



GUIDANCE ON MEASURING FOSSIL FUEL SUPPORT

Updates on OECD work

Session 7

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Background - OECD Inventory of Support Measures for Fossil Fuels

Inventory since 2010

- Over 1500 measures
- In 51 OECD, G20 and EU Eastern Partnership countries

Country notes: interactive webbooks

- Country's energy market, FFS policy environment, recent developments, opportunities for reform

Companion to the Inventory

- Draw out trends and complement the analysis by reviewing recent international developments

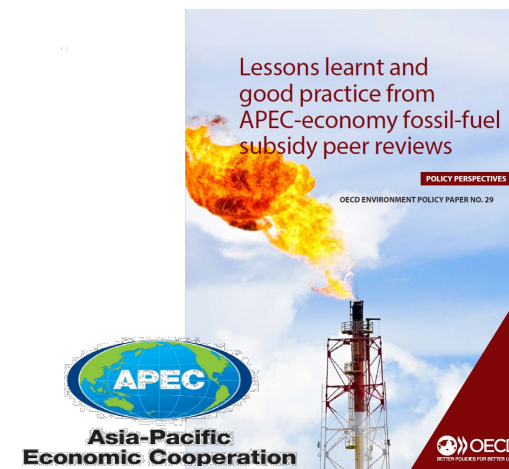
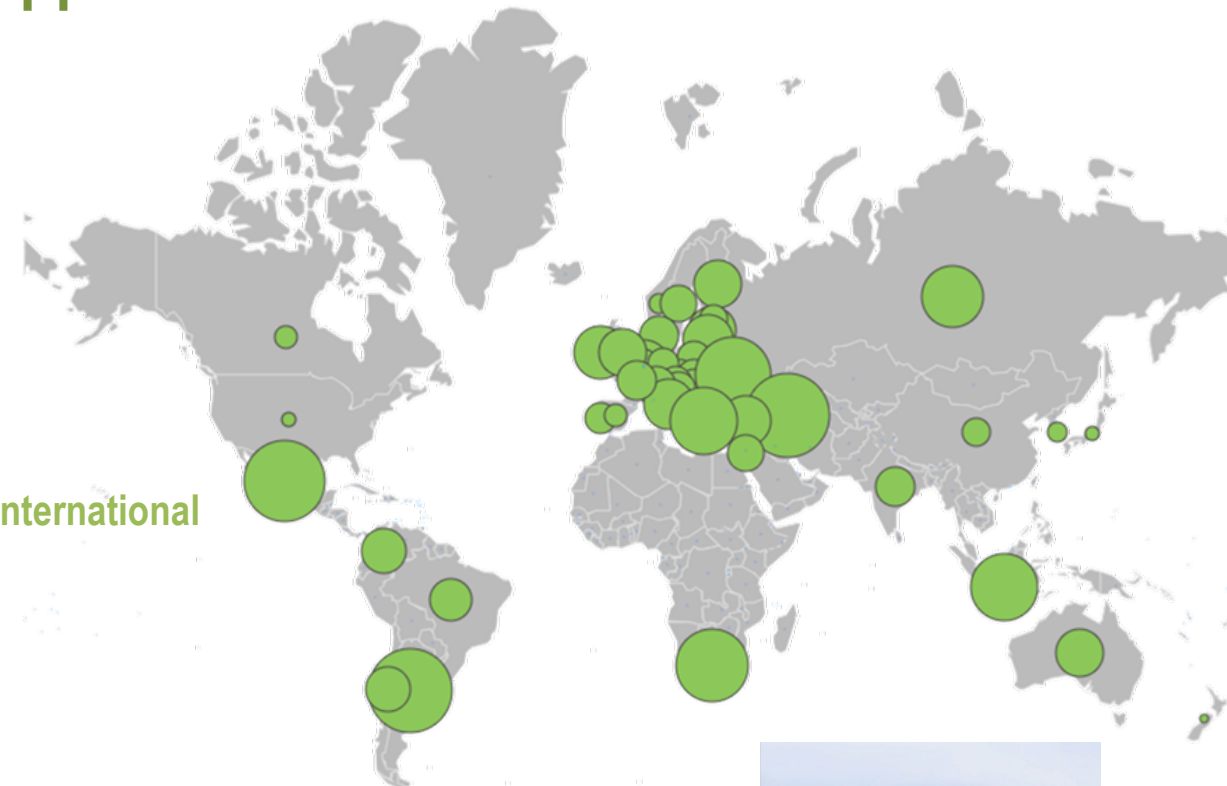
<https://www.oecd.org/fossil-fuels/>

