



MINISTERO DELL'AMBIENTE
E DELLA TUTELA DEL TERRITORIO E DEL MARE



Technical expert group on fossil fuel subsidy indicator for SDG12c

Second consultation meeting – 29 September 2017

Background briefing and agenda

1. Introduction

Monitoring and reporting progress on SDG12c

The 2030 Agenda for Sustainable Development set out 17 Sustainable Development Goals (SDGs) and 169 targets to be achieved by 2030. Countries' performance in delivering the SDGs will be measured and reported against a suite of 230 SDG indicators.¹ UN Environment is the custodian of 26 SDG indicators, mainly related to water, sustainable consumption and production, oceans and biodiversity, including the indicator for SDG12c (see Box 1).

As custodian, UN Environment is responsible for leading the methodological development of the SDG12c indicator and for compiling and reporting data on the indicator for the Secretary General's progress report on the SDGs. The proposed methodology should be approved by UN member states.²

Box 1: SDG12c target and indicator

Target: *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: *Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels.*

Global estimates of fossil fuel subsidies have been developed by a number of organisations including the OECD, IMF and IEA with estimates varying from USD 544 billion to USD 2 trillion depending on the definitions and measurement approaches adopted, the coverage of countries and fuels, the time period and the types of support considered. Table 1 provides a comparison of different approaches to defining and measuring subsidies and other forms of support to fossil fuels as set out in a primer developed by the Global Subsidies Initiative (GSI)³ in conjunction with the OECD, World Bank, IMF and the IEA. Box 2 sets out the definition of a subsidy from the WTO Agreement on Subsidies and Countervailing Measures (ASCM) and Box 3 provides further detail on the OECD inventory approach to estimating fossil fuel support measures.

¹ Excluding indicators that overlap across the targets.

² The Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDG) considers the SDG12c indicator to be a Tier III indicator as there is currently no established methodology and standards for the indicator, the methodology/standards are being developed and tested.

³ GSI (2014) [Comparison of Fossil-Fuel Subsidy and Support Estimates](#)

Table 1: Comparison of current methods for defining and measuring fossil fuel subsidies and support⁴

	OECD	IEA	IMF	GSI	UN
Coverage					
<i>Countries</i>	34 OECD member countries & 6 partner countries (incl. some sub-national)	41 countries (primarily emerging & developing)	176 countries	Study dependent	193 UN member states
<i>Time period</i>	2005-2014	2012-2014	2011-2015	Study dependent	2020-2030
Energy carriers⁵					
<i>Petroleum products</i>	√	√ ⁶	√ ⁷ (176 countries)	√	
<i>Coal</i>	√	√	√ (56 countries)	√	
<i>Natural gas</i>	√	√	√ (56 countries)	√	
<i>Electricity</i>	× (unless FF generated)	√ (non-fossil power subsidies excl.)	√ (77 countries)	√	
Type of subsidy					
<i>Producer</i>	√ (incl. General Services Support Estimates)	×	√ (incl. OECD Producer Support Estimates, excl. GSSE)	√ (for specific countries)	√
<i>Consumer</i>	√	√	√	√	√
Benchmark					
<i>Fossil-fuel reference prices</i>	International price	International prices (in country ave. cost)	International price or cost-recovery price for electricity	International price	
<i>Consumption-based taxes</i>	√ VAT or GST, excise	√ VAT or GST	×: Pre-tax √: Post-tax: VAT actual & estimated (regional)	√ VAT or GST	
<i>Non-internalized externalities</i>	× (incl. exemption of carbon taxes)	×	× Pre-tax √: Post-tax: various ⁸	× (non-application of enviro. legislation)	
Methodology					
Definition	Government, producer and consumer support mechanisms	Government actions that result in prices paid by end users below full cost of supply (based on international benchmarks)	Pre-tax: Price paid by consumers below benchmark; Price paid by producers above benchmark Post tax: pre-tax plus taxes below efficient levels	WTO Agreement on Subsidies and Countervailing Measures (ASCM), Article 1.1	

⁴ Adapted from GSI (2014) [Comparison of fossil fuel subsidy and support estimates](#)

⁵ Subsidies to renewable and nuclear energy excluded. Estimates of subsidies to other energy types made separately.

⁶ Gasoline, diesel, kerosene, liquefied petroleum gas (LPG) and heavy fuel oil.

⁷ Gasoline, diesel and kerosene petroleum products.

⁸ Global warming (USD34 per tonne CO₂ in 2007 USD [US IAWG, 2013]), health impacts linked to local air pollution and road accidents, other externalities linked to traffic congestion and road damage.

