

Climate Finance Definitions: Key Concepts for Operationalizing Article 2.1(c) and Shifting Public Financial Flows Away from Fossil Fuels and Towards Clean Energy

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About OCI

Oil Change International (OCI) is a civil society organization that works to expose the true costs of fossil fuels and facilitate the ongoing transition to clean energy, through research, communications, and advocacy. OCI urges governments to deliver an equitable and managed phase-out of fossil fuel production in line with 1.5°C, with a just transition for workers and communities affected by this transition. Within OCI, the Global Public Finance team works to promote best practices on aligning international public finance with the 1.5°C warming objectives of the Paris Agreement, and tracks data on G20 public finance through OCI's Public Finance for Energy Database.

About IISD

The International Institute for Sustainable Development (IISD) is an award-winning independent think tank working to fulfill a bold commitment: to create a world where people and the planet thrive. IISD's Energy program has run a dedicated global initiative on government support for energy since 2005, creating large datasets at the global level and running dedicated national initiatives, in collaboration with intergovernmental organizations, national governments and civil society organizations. IISD leads a number of initiatives to share best available data on public financial flows for fossil and clean energy, including with the OECD through www.FossilFuelSubsidyTracker.org and a wide range of civil society organizations through www.EnergyPolicyTracker.org. This submission has directly reproduced or slightly adapted materials from a range of IISD publications, particularly our formal submission to the UNFCCC global stocktake (Urazova et al., 2023), assessments of G20 public support for fossil fuels (Geddes et al., 2020) and collaborative work with UNEP and the OECD on the formal methodology for reporting on fossil fuel subsidies under the Sustainable Development Goals (Wooders et al., 2019). We have indicated such instances and are indebted to the original authors of these prior publications.

Executive Summary

This joint submission to the Standing Committee on Finance outlines how the Committee could take into consideration the importance of formally recognizing the role of public financial flows within the definition of climate finance. This document highlights three key subconcepts within public financial support for energy - subsidies, state-owned enterprises, and public finance - and indicates how these subconcepts can be understood as tools to support a just energy transition aligned with a 1.5 C warming limit. These considerations are fundamental to understanding how to define implementation under Article 2.1(c) of the Paris Agreement, recognizing the catalytic role public financial flows have in shifting global financial flows towards a low greenhouse gas emissions trajectory and climate resilience.

1. Public financial flows: A distinct and important sub-concept in climate finance and how it should be further disaggregated to support negotiations

1.1 Why “public financial flows” matter

Public financial flows play a unique and powerful role in reaching countries’ obligations under the Paris Agreement, and particularly the commitment to “mak[e] finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development” as outlined (Article 2.1(c)). Thus public financial flows must be given special attention when defining and conceptualizing definitions of climate finance in the upcoming report of the Standing Committee on Finance to be prepared for the 28th Conference of the Parties.

The impact of public financial flows reach beyond their own scale, because they serve to de-risk projects for private financiers and as such have an outsized influence on which projects get built or not. Governments’ public financial choices play a large role in shaping our future energy system, and it is important that these choices are guided by existing multilateral commitments and informed by climate science. Public financial flows are also an important focal point for climate action because they are directly under government control, and as such can be rapidly directed to influence energy sector development (Urazova et al., 2023). Finally, as energy transition gathers pace, and private markets more accurately price the risk of fossil energy investments, there will be increased pressure for this risk to be borne instead by public financial flows (Urazova et al., 2023). This risks leaving public institutions heavily exposed to potential impacts of asset stranding, which may compromise their ability to deliver on broader economic and social obligations. Shifting public financial flows, therefore, is also critical to manage the economic and financial risks faced by public institutions during transition.

