of funds	++	++	++	National	Global
Induced transfers (price support)	+	+	++	Yes	Yes
Tax expenditure, other revenue foregone, and under-pricing of goods and services	+	0	+	Yes	Yes
Transfer of risk	-	-	0	Yes, but optional ³	Yes, but optional ³

++ (green) means "excellent" or "low degree of complexity"
 + (yellow) means "good" or "moderate degree of complexity"
 0 (orange) means "neutral"
 - (red) means "poor" or "difficult"

Direct transfer of funds

Direct transfers of government funds	Direct spending, budget and off-budget transfers	Agency appropriations: Targeted spending on the sector through government budgets of different levels and budgets of individual government agencies. Government procurement of energy at above-market rates.
	Government ownership of energy-related enterprises if on terms and conditions more favourable for business than in case of private ownership	Government ownership of strategic and other energy assets that provides returns on investment at rates below market

Data availability	Complexity	Acceptance
++	++	++
Direct budgetary transfers are well documented by governments, and often in publicly available documents.	Do not need to be estimated by analysts, only reported. Some analysis may be required to allocate the amount to fossil fuel-related industries.	Included in all international definitions, accepted by governments in case study countries.

Price gap

IEA quarterly database on fuel prices and taxes³⁹

The Energy Prices and Taxes data service contains a major international compilation of energy prices for OECD countries. The database includes annual and quarterly end user industry and consumer prices as well as annual, quarterly and monthly crude oil spot prices, oil product spot prices and import costs by crude stream. The end user prices cover the main oil products, gas, coal and electricity.

IMF fuel price dataset⁴⁰

Retail prices for petroleum, coal and natural gas. Not country specific, but benchmark prices which are representative of the global market, determined by the largest exporter of a given commodity. Compiled from data data collected from government sources, IMF staff, and monitoring of news reports.

International Fuel Prices report published by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)⁴¹

Retail prices of gasoline, diesel, and LPG, based on surveys conducted on a specific day throughout the world. The report is published roughly every two years, the latest being 2014. It is not clear when, or whether, it will be published again.

Price gap

Data availability	Complexity	Acceptance
+	+	++
<p>Good, as data on energy prices is available for most countries. Data to calculate the reference price could be improved.</p>	<p>Moderate and can vary, depending on the size of the market and fuels.</p>	<p>Price support is widely recognized as a component of total government support in estimates of total support under the WTO Agreement on Agriculture, the OECD's work on support for different sectors, the IEA's work on fossil fuel subsidies, the IMF's and in the economic literature more generally.</p> <p>However, low-cost producer countries argue that the reference price for making comparisons, even for tradable commodities such as petroleum products, should be production cost, not export-price parity.</p>

Tax revenue forgone

Tax expenditures, other government revenue foregone and under-pricing of goods and services, including risk

Tax breaks and other government revenue foregone

Income-tax expenditures: Tax expenditures are foregone tax revenues, due to special exemptions, deductions, rate reductions, rebates, credits or deferrals that reduce the amount of tax that would otherwise be payable.

Exemptions from excise taxes and other special taxes, or other duties: Exemption of excise taxes on fuels; special targeted taxes on energy industry (e.g., based on environmental concerns or "windfall" profits); exemption of import duties on equipment for a specific industry.

Under-pricing of government-owned energy resources

Benefits related to differences in procedures for energy resource leasing: For example, some countries auction access to larger sites, but designate a sole source for smaller sites.

Royalty relief or reductions in other taxes due on extraction: reduced, delayed or eliminated royalties

Tax revenue forgone

Data availability	Complexity	Acceptance
+	0	+
<p>Government estimates of tax expenditures relevant to the production of fossil fuels are reported by most developed countries, but not by many others.</p> <p>Data that would permit the valuation of exemptions, reductions and rebates of consumption-side taxes – VAT and excise taxes in particular – should be obtainable with a moderate amount of effort.</p> <p>Data on financing can be opaque but is increasingly being collected.</p>	<p>Tax expenditures: relatively complex to measure.</p> <p>Under-pricing of goods and services: relatively non-complex to measure.</p> <p>Methods for estimating the subsidy element of loans have been developed, but not systematically applied.</p>	<p>Tax expenditures: Included in national monitoring in some countries and G20 peer-reviews, but not widespread.</p> <p>Can be controversial, because differences in national tax systems make interpretation necessary.</p> <p>Under-pricing of goods and services: included in most definitions, and accepted, though in practice not widely measured.</p>

Transfer of risk

Transfer of risk to government	Credit support	Loan guarantees: at below-market rates.
	Debt restructuring and cancellations	<p>Debt restructuring: the government orders the easing of the debt burden on one or more firms.</p> <p>Debt cancellation: the government forgives the outstanding balance of a loan it has made, with no compensation from the beneficiary.</p>
	Insurance and indemnification	<p>Government insurance and indemnification: market or below-market risk-management or risk-shifting services.</p> <p>Statutory caps on commercial liability: can confer substantial subsidies if set well below plausible damage scenarios.</p>
	Assumption of risks related to occupational health and accidents	Assumption of occupational health and accident liabilities.
	Assumption of responsibility for remediating environmental damage	<p>Responsibility for closure and post-closure risks: facility decommissioning and clean-up; long-term monitoring; remediation of contaminated sites; litigation.</p> <p>Waste management and environmental damages: avoidance of fees payable to deal with waste, avoidance of liability and remediation to make the environment whole.</p>

Transfer of risk

Data availability	Complexity	Acceptance
<p>-</p> <p>Only the face values of individual transactions are generally made public, if they are public at all.</p> <p>Other data needed to produce estimates are likely to be hard to obtain.</p>	<p>-</p> <p>Relatively complex to measure.</p>	<p>0</p> <p>Generally accepted in theory, but rarely quantified in practice.</p> <p>In concrete cases of subsidy estimations, divergent stakeholder views are often observed.</p>