	OECD	IEA	IMF	GSI	UN
Method	Inventory approach. Two thirds of subsidy mechanisms currently identified are preferential tax treatments	Price-gap (fuels); average cost plus transport & distribution, capped at cost of a combined cycle gas turbine power plant (power)	(i) Price-gap approach for consumer subsidies (ii) inventory approach for producer subsidies	Inventory approach WTO ASCM interpreted to cover 30 subsidy types	
Data sources	Official government data, with inputs from experts	IEA, secondary data sources, annual survey	IMF, IEA, OECD data. Wider sources for post-tax estimates	Official data, in-country research	
Unit of measurement	Reported by country currency, line by line for each subsidy item	Ave. subsidization rate (as proportion of full cost of supply) % USD/person % share of GDP USD by fuel type	% of government revenue % of GDP by country and region	Country total in USD and national currency	% of total national expenditure on FF FFS per unit of GDP

Box 2: Subsidy definition from WTO Agreement on Subsidies and Countervailing Measures (Article 1.1)

1.1 For the purpose of this Agreement a subsidy shall be deemed to exist if:

(a) (1) there is a financial contribution by a government or any public body within the territory of a Member (referred to in this Agreement as "government"), i.e. where:

(i) a government practice involves a direct transfer of funds (e.g. grants, loans, and equity infusion), potential direct transfers of funds or liabilities (e.g. loan guarantees);

(ii) government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits);¹

(iii) a government provides goods or services other than general infrastructure, or purchases goods;

(iv) a government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments;

or

(a)(2) there is any form of income or price support in the sense of Article XVI of GATT 1994;

and

(b) a benefit is thereby conferred.

¹ In accordance with the provisions of Article XVI of GATT 1994 (Note to Article XVI) and the provisions of Annexes I through III of this Agreement, the exemption of an exported product from duties or taxes borne by the like product when destined for domestic consumption, or the remission of such duties or taxes in amounts not in excess of those which have accrued, shall not be deemed to be a subsidy.

Box 3: Inventory approach to estimating support for fossil fuels

The OECD's inventory approach to estimating support for fossil fuels covers a broad set of measures that in some way 'support' fossil fuel use or production as defined by the PSE-CSE framework. The PSE-CSE framework is used by the OECD to measure support, most notably in agriculture, and distinguishes among those measures that benefit individual producers (PSE: Producer Support Estimate), those that benefit individual consumers (CSE: Consumer Support Estimate), and those that benefit consumers and producers collectively and those that do not support current production such as industry-specific infrastructure development (GSSE: General Services Support Estimate). For more see the [PSE Manual](#) and the [Companion to the Inventory of Support Measures for Fossil Fuels](#). The scope of support covered is broad, encompassing direct budgetary transfers and tax expenditures that provide a benefit or preference for fossil-fuel production or consumption, either in absolute terms or relative to other activities or products. This approach relies on official government data published or otherwise provided by governments, supported by assessments by the OECD where necessary.⁹ It does not make reference to the original purpose, economic or environmental effects of the identified support and no judgement is made as to whether or not such measures are inefficient or ought to be reformed.¹⁰

Technical expert group

UN Environment has established a technical expert group to support the development of a methodology to measure the SDG12c indicator. The expert group includes:

- **IMF, IEA, IADB, OECD, UN Environment, UN Statistics, EUROSTAT, EC, OPEC Secrétariat, Global Subsidies Initiative (GSI).**
- **Statistics Sweden, Federal Ministry for Economic Affairs and Energy, Germany, Ministry of Environment, Land & Sea, Italy.**

Additional countries invited to the second consultation process on the methodological development as well as the data collection process include:

- **China, Egypt, India, Indonesia, Malaysia, Mexico, Norway, Peru, the Philippines, S. Africa, Saudi Arabia, Switzerland, USA, UAE and Zambia.**

First meeting of technical expert group

The first meeting of the expert group was held on 29 June 2017 by teleconference. The meeting provided an opportunity for an initial discussion on some of the key issues to be agreed in developing a methodology to measure fossil fuel subsidies including the pros and cons of different approaches, how this relates to the development of an internationally agreed methodology and how to move forward. The key takeaways from these discussions are currently informing the development of a draft methodology paper, which is being prepared by colleagues from GSI and OECD, to be discussed at the follow-up meeting among experts in Rome on 29 September 2017.

A more detailed summary of the discussions of the first meeting of the expert group is available for download here: <https://drive.google.com/open?id=0BxUOZ2JdIS6MTkZSYjJoYkQ0RWc>

⁹ OECD (2015) [Companion to the Inventory of Support Measures for Fossil Fuels](#)

¹⁰ OECD-IEA Fossil Fuel Support and Other Analysis – [Methodology](#)



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Milestones and timeline for development of methodology

- ✓ **29 June 2017:** First expert group consultation meeting (virtual meeting)
- **August-September 2017:** First draft of methodology
- **29 September 2017:** Second expert group consultation meeting (Rome, Italy)
- **October-November 2017:** Review of draft methodology by select group of country experts and representatives from G20 and APEC Peer Review processes
- **December 2017:** Revised draft methodology circulated for review to Inter-Agency and Expert Group on the SDG Indicators (IAEG-SDG) and wider group of countries