As elaborated in Urazova et al, 2013, “any public financial support for new fossil fuel projects is not aligned with climate targets. There is a longstanding consensus that there is no room for new coal, and a coal phasedown is required to mitigate climate change, as concluded by numerous expert studies (International Energy Agency [IEA], 2021; Rocha et al., 2016; Yanguas Parra et al., 2019). Both the Glasgow Pact and the Sharm el Sheikh Implementation Plan now commit to a “phasedown of unabated coal” (UNFCCC, 2021, 2022). More recently, a similar consensus has emerged around oil and gas. An International Institute for Sustainable Development (IISD) synthesis of the latest research on climate and energy pathways demonstrates that analysis by all credible expert institutions, including the Intergovernmental Panel on Climate Change (IPCC) and IEA, concludes that the exploration and extraction of oil and gas from new fields is not compatible with 1.5°C pathways and that oil and gas consumption and production must decrease at least 65% by 2050 (Picciariello et al., 2022). At UNFCCC COP 27 (2022), India proposed to extend to other fossil fuels the agreement to phase down coal. Although this proposal has not yet gained support from all parties, a broad coalition

of more than 80 countries took up the call (Darby et al., 2022). Stopping financial flows for new fossil fuel projects should be the first priority for the parties to implement Article 2.1(c) of the Paris Agreement.”

This submission outlines how public finance flows can be given specific attention in defining and clustering definitions of climate finance, in order to crystallize the primary obligations of Parties in ensuring targets on climate finance and aligning financial flows with climate goals within the UNFCCC process remain within reach.

1.2 Key sub-concepts within public finance flows: subsidies, SOE investments and public finance

Three categories of “public support” can be identified, all of which represent ways that public funds can be allocated to energy: subsidies, SOE investments, and public finance (which can be international or domestic) (Geddes et al., 2020).

Subsidies are government policies that confer a financial benefit on energy producers, consumers, or both, and they can take several different forms. As elaborated in Wooders et al., (2019), they can be direct budget transfers, such as direct spending on research and development for fossil fuel exploration. They can also take the form of tax expenditures, sometimes referred to as government revenue foregone, such as through reduced rates or exemptions from value-added tax or tax breaks for diesel use in transport. Subsidies can also take the form of consumer price support, provided when end-user prices paid by consumers are set below a reference price that reflects the full cost of supply; that is, a price that would prevail in a competitive market (e.g. when electricity prices are regulated at below-market prices (IEA, 2020). They can also consist of goods or services provided at below-market prices.

State-owned enterprise (SOE) investments are a way that a number of countries also provide public support to energy. Energy sector SOEs, wholly or majority-owned by governments, make large capital investments every year into energy sector projects. There is also a wide variety of other ways in which SOEs can have a range of impacts on government budgets, with a number depending on budgetary transfers to remain financially viable and in operation and others contributing significant shares to government revenue (International Monetary Fund, 2013; Sdravovich et al., 2014).

Public finance for energy flows through public finance institutions (PFIs) that governments own and operate, again through either full or majority ownership. Relevant institutions include multilateral, bilateral and national development banks, development finance institutions, and export credit agencies. Public finance can take the form of grants, loans, equity, bonds insurance, guarantees, and technical assistance, often at a below-market value (i.e., concessional rates). Even when not concessional, the high credit ratings of publicly owned financial institutions, their signaling of government priorities, and their often greater research and advisory capacity can reduce the risk to parallel private investors and drive private investment in fossil fuel production that would not otherwise occur (OECD, 2017; Tucker et al., 2020).

1.3 How significant are the financial flows associated with these concepts?

The financial support provided through each type of public support measure to fossil fuels are significant in and of themselves, reaching tens or hundreds of billions. This support also leverages an even larger volume of private finance, and therefore provides a direction that shapes the future of global energy systems. The existing scale of support for fossil energy also represents an equivalent opportunity for clean energy, if public financial flows could be redirected. This shows that shifting this money is not only integral to meeting Paris alignment goals, but also an important opportunity for meeting climate finance targets.

Subsidies

As reported in Urazova et. al (2023), according to the Fossil Fuel Subsidy Tracker, **fossil energy subsidies reached USD 732 billion in 2021**, 35% higher than in 2015, the year of the Paris Agreement (USD 543 billion). The same review found that on average, governments have allocated at least USD 643 billion per year for fossil fuel support from 2010 to 2021. There is still no complete data set of the value of fossil fuel subsidies in 2022—but, based on the first preliminary estimates from the International Energy Agency (IEA), global subsidies for fossil fuel consumption exceeded USD 1 trillion for the first time, reaching a total value of USD 1.1 trillion (IEA 2023). The IEA dataset does not cover all countries, and does not include production subsidies, so the final value of fossil fuel subsidies for 2022 will be higher still, as further data become available.

In contrast, the most recent published analysis from the International Renewable Energy Agency estimated that subsidies for renewables constituted close to USD 167 billion in 2017 (including support for biofuels), with subsidies for renewable power generation of around USD 128 billion (Taylor, 2020). The International Energy Agency's estimate of renewable power subsidies is slightly higher, at USD 146 billion (IEA, 2018). In preparing their submission to the Global Stocktake, Urazava et al. (2023) were unable to identify more recent estimates of support levels for clean energy.

State-owned enterprise (SOE) investments

As of the last available international study, SOE investment for G20 countries amounted to an average of \$257 billion per year (2017-2019 average) (Geddes et al., 2023). SOEs play a much more important role in some countries' energy systems than others. Out of the thirteen G20 countries in which national-level majority-government-owned SOEs operate, Argentina, China, Russia, and Saudi Arabia are the largest providers of SOE investment in absolute USD terms (Geddes et al., 2020).

Public finance

OCI's Public Finance for Energy Database demonstrates that international public finance still flows predominantly to fossil fuel infrastructure. Between 2019 and 2021, the G20 and MDBs provided at least \$55 billion USD annually in public finance for fossil fuel projects, almost double their support for clean energy (\$29 billion USD annually).

For domestic public finance, it is difficult to estimate the total global value of domestic public finance for energy, due to poor transparency. Only limited national-level studies exist. For example, research by the Climate Policy Initiative found that in South Africa, annual investments by the government in clean energy amounted to around ZAR 3 billion, while annual investments by development finance institutions topped ZAR 4 billion (Cassim et al., 2021).

Public development banks invest a total \$2.2 trillion a year: an estimated 10% of global financial flows (Finance in Common, 2023). Worldwide, 693 government owned or operated banks own assets worth about \$38 trillion and if central banks, sovereign wealth funds, pensions, and multilateral banks are also included, this doubles to \$73 trillion. This finance holds the potential to play a catalytic role in the energy transition: public finance has government-backed credit ratings, is often provided at below-market rates, often has larger research and technical capacity, and signals broader government priorities. All of this helps make a project a less risky and more attractive investment. Regarding international public finance flows,

1.4 To what extent are these terms already reflected in existing international negotiations and commitments?

In addition to the commitment to align financial flows with the Paris Agreement (Article 2.1.c), several parallel multilateral commitments have been made on public support. Linked implementation efforts show that having working definitions for public support is useful for clarifying commitments and tracking progress on implementation. Several multilateral commitments already exist on public financial flows.

Commitments on subsidies (Urazova et al, 2023):

- In 2022, under Target 18 of the Global Biodiversity Framework (Convention on Biological Diversity, 2022), countries committed to *“identify by 2025, and eliminate, phase out or reform incentives, including subsidies harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least 500 billion United States dollars per year by 2030”*, starting with the most harmful incentives, and to scale up positive incentives for the conservation and sustainable use of biodiversity.
- In 2021 and 2022, the Glasgow Pact and the Sharm el-Sheikh Implementation Plan committed to *“phase-out of inefficient fossil fuel subsidies, while providing targeted support to the poorest and most vulnerable in line with national circumstances and recognizing the need for support towards a just transition”* (UNFCCC, 2021, 2022).
- In 2015, under Sustainable Development Goal (SDG) indicator 12.c.1, countries committed to (United Nations General Assembly, 2015) *“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.”

- In 2009, G20 countries committed to (G20 Leaders Statement, 2009) *“phase out and rationalize over the medium-term inefficient fossil fuel subsidies while providing targeted support for the poorest. Inefficient fossil fuel subsidies encourage wasteful consumption, reduce our energy security, impede investment in clean energy sources and undermine efforts to deal with the threat of climate change.”*
- This was followed closely by a similar commitment from Asia-Pacific Economic Cooperation economies (APEC, 2009). It has since been repeated in numerous summit statements (Wooders et al., 2021). G7 governments, a subset of G20 countries, in 2016 adopted a deadline of phasing out “inefficient fossil fuel subsidies” by 2025 (G7 Ise-Shima Leaders’ Declaration, 2016).

Commitments on State-owned Enterprises (SOEs):

- No multilateral commitments currently exist on public support through state-owned enterprises. However, there is a growing body of evidence demonstrating that they are an important piece of the climate mitigation puzzle. Some national-level commitments have also been made. A review of SOE commitments in India, for example, found a broad range of national-level commitments, such as on clean energy targets (Aggarwal et al., 2022).

Commitments on Public Finance:

- In 2021 at the 26th Conference of the Parties, 34 countries and five public finance institutions signed the Clean Energy Transition Partnership. This partnership commits signatories to *“end new direct public support for the international unabated fossil fuel energy sector within one year of signing this statement*, except in limited and clearly defined circumstances that are consistent with a 1.5°C warming limit and the goals of the Paris Agreement.”* Signatories included some of the largest historic providers of international public finance to fossil fuel projects, including Canada, the United States, Italy and Germany.
- The following year, in 2022, the G7 adopted a near-identical commitment, bringing Japan, one of the world’s largest historic providers of international public finance on board (G7 Climate Ministers, 2022). In 2023 G7 Climate, Energy and Environment ministers reiterated their commitment and claimed that they have now ended international fossil fuel support. They also commit to report on progress made on this agenda by the end of 2023 (G7 Climate Ministers, 2023).
- On domestic public finance, some countries have made national commitments. For instance, the Canadian government has committed to develop a plan to “phase-out

public financing of the fossil fuel sector, including from Crown corporations”, consistent with reaching net-zero emissions by 2050 (Parliament of Canada, 2022). Some jurisdictions, such as the EU, have adopted or are designing taxonomies to classify what economic activities are environmentally sustainable, which could be used to redirect public finance (European Commission, 2020).

2. How can public financial flows and related concepts best be defined?

2.1 Public financial flows

Public financial flows can be considered any type of grants, financing, investment, loans, guarantees, or mechanisms that derive from government funding and the public sector at large. Public financial flows can be further understood into sub-concepts of public support, which includes subsidies, investments by state-owned enterprises and lending from public finance institutions (including both domestic and international).

2.2 Subsidies

The World Trade Organization, in its Agreement on Subsidies and Countervailing Measures, defines a subsidy as (paraphrased): any financial contribution by a government, or agent of a government, that confers a benefit on its recipients in comparison to other market participants (WTO, 1994, Article 1.1). A financial contribution is defined as either where a government practice involves a direct transfer of funds, potential direct transfer of funds or liabilities; where a government revenue that is otherwise due is forgone or is not collected; where a government provides goods or services other than general infrastructure, or purchases goods; or where a government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the above types of functions which would normally be vested in the government. This is the most widely recognized definition of a subsidy. It is used as the basis for the formal indicator on fossil fuel subsidy reporting in the SDGs (Wooders et al., 2019). The underlying methodology for SDG reporting can also be consulted for a detailed taxonomy of different types of common subsidy policy and how they can be categorized (Wooders et al., 2019).

2.3 State-owned enterprise (SOE) investments

SOE investments can be defined as the capital expenditure of an SOE (Geddes et al., 2020). In some contexts, SOE corporate social responsibility (CSR) expenditure may also represent a meaningful contribution of public support to local communities living near sites of fossil energy extraction and processing, which may be relevant to track for the purposes of discussions around just transition.

2.4 Public finance institutions

Public finance institutions can be grouped as either domestic or international. International public finance consists of institutions that include Multilateral Development Banks (MDBs), such as the World Bank, national Development Finance Institutions (DFIs) and Export Credit Agencies (ECAs), and bilateral financing instruments between countries. According to the WTO definition and linked UNEP, IISD, OECD methodology (Wooders et al, 2019), public finance for fossil fuels can be considered a fossil fuel subsidy to the extent it is provided at concessional or below market rates. However, whether public finance flows can be classified as subsidies or not should not matter for governments using their direct influence over public finance institutions to align financial flows with policy objectives.

3. Relevance for ongoing and future negotiations

3.1 Importance of transparency and reporting

It is important to improve the state of transparency on public financial support for energy. Governments must at the very least immediately adhere to reporting requirements on fossil fuel subsidies under SDG indicator 12.c.1. Transparency is especially lacking when it comes to SOE investments and domestic public finance, but continues to be poor on fossil fuel subsidies and international public finance flows too. We anticipate that one possible outcome from the Global Stocktake may include a call for increased transparency on public financial flows, which will require clarity on different sub-categories of “public support”. In this area, Nationally Determined Contributions (NDCs) may provide an important space for reporting and taking stock of progress made towards aligning Parties’ public finance flows with the objectives of the Paris Agreement. While efforts to increase transparency are critical, this should not delay concrete policy action. Based on existing reporting, commitments and scientific evidence, governments should and can already take concrete action to align financial flows with the goals of the Paris agreement by adopting roadmaps for ending fossil fuel support and shifting fossil fuel finance flows to climate action. This can be done in parallel with efforts to increase transparency.

3.2 Tracking progress against existing commitments

The G7 has pledged to phase out “inefficient” fossil fuel subsidies every year since 2009. In 2016, they specified a timeline, committing to phase out subsidies by 2025. In 2022, G7 ministers took a small step forward, committing to make a progress report in 2023 and further stating that they would consider options for developing joint public inventories of fossil fuel subsidies (G7 Climate, Energy and Environment Ministers, 2022). In 2023, the G7 committed to reporting on progress by the end of 2023, “building on the ongoing work at the G20, UN, OECD and its subsidies inventory, and other relevant fora to facilitate greater transparency on inefficient fossil fuel subsidies globally, strengthen our action as necessary and consider options

for developing joint public inventories of fossil fuel subsidies” (G7 Climate, Energy and Environment Ministers’ Communiqué, 2023).

The Clean Energy Transition Partnership, launched at COP26, has already had considerable real-world impact in aligning public finance flows with a 1.5 C trajectory. With the passing of the end-of-2022 deadline, tangible progress has been made in shifting international public finance away from fossil fuels. Out of 16 high-income signatories that provide significant international public finance for energy, eight have new or existing policies that broadly meet the promise they made in Glasgow. As of May 2023, this is shifting **\$5.7 billion USD per year** out of fossil fuels and into clean energy, and is playing a concrete role in reaching Parties’ commitments under Article 2.1(c) of the Paris Agreement (McGibbon et al, 2023). In 2022, the G7 adopted a near-identical commitment, bringing Japan, one of the world’s largest historic providers of international public finance on board (G7 Climate Ministers, 2022).

3.3 Possible future focal points for negotiations

There are several possible future focal points for negotiations:

Strengthening existing commitments

- Governments should explicitly expand commitments to end fossil fuel subsidies and international public finance for fossil fuels to cover all public financial flows.
- The qualifier “inefficient” should be dropped, as it only creates uncertainty about which subsidies need reform. Rather, exceptional cases should be specifically named, and alternative reform pathways identified—for example, in the case of subsidies that are essential for energy access, targeting subsidies in the short term while developing clean alternative technologies.
- Reporting related to all current multilateral commitments can be enhanced in order to improve transparency and track progress.
- Parties to the UNFCCC may consider following the G7 in committing to make progress reports on phasing out fossil fuel subsidies and international public finance for fossil fuels, and developing inventories. They should submit their inventories, accompanied with their planned actions for ending fossil fuel support, annually through the formal reporting process for SDG indicator 12.c.1 (fossil fuel subsidies)—a process that is currently under-utilized (Urazova et al., 2023).

Integrating existing commitments into UNFCCC Article 2.1(c) implementation

- A distinction between public and private financial actors should be given specific attention in defining climate finance, in order to ensure that Parties use their national decision making capacity and autonomy to align their public financial flows with a 1.5°C trajectory.

- Given the foundation already established at COP 26, the language from the Clean Energy Transition Partnership can be considered and build on for integration into the decision text related to the implementation of Article 2.1(c) of the Paris Agreement, specifically in ending “*new public support for the fossil fuel energy sector, except in limited and clearly defined circumstances that are consistent with a 1.5°C warming limit and the goals of the Paris Agreement*”.

Inviting NDCs to pay special attention to public financial flows

- Clear plans for shifting public financial flows should be incorporated into Parties’ Nationally Determined Contributions (NDCs). Commitments should include setting clear timelines, and considering the establishment of financial and technical support for state and non-state actors in implementation.

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