

Task Force 02

**SUSTAINABLE CLIMATE ACTION AND INCLUSIVE JUST ENERGY TRANSITIONS**

## Raising Ambition on Fossil Fuel Subsidy Reform in G20 Countries

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## Abstract

During the recent energy crisis, fossil fuel subsidies in G20 countries soared to over USD 850 billion in 2022 in response to record high energy prices. Even before the energy crisis, there has been little systemic progress since the first G20 pledge to phase out inefficient fossil fuel subsidies from 2009. Aside from a few major reforms in large emerging economies—the gains of which have been threatened by the reemergence of subsidies since 2022—changes in subsidy expenditure have been driven by fluctuating international prices for fossil fuels rather than policy.

There is increasing scrutiny on the G7 and G20 given looming deadlines to phase out “inefficient” fossil fuel subsidies, such as that in the G7 by 2025 and that for all UN members by 2030 (under SDG Target 12.1(c)). The G20 spearheaded commitments to phase out fossil fuel subsidies in 2009 and now needs to lead implementation via detailed national roadmaps for reform, with firm deadlines for action.

In this policy brief, we provide specific recommendations for the G20 on the implementation of fossil fuel subsidy reform. The intention is to inform G20 advisers and decision-makers about the evidence-based pathways for eliminating fossil fuel subsidies. The brief provides strategies based on successful case studies of subsidy phase-out for overcoming the challenges of reform. We have international commitments, and we have the solutions: G20 leaders need to show how and when they will take action.

## Diagnosis of the issue

Governments provide fossil fuel subsidies for a variety of intended outcomes, including to promote a reliable and affordable supply of energy to households and foster domestic industry (Wooder, Steenblik, and Zinecker 2019). Consumption subsidies are meant to reduce energy costs for users through price caps, direct budgetary transfers, and reduced taxes. Production subsidies support exploration, extraction and processing of fossil fuels via direct transfers, tax cuts, concessional finance, provision of goods or services at below market prices, and transfer of risk (such as assuming responsibility for environmental remediation). Subsidies drive fossil fuel consumption and production, exacerbating air pollution and climate change, among other problems, and disincentivizing energy efficiency and low-carbon alternatives (Gerasimchuk 2017; IRENA 2022).

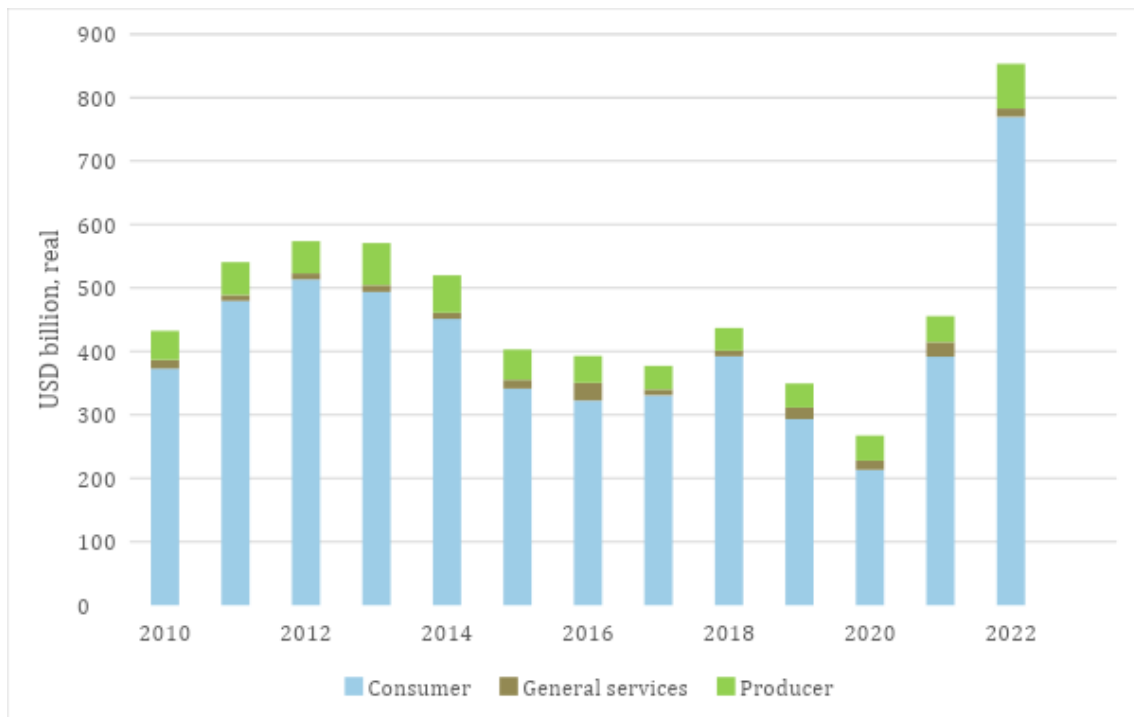


FIGURE 1. Fossil fuel subsidies from G20 members by beneficiary type, 2010-2022.