March 2018: Final methodology published

- **April – September 2018:** Pilot data collection in select countries / country case studies
- **TBD 2018:** First meeting of expanded expert group including partners for data collection

2020-2030: Data collection for all UN member countries



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2. Reference materials

Some key publications and materials relating to FFS by partners are saved in the Google folder:
<https://drive.google.com/open?id=0BxUOZ2JdIS6MTkZSYjJoYkQ0RWc>

Online links to additional materials are provided below:

Methodologies for estimating support for fossil fuels

- IMF Working Paper (2015) [How large are global energy subsidies?](#)
- Parry et al. (2014) [Getting Energy Prices Right: From Principle to Practice](#)
- Clements et al. (2013) [Energy Subsidy Reform : Lessons and Implications](#)
- OECD (2015) [Companion to the Inventory of Support Measures for Fossil Fuels](#)
- Steenblik (2003) Subsidy Measurement and Classification: Developing a common framework (saved in Google folder)
- OECD (2016) [OECD's Producer Support Estimate \(PSE\) Manual](#)
- IEA (2015) World Energy Outlook: [Fossil-fuel subsidies – methodology and assumptions](#)
- GSI (2014) [Comparison of fossil fuel subsidy and support estimates](#)
- ODI (2015) [Empty promises: G20 subsidies to oil, gas and coal production](#)

Country reports on subsidies, including fossil fuel subsidies

- Ministry of Finance Germany (2016) 25th Subsidy Report of the Federal Government (see Google folder)
- Ministry of Environment, Land and Sea – Italy (2016) [1st Catalogue of Environmentally Harmful Subsidies \(EHSs\) and Environmentally Friendly Subsidies \(EFSs\)](#) (in Italian with an English translation of the Introduction and Executive Summary) (see Google folder)

Additional links and information

- <http://www.imf.org/external/np/fad/subsidies/>
- <http://www.imf.org/external/np/fad/environ/>
- <https://www.iea.org/newsroom/news/2017/april/commentary-putting-the-right-price-on-energy.html>
- <http://www.iea.org/statistics/resources/energysubsidies/>
- <http://www.scb.se/en/finding-statistics/search/?query=environmental+accounts>
- http://www.scb.se/en_/Finding-statistics/Statistics-by-subject-area/Environment/Environmental-accounts-and-sustainable-development/System-of-Environmental-and-Economic-Accounts/Aktuell-Pong/38171/Behallare-for-Press/403334/



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3. Proposed agenda for second expert group consultation

Villa Celimontana, Società Geografica Italiana, via della Navicella 12, Rome, Italy

28 September	
19:30-(22:00)	Informal dinner at Obicà al Parlamento Piazza Firenze 28 (near Pantheon and Parliament)

29 September	
08:30-09:00	Registration
09:00-09:15	Opening remarks and G7/G20 updates on fossil fuel subsidies Aldo Ravazzi Douvan, Chief Economist, Ministry of Environment - Sogesid TA, Italy
09:15-09:30	Tour de table
09:30-10:00	Introduction, the SDG process, recap of first meeting and consultation overview Joy Kim, Economy Division, UN Environment Jillian Campbell, Science Division, UN Environment
10:00-10:45	Presentation of the draft options paper and case study on the global monitoring of fossil fuel subsidies Peter Wooders, Global Subsidies Initiative (GSI) Ronald Steenblik, Organisation for Economic Co-operation and Development (OECD) <i>The presentation of the options paper will present methodologies for scoping and calculating subsidies, the current state of monitoring, and which data sources could be used/collected. Linkages to other global policy processes will be explored, and draft guidance will be offered for countries wishing to improve their national monitoring. The presentation will cover an in-depth case study illustrating current experiences and potential lessons learned. Options for indicators and sub-indicators to measure fossil fuel subsidies will be presented as a basis for the following technical consultation.</i>
10:45-11:00	Questions and discussion of the draft options paper and case study
11:00-11:15	Coffee break
11:15-12:30	Technical consultation on the development of methodologies Joy Kim and Jillian Campbell, UN Environment (Moderators) Peter Wooders, GSI, and Ronald Steenblik, OECD (Brief presentations) <i>This session will be structured around four key areas of discussion.</i> 1. Price gap measurements: values for price, benchmarks, and taxation



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12:30-14:00	Lunch break
14:00-16:30	<p>Technical consultation on the development of methodologies (<i>continued</i>)</p> <ol style="list-style-type: none"> 2. Electricity from fossil fuels: inclusion and measurement 3. Producer subsidies: inclusion and measurement, revenue foregone, risk transfers, loans 4. Sub-indicators: external costs (GHG emissions, pollution), fossil fuel subsidy reform efforts, tax revenue raise
16:30-16:50	<p>Review of discussions, proposals for providing feedback and next steps</p> <p>Joy Kim, UN Environment Peter Wooders, GSI Ronald Steenblik, OECD</p>
16:50-17:00	<p>Closing remarks</p> <p>Aldo Ravazzi Douvan, Ministry of Environment</p>