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Commentary

Reforming fossil fuel subsidies requires a new approach to setting international commitments

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Fossil fuel subsidy reform is a sensible climate change mitigation option, yet government support for fossil fuel production and consumption remains high. International efforts to phase out fossil fuel subsidies can be strengthened by distinguishing between different subsidies, taking into account their climate impacts and the feasibility of reform.

For decades, governments across the world have persistently supported the production and consumption of fossil fuels through measures such as fixed fuel prices, tax breaks, favorable loans, and the provision of physical infrastructure (e.g., a railroad from a coal mine to a port). Notwithstanding the lofty rhetoric of "building back better" in the wake of the global pandemic, such fossil fuel subsidies remain large. The Organisation for Economic Co-operation and Development (OECD) and International Energy Agency jointly estimated them at \$468 billion in 2019 across 81 major economies. As Figure 1 shows, such subsidies are being handed out by all G20 countries to varying degrees. Although subsidies for fossil fuel consumption in recent years have decreased due to lower fossil fuel prices, support for fossil fuel production has actually increased in a reversal of previous trends.1 By contrast, the level of government support to renewable energy is much lower, with the International Renewable Energy Agency pegging such subsidies at \$166 billion in 2017.2

Fossil fuel subsidy reform can be a useful tool in achieving net-zero targets and the goals of the Paris Agreement. 4,5 Government support for fossil fuel production and consumption drives greenhouse gas emissions and locks in carbon-intensive behavior. Moreover, fossil fuel subsidies create an unequal playing field in energy markets, preventing the uptake of renewable energy.⁶ Eliminating such subsidies could thus help cut emissions-with one estimate suggesting that annual emissions savings could be similar to those of 1,000 coal-fired power plants - particularly if governments simultaneously increase their support for renewables.5 If one would further follow the understanding by the International Monetary Fund that fossil fuel subsidies include the "under-pricing" of fossil fuels-meaning that their full social cost (including their environmental cost) is not reflected in their price—the full pricing of fossil fuels would further contribute to the achievement of net-zero targets.

Fossil fuel subsidy reform can also help realize the 2030 Sustainable Development Goals (SDGs), adopted by all United Nations (UN) member states in 2015. Fossil fuel subsidies lead to local environmental and health impacts (e.g., air pollution), disproportionately benefit richer segments of society, and put a major strain on the public purse, directing money away from healthcare, education, and other development priorities.^{7–9}

Since 2009, calls for fossil fuel subsidy reform have been embedded in various international commitments. The first and most significant of these was the commitment by the G20 to "phase out and rationalize over the medium term inefficient fossil fuel subsidies while providing targeted support for the poorest."10 A commitment to reform fossil fuel subsidies was also incorporated in the SDGs, and declarations calling for phasing out fossil fuel subsidies were adopted by the G7, the Asia-Pacific Economic Cooperation economies, and the New Zealand-led Friends of Fossil Fuel Subsidy Reform. Climate change mitigation is becoming an increasingly important rationale underpinning these commitments.1

Notwithstanding these international commitments and some progress made in implementing them,2 the actual practice of reforming fossil fuel subsidies remains fraught with challenges. Stories of failures or reversals of reform abound. For instance, a fuel price hike caused by the removal of gasoline and diesel subsidies in Ecuador in 2019 sparked civil unrest, which led the government to reverse its reforms. Various factors influence the success of reform efforts. Interest groups-and the extent to which they are organized-can play a significant role in opposing subsidy reform. A key challenge in this context is that the benefits of maintaining subsidies tend to be tangible and concentrated on specific groups (e.g., fossil fuel producers, car owners), whereas the benefits of subsidy reform are often less tangible and more diffuse across time and space (e.g., improved fiscal balances and environmental improvements). In some countries, such as Colombia and South Africa, interest groups opposed to reform have succeeded in framing fossil fuel subsidies as crucial for national development, further challenging the prospects of reform. Reform may also be challenged by more structural factors, such as a country's economic dependence on fossil fuels, a country's institutional capacity to implement reforms, or the type of political system.11



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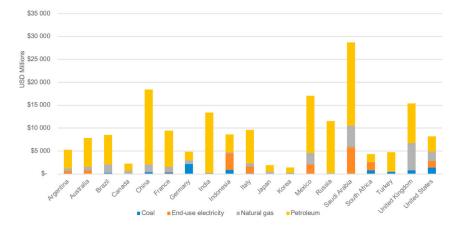


Figure 1. Fossil fuel subsidies in the G20 countries by fuel type Source: OECD and IISD.³

International commitments to reform fossil fuel subsidies cannot address all these challenges, but it is evident that the broad way in which they have been formulated constrains both their actionability and their accountability. To help overcome these limitations, we suggest that, as a first step, it is important to start distinguishing between different types of subsidies in international commitments on fossil fuel subsidy reform.