Source: IISD and OECD, *Fossil Fuel Subsidy Tracker* (2024)

In an attempt to shelter consumers from record high energy prices, governments worldwide increased fossil fuel subsidies to at least USD 1.5 trillion in 2022. A large share was provided by G20 members, with subsidies hitting USD 852 billion – double the annual average in the previous decade (IISD and OECD 2024). The majority (USD 769 billion) was for consumption subsidies as both developed and emerging economies kept prices and costs for transport, electricity, and heating artificially low (IEA 2023). Many of these were not targeted to vulnerable consumers (Bruegel 2023). Subsidies are expected to be smaller in 2023 and 2024 as energy prices ease and time-bound support is wound back.

A commonly cited objective for subsidizing fossil fuels is to assist low-income households and increase energy access. However, research shows that most fossil fuel subsidies are regressive, especially universal consumer subsidies (Coady et al. 2015). An analysis of 32 countries found that the wealthiest quintile of households benefited six times more than the poorest quintile (Del Granado, Coady, and Gillingham 2012), a result reinforced in subsequent studies (Coady et al. 2015). Fossil fuel subsidies can also hinder energy access by causing deficits in state-owned energy companies, crippling their capacity for infrastructure improvements and fuel distribution (Zinecker 2018).

Producer subsidies, although smaller (USD 70 billion in G20 in 2022), have an outsize impact on markets. They crowd in private capital investment, locking in higher production and carbon-intensive development pathways (Erickson et al. 2017). As the world transitions to clean energy, ongoing reliance on fossil fuels jeopardizes energy security, risking stranded assets, energy sector employment, and increasing poverty risks (Dufour et al. 2022). Public support for producers is also unjustifiable during record-high prices.

Subsidies strain government budgets, reducing fiscal space for other priorities. The IMF estimated that eliminating subsidies and increasing taxes on fossil fuels taxes could raise USD 3 trillion a year by 2030 in 121 emerging and developing countries, broadly equivalent to their additional spending needs for the SDGs (Black et al. 2023). A study of 96 developing countries found that fossil fuel subsidies exceeded foreign aid in 59% of the countries in 2015 (McCulloch 2017b). Subsidy reform could liberate substantial revenues for more productive purposes (Laan et al. 2023b).

Governments are aware of the pernicious effects of fossil fuel subsidies and have made commitments to reform them (G7 2022; G20 2009; APEC 2009; UN 2019, 12). The G20 spearheaded these pledges in 2009 with a commitment to phase out and rationalize over the medium-term “inefficient” fossil fuel subsidies while providing targeted support for the poorest (G20 2009). However, reform has clearly stalled and renewed efforts are needed to implement these commitments.

## Recommendations

As the world's largest economies, G20 members should lead on the implementation of fossil fuel subsidy reform. As fossil fuel prices normalize, they should seize the chance to enact meaningful changes. They can do so by implementing the following policy recommendations.

○ **Develop timebound and ambitious national roadmaps for subsidy phaseout that set clear policy-specific deadlines**

Ambitious national roadmaps are needed to set out a detailed approach to reform based on country circumstances, evidence-based strategies, and strong accountability systems.

Roadmaps need to:

- set clear expectations regarding the future policy environment to create certainty for both fossil and clean energy investors; and
- include policy-specific deadlines that eventually phasing out *all* fossil fuel subsidies.

G7 countries have already committed to phase out *inefficient* fossil fuel subsidies by 2025 and all other G20 members have agreed to do the same by 2030 under the UN SDGs. To demonstrate global leadership, G20 members should eliminate *all* fossil fuel subsidies by 2030 or sooner (Urazova et al. 2023).

Suggested text for communiqués:

*1. Reaffirm commitment to eliminate all fossil fuel subsidies by 2030 or sooner, noting the G7 committed to do so by 2025 or sooner. Intensify domestic implementation efforts through national roadmaps that consider country circumstances and best practice*

*on reform. Roadmaps will contain pre-agreed accountability mechanisms and set clear policy-specific implementation deadlines.*

- **Close definitional loopholes**

National roadmaps should be comprehensive and explicit about the types of support considered a subsidy based on internationally recognized and mutually compatible definitions from the WTO, OECD and SDG 12.c.1 reporting methodologies. Interpreting “inefficient” or other qualifiers in accordance with “national circumstances” can be used as an excuse for inaction and is a challenge for accountability on implementation. It is time to reverse the logic and put the burden of proof on governments to demonstrate why any given fossil fuel subsidy is efficient. Exemptions should only be provided in exceptional circumstances, be timebound, and subject to periodic review.