<https://fossilfuelsubsidytracker.org/> [OECD, IISD]

Complemented with IEA consumer subsidy estimates

OECD approach and inventory used in

- OECD country reviews, G20, APEC Peer Reviews
- G7 efforts to enhance transparency for reform
- Support for Agreement on Climate Change, Trade and Sustainability negotiating parties
- UNEP SDG 12c1 reporting methodology





- **Why do we need FFS inventories?**
- **Inventories are important tools to:**
 - Enhance transparency on the magnitude and nature of government support for fossil fuels
 - Inform national policies and help prioritise subsidy and tax reforms
 - Empower international work on reducing government support ...
- **Main purpose is to direct and inform reform strategies**
 - Provide governments with a list of measures that are potential candidates for reform
 - Allow governments to track and evaluate individual supports
- **Desirable characteristics**
 - Inventories should be as comprehensive as possible, with enough detail for policy and analytical purposes
 - Inventory data should lend themselves to being used for several purposes
 - Inventories can be a rich source for official statistics and accounts and for deriving subsidy related indicators



Background – OECD Informal Task Team

- **Measurement challenges associated with FFS data**
 - Differences in definitions and measurement methods used
 - No universal agreement on the measures that constitute a subsidy and on how to estimate their monetary value
 - scope of support measures in databases held by IGOs is incomplete and varies across countries
 - concerns about comparability of FFS data across countries and interpretation
 - **OECD Informal Task Team on Measuring Fossil Fuel Subsidies (ITT-FFS)**
 - Help advance the measurement of FFS and ensure international coherence in reporting
 - Contribute to OECD work on FFS and to UN Environment work on SDG indicator 12.c.1
 - Improve the quality and comparability of the data and indicators derived from OECD Inventory
 - Exploit synergies with national efforts to report on the SDG indicator 12.c.1
- Output: Note on practical guidance for improving the measurement of fossil fuel support
 - Will also inform the G20 Data Gaps Initiative – Recommendation 6 (climate subsidies)



- **Objectives**
 - Help countries measure, compile and report FFS data.
 - Contribute to further harmonise international reporting of FFS data
 - Identify synergies with official statistics and accounts.
 - Complement the methodology for Measuring FFS in the Context of the SDGs.
- **Content**
 - What is a subsidy? Key concepts, terms and definitions
 - What to include in a FFS inventory? Delimiting the scope of reporting
 - How to set-up an inventory? A pragmatic and incremental approach
 - How to estimate support measures for fossil fuels?
 - Improving data collection and harmonisation
 - Improving data dissemination and communication
 - Outstanding measurement issues



- **What is a “subsidy”?**
 - WTO definition under the Agreement on Subsidies and Countervailing Measures (ASCM). OECD. UN SDG 12.c.1 reporting methodology → broad definition of “support”
 - SNA and SEEA definition → more limited scope: subsidies and similar transfers
- **What form can subsidies take?**
 - A wide variety of relevant policy instruments exist
 - Types of support by transaction type, i.e. mechanism through which support is provided
 - Types of support by targeted aspects (incidence)
 - Production and consumption
 - Specific factors of production
 - Output returns, income (producer or consumer),
 - Costs of intermediate inputs (production side)
 - Unit consumption cost

Support measures by transaction type

Direct transfer of funds

Induced transfers

Tax expenditure

Tax revenue foregone

Other government revenue foregone

Transfer of risk to government

Adopting a common definition of FFS in terms of transaction and incidence is essential to international monitoring



Delimiting the scope of reporting

Any government measure that may confer an absolute or relative benefit or preference for the production or consumption of fossil fuels should be considered a candidate for an inventory of support measures for fossil fuels