The problem with fossil fuel subsidy commitments

The G20 pledge to phase out and rationalize fossil fuel subsidies marked the first international commitment to reform. However, the commitment does not elaborate on key terms such as "fossil fuels," "subsidies," "rationalize," "medium term," and "inefficient," mainly at the insistence of Brazil, Russia, India, and China. 12 As a consequence, the commitment lacks precision regarding its scope, what states are committed to do, and by when. SDG Target 12.c suffers from similar deficiencies, as it contains a voluntary commitment to "[r] ationalize inefficient fossil-fuel subsidies that encourage wasteful consumption."13 This target also does not elaborate on its key terms or set a deadline. By contrast, the smaller group of G7 countries in 2016 managed to adopt a commitment to eliminate fossil fuel subsidies by 2025.

The ambiguity in both the G20 and SDGs commitments has to a limited extent been addressed through follow-up efforts. The G20 countries committed themselves to submitting strategies and timetables for phasing out their fossil fuel

subsidies, and from 2016 countries have undergone voluntary peer reviews of their fossil fuel subsidies and efforts to reform them. The peer reviews have proven to be the most important post-2009 G20 activity on fossil fuel subsidies, with countries (e.g., China and the United States, Germany and Mexico, Italy and Indonesia) undergoing peer reviews in pairs.2 However, although the peer reviews identify fossil fuel subsidies that could be reformed and in theory allow for others to shame the reviewed countries for a lack of action, it is up to each country to decide whether it wants to be reviewed and how it follows up on the review. Regarding SDG Target 12.c. efforts have focused on developing a set of indicators for identifying and measuring fossil fuel subsidies to support the Voluntary National Reviews through which countries report on their progress in implementing the SDGs.14 As their name suggests, however, such reports are prepared on a voluntary basis, and Target 12.c is among the "least reported targets" under SDG 12.15

Precision in international commitments matters, as it can circumscribe the substantive, geographical, and temporal scope. The lack of precision in existing international commitments, combined with the voluntary nature of follow-up efforts, makes it challenging to hold the countries adopting a commitment to account for their (lack of) progress. Indeed, governments may insist on vague language precisely because they do not wish to be held accountable for reforms they cannot implement.

Yet opposition to reform is likely to vary depending on the type of subsidies. For instance, the reform of fixed fuel (e.g., gasoline) prices can provoke widespread rioting, as happened in Ecuador and Nigeria. Fixed fuel prices guarantee low energy prices for the entire population and are often part of the social contract between government and people. Although the reform of other kinds of subsidies also provokes pushback from affected groups, these groups are often smaller and easier to compensate. For instance, most European Union member states that subsidize coal production have managed to phase these subsidies out while compensating miners, although the attempted reforms led to protests in some countries and, in the case of Poland, to the government reversing reforms in 2015. Several smaller subsidies. such as tax breaks for the consumption of fossil fuels within specific sectors, are also comparatively easy to reform. For instance, in 2017 and 2019 Norway removed reductions in carbon tax rates for domestic shipping and fishing, and in 2017 Colombia removed specific tax deductions for the mining sector, including coal mining.

Subsidies differ not only in terms of how politically entrenched they are but also in the benefits their reform brings about. Notably, subsidies vary in their environmental impact, both in terms of immediate impact on greenhouse gas emissions and local air pollution and in terms of locking in fossil fuel production and consumption for the long run.5,6 Yet existing international commitments on subsidy reform do not distinguish between the environmental impacts of different kinds of subsidies, meaning that reforms of the most environmentally harmful subsidies can be held up by general opposition against subsidy reform.

Toward a new generation of subsidy commitments

Acknowledging that not all fossil fuel subsidies are equal paves the way for identifying and subsequently honing in on the reform of particular kinds of subsidies, which may be subject to more stringent commitments and (earlier) phase-out dates. Exactly which criteria the kinds of subsidies should be prioritized must be determined through deliberation within the institutions

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adopting the commitments, notably the G20 and the UN (for the SDGs).

We argue that including the difficulty of reform and environmental impact among the main criteria is sensible. Regarding the difficulty of reform, it can be counterproductive to pursue commitments that countries find difficult to achieve, as this may deter participation. The focus should rather be on picking low-hanging fruit first and using these successful reforms to build momentum to gradually reform more politically

entrenched subsidies. Regarding the environmental impact, it makes sense to prioritize the reforms that lead to the greatest environmental benefits. This can include the reform of subsidies that stimulate coal production and consumption, which would bring about the largest benefits in terms of reducing greenhouse gas emissions and improving public health, but also the reform of subsidies that can break fossil fuel lock-in, such as support for new oil and gas fields that may remain active for decades to pay off the initial investment. 6,16 The two criteria we put forward are interconnected. In some cases, the environmental benefits may make it easier to reform a subsidy, for instance, if there is opposition to coal mining due the local pollution it causes-as is the case in Australia and South Africa, two countries that subsidize coal production.

Figure 2 illustrates how fossil fuel subsidies can be distinguished according to their environmental impact and