Suggested text for communiqués:

*1. Agree that fossil fuel subsidies may be considered “efficient” only in exceptional circumstances when public policy objectives cannot be achieved via alternative mechanisms, considering their full economic, social and climate impacts.*

*2. Any decision to maintain or adopt a subsidy will be accompanied by plans to develop alternative solutions and will be reassessed regularly with the goal of eliminating the subsidy.*

- **Improve transparency**

A first step toward solving any problem is understanding and measuring its extent and impacts. Authoritative and comprehensive data on the types and size of subsidies provided by governments to fossil fuels is useful to have. Intergovernmental organisations (IGOs: the IEA, IMF and OECD) collect data on subsidies, which are collated in the

Fossil Fuel Subsidy Tracker (IISD and OECD 2024). Governments can improve transparency by endorsing IGOs to continue collecting data on their behalf, increasing domestic transparency (such as dedicated and timely reporting on fossil fuel subsidies in budgets and tax expenditure statements and being explicit about any exemptions to phase-out commitments) and use that data as the basis for their reform planning. The absence of perfect data on the quantum of subsidies should not be an excuse for inaction.

Suggested text for communiqués:

1. *Endorse IGOs' efforts to collect fossil fuel subsidy data on behalf of G20 governments.*

2. *Facilitate IGOs' data collection by improving transparency on public money allocations in government documents and use the data to inform our subsidy reform roadmaps.*

○ **Commit to provide financial and technical assistance for reform in low-income countries**

Low-income countries also need to prioritize fossil fuel subsidy reform to realise significant fiscal savings and avoid future dependency on price-volatile and polluting fossil fuels while wealthier countries transition to clean energy. A major impediment to reform can be a lack of effective mechanisms to protect vulnerable groups that could be affected by subsidy elimination (Whitley and Burg 2015; Beaton et al. 2013). Another significant barrier is a lack of public trust in the reform process due to weak governance: citizens feel that subsidies will not be replaced by other government services (McCulloch 2017a). International support, both technical and financial, can help advance reform in such contexts. G20 members are well placed to provide such support including as part of the New Collective Quantified Goal (NCQG) under the Paris Agreement.



Suggested text for communiqués:

*1. Given many countries' limited capacity to implement reform, provide technical and financial assistance to accelerate reform in lower-income countries, especially in the Global South, including as part of the New Collective Quantified Goal (NCQG) under the Paris Agreement.*

○ **Strengthen national reform commitments in international forums**

To ensure that reform efforts undertaken by G20 governments have maximum impact, they should mainstream reform commitments across different international forums and domestic policy documents. National roadmaps for subsidy reform need to be reflected, where appropriate, in other global forums (see text below). Building on successful reform implementation at home, G20 members should lead international efforts on developing legally binding agreements on fossil fuel subsidy phaseout.

Suggested text for communiqués:

*1. To accelerate reform worldwide, mainstream and advocate for an elimination of fossil fuel subsidies in international cooperation engagements.*

*2. National roadmaps will be included in submissions of nationally determined contributions (NDCs) under the Paris Agreement, the National Biodiversity Strategies and Action Plans (NBSAPs), and other relevant global forums.*

## Scenario of outcomes

If G20 countries implement these reforms in good faith, vast revenues would become available for other priorities such as (Laan et al. 2023a):

- SDG 2: USD 33 billion per year to end world hunger by 2030;
- SDG 7.1: USD 36 billion per year to achieve universal access to electricity and clean cooking by 2030 in ways that align with net-zero emissions;
- SDG 7.2: USD 450 billion to fill the investment gap for renewable energy generation;
- SDG 13.4: USD 17 billion per year to fill the investment gap for clean energy finance in developing countries.

Furthermore, phasing out subsidies would also reduce environmental ‘externalities’ associated with fossil fuel use. The IMF found that eliminating fossil fuel subsidies and increasing taxation to reflect externalities would prevent 1.6 million deaths related to local air pollution annually and reduce global carbon dioxide emissions to around 43 percent below baseline levels in 2030 (Black et al. 2023).

Case studies demonstrate that subsidy savings can be redirected to social causes, including health, education, and the energy transition. In India, the reform of gasoline and diesel subsidies from 2010 to 2014 coincided with increased government spending on renewable energy and electric vehicles (Garg et al. 2020). In Indonesia, the removal of gasoline and diesel subsidies in 2015 saved the government over 10% of its annual state expenditure (USD 15.6 billion), with increased allocations for regional governments and villages, health insurance, housing for low-income groups, clean water access, and investments in infrastructure (Pradiptyo et al. 2016).

To achieve these outcomes, countries need to put in place strategies that reflect the lessons of previous experiences of fossil fuel price reform. From 2015 to 2020, 53

instances of fossil fuel subsidy reform or taxation increases were observed worldwide (Sanchez et al. 2020). While many of these gains may have been eroded by government responses to the energy crisis, they show that reform is achievable. Reform design will differ from one country to the next depending on national and local circumstances, but Beaton et al. (2013) highlight three common elements of successful reform (Figure 2).

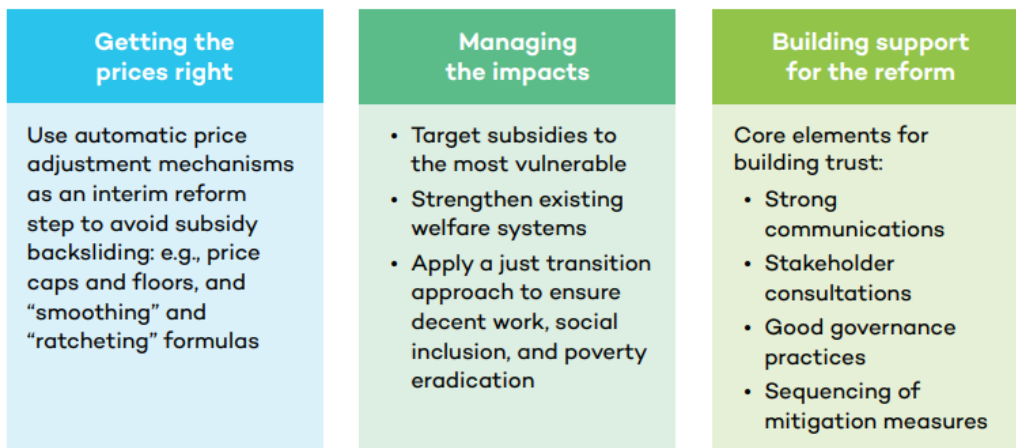


FIGURE 2: Core elements of reform planning

Source: Urazova et al. (2023), based on Beaton et al. (2013)

○ **Getting the prices right**

To avoid reform backsliding, governments dependent on ad hoc pricing may—as an interim reform step—find it helpful to pre-empt fuel price interference by introducing automatic pricing mechanisms that link domestic and international energy prices without political decision-making. Price smoothing, ratcheting, and cap-and-floor mechanisms can reduce pressure on the most vulnerable by making energy prices more stable while also reducing fiscal pressure (both in terms of fiscal volatility and magnitude of support).<sup>1</sup> Both reduce political pressure for price-fixing (Sanchez et al. 2021; McCulloch et al.

<sup>1</sup> For more details on automatic pricing mechanisms, see McCulloch et al. 2017.

2017). In many cases, the end-state of pricing reform is a competitive energy market, where competition regulations help drive efficiency and effective social protection systems take pressure off of energy pricing as the primary intervention when there is a cost-of-living challenge. In addition to market-based pricing, fossil fuels should be taxed at levels that reflect their externalities (as mentioned above).

- **Managing the impacts**

To minimize the potential negative effects of a subsidy phaseout on the most vulnerable, policymakers need to map out potential socio-economic impacts of the reform and reallocate revenues into assistance for people and businesses accordingly. Careful planning and comprehensive welfare programs are especially important when reforming programs aimed at increasing energy affordability and access, such as for clean cooking fuels and electricity. In such cases, targeted support, such as cash transfers, geographic targeting, and subsidy quotas can ensure reforms benefit the poorest (Sharma et al. 2019).

- **Building support for the reform**

Affected groups should have a voice in how reform is designed. To build trust, it is important to consult all stakeholders regarding price adjustments and impact management, as well as delivering clear and evidence-based communication on why the reform is necessary before, during, and after its implementation.

There is ample evidence of the negative impacts of fossil fuel subsidies, the benefits of phasing them out, case studies of successful reform and guidance on strategies and roadmaps. The challenge for the G20 in 2024 is to lead by example and introduce robust national action plans to ensure subsidies are phased out in line with their commitments.

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