Scope		Government measures
Include	<input checked="" type="checkbox"/>	Measures that <i>specifically target producers and consumers of fossil fuels</i> , or general support to the sector
	<input checked="" type="checkbox"/>	Measures that <i>support the production and consumption of all types of fossil fuel products</i> – primary fossil-fuel commodities and secondary refined or processed products
	<input checked="" type="checkbox"/>	Support at <i>all levels of government</i> – i.e. measures provided at national, state or provincial, and local or municipal levels
	<input checked="" type="checkbox"/>	Estimates of <i>undercharging of fossil-based users of transport infrastructure services</i> whenever possible
	<input checked="" type="checkbox"/>	<i>Regulatory exemptions</i> targeting the fossil fuel sector as a simple qualitative list
Do not include	<input checked="" type="checkbox"/>	Measures that support the use of non-energy inputs in energy-intensive industries
	<input checked="" type="checkbox"/>	Non-priced externalities.

Adopt step-wise approach - Prioritise quantification of budgetary transfers, tax expenditures, and induced transfers to support cross-country harmonisation



OECD Inventory - scope of data collected

Support Type	OECD Inventory Mandate and Current Capture	UNEP SDG 12.c.1 Mandate and Current Capture
Direct budgetary transfers	Yes – collected.	Yes - recommended for first round.
Induced transfers (price support)	Yes - IEA for consumer; not yet captured on producer.	Yes - recommended for first round; likely to rely on IEA data.
Tax expenditures (including environmental fees and fuel mineral leasing)	Yes – partial; primarily capturing fuel tax reductions, exemptions.	Yes - optional, 2025 target for TE. Fees if in TE.
Risk transfer – credit	Yes – partly tracked within OECD; no systematic tracking of credit in inventory.	No - delay until consensus methodology.
Risk transfer – liability, including accident, reclamation, health	Yes - low capture.	No - delay until consensus methodology.
Regulatory exemptions	Yes – low capture.	No – certainly not in first round.
State-owned enterprises	Yes - low capture.	NO - similar pattern to OECD likely.

OECD covers 51 countries; UNEP covers 212.



The case of tax expenditure – Common issues (OECD inventory)

- **Under-reporting**

- Lack of detailed reports, quantitative data and legal requirement to report
- Most reported: Reductions/exemptions in *consumer taxes* – mainly fuel excise taxes
- Observed gaps: Tax incentives through *corporate income tax* system; Tax incentives provided at *sub-national level*

- **Variations across countries and over time → interpretation challenges**

- Tax incentives typically defined in relation to a country's standard tax system
 - Even small deviations from high benchmark rates translate into large amounts of support
 - Baseline rates, terms or eligibility change over time
- Differing views on whether certain tax provisions constitute a tax incentive or form part of a standard tax treatment
 - Preferential income tax treatment for certain firms, e.g. state-owned enterprises
 - VAT exemptions or reductions for energy products
 - Treatment of different tax rates
 - on different fuels used for the same purpose (diesel vs gasoline)
 - on the same fuel used for different purposes (transport vs heating)
 - when the same fuel is used for the same purpose, but by a different user (driving on highways vs driving on private farm land)



Tax expenditure - Overcoming comparability and interpretation issues

- **Collect information on national tax rates (including baseline)**
 - Capture baseline rates to assist TE benchmarking and comparisons
- **Develop standardised approaches for measuring specific types of TE**
- **Use harmonised international or regional benchmarks**
 - Single reference price on carbon emissions
- **Benchmarking rates from standardised rates (ECR approach)**
 - Across fuels , by energy content, carbon content, etc.
 - The effective tax rates approach (per tonne of CO₂ or per GJ) helps normalize differences in gross values and provide a more even base for comparison.
- **Communicate FFS data with indicators such as effective carbon rates (ECR) that are more comparable across countries**

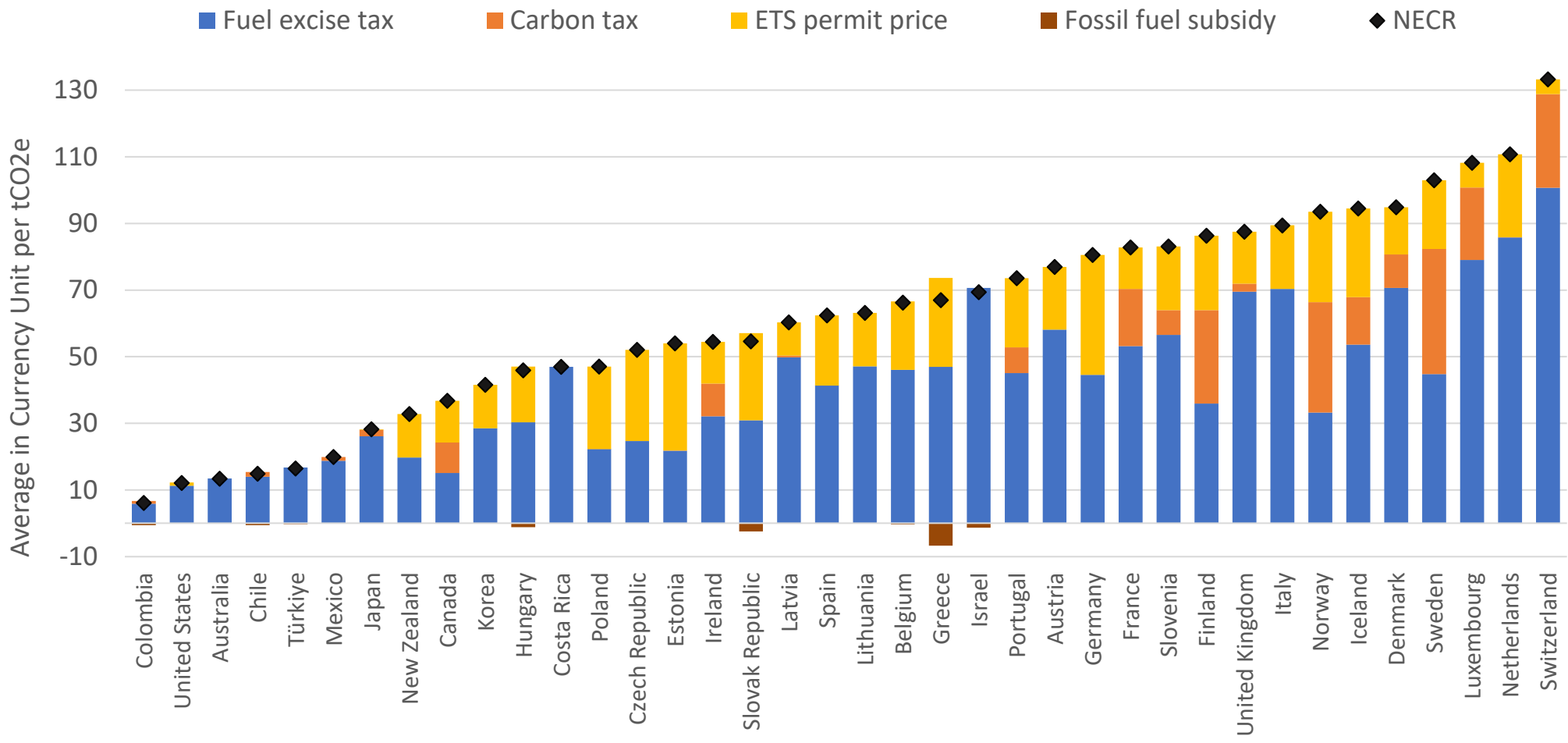


- **The OECD Net Effective Carbon rates (net of pre-tax direct transfers)**
 - Measures the price on carbon emissions arising from the sum of fuel excise and carbon taxes, tradeable permits, and budgetary transfers, expressed per tonne of CO₂ or GHG emitted.
 - Common benchmark prices used so far: EUR30; EUR60; EUR120
 - Revenue forgone by not pricing emissions to at least these external benchmarks
- **Main advantages**
 - Ease interpretation: a decrease in the amount of revenue forgone corresponds to progress towards the goal of pricing all energy-related carbon emissions at a certain benchmark.
 - Related indicators are attractive
 - less subject to judgment or local conditions; less at risk for manipulation; more comparable across countries
 - allow comparisons between taxes paid by different sectors
 - allow the monitoring of trends of support levels in a manner less sensitive to domestic data structure
- **Limitations**
 - Disregards behavioural responses
 - Cover only support to end-users; exclude other measures that determine price signals (e.g. transfers of risk)
 - Do not include VAT reductions or support to producers



Measuring fossil fuel support

Net effective carbon rates (NECR)



Source: OECD (2022), *Pricing Greenhouse Gas Emissions: Turning Climate Targets into Climate Action*, OECD Series on Carbon Pricing and Energy Taxation, OECD Publishing, Paris



Integrating FFS inventory data with official statistics and SEEA accounts

- **Institutional integration: Ministries of Finance, Tax Agencies, NSOs**
- **Added value**
 - Opens the data to a wide array of additional uses and analyses
 - Helps ensure that data are compiled on a consistent basis in all countries
 - Enables linkages to recipient industries in line with international standard classifications.
 - Helps ensure coherence and exploit synergies with data on Environmental Subsidies and Similar Transfers, Environmental Tax revenue, and Potentially Environmentally Damaging Subsidies (PEDS)
 - Integrating the collection of data on FFS and other PEDS with national FFS inventories may provide significant efficiency gains for NSOs
 - Helps combine the data with emission or energy accounts
- **Current limitations**
 - Integrating full set of support types is challenging (differences in scope will remain; integrating core support measures should be aim)
 - Flows most amenable are direct transfers (captured in national accounts)
 - Other support types are more difficult to map into accounts and their measurement does not (yet) satisfy statistical quality criteria.
 - Data by recipient industry are difficult to obtain or limited to a high aggregate level



Integration with official statistics and the SEEA

Type of Subsidy	OECD inventory	Eurostat Environmental Subsidies and similar transfers (ESST)	SEEA Central Framework
Direct subsidies	✓	✓	✓
Social transfers	✓	✓	✓
Transfers within government/ to RoW	✓	✓	✓
Capital grants	✓	✓	✓
Tax expenditures	✓	✓	
Induced transfers/Price support	✓		
Provision of goods or services	✓		
Government ownership of energy enterprises	✓		
Government loans/loan guarantees	✓		



How to set-up an Inventory?

Adopt a pragmatic and incremental approach

- **Start with reporting a minimum set of support types drawing on easily accessible and well-defined data**
 - Delimit the scope for reporting and analysis - Qualitative listing of likely relevant policies, grouped by support type - Identify data sources and gaps
 - Establish plan for regular reporting
 - Ensure appropriate institutional arrangements for a coordinated and comprehensive approach
- **Improve and harmonise measurement over time**
 - Regularly review and refine the data collected, and prepare annual progress reports [standardised format; comparisons over time, across countries]
 - Encourage reporting on main support types: prioritise quantification of budgetary transfers, tax expenditures and induced transfers (international reference list)
 - Improve documentation and metadata
 - Use harmonised estimation methods
 - Progressively integrate FFS data with official statistics
- **Making FFS data publicly available**
 - Ensure that FFS data are easily accessible to policy makers, analysts and the public → gain feedback from users



Outstanding issues and areas for further progress

- Harmonise estimation methods and develop common approaches to serve as a reference for compilers and researchers (of benefit for accounts too)
- Maintain an international reference list of support measures, main valuation challenges and how they can be solved
- Develop additional guidance on specific support types to facilitate the integration with SEEA accounts
- Integrate PEDS into the SEEA Central Framework
- Investigate borderline cases
 - to clarify measures on which there is disagreement on whether they should be counted as FFS.
- Further investigate the use of international or regional benchmarks to harmonise tax expenditure data
- Further develop guidance on how to measure transfers of risks

Role of international work by OECD, Eurostat, the London Group, the UNCEEA and the SEEA Technical Committee



**Thank you
for your attention!**



OECD Informal Task Team on Measuring FFS – Main tasks

Advise on the measurement of national fossil fuel subsidy data

- Take stock of national data sources, measurement methods, institutional arrangements, good practices
- Compare OECD FFS data with national data; review differences
- Propose ways to co-operate in measurement & reporting processes
- Develop guidance for national reporting building on good practices in countries and on experience with the OECD Inventory

Facilitate the international harmonisation of FFS data

- Review terms & definitions; propose clarifications
- Advise on methods used to measure FF support
- Advise on the communication and interpretation of international FFS data and indicators
- Advise on the use of international benchmarks (e.g. a reference carbon price)



**Guidance note
on measuring
fossil fuel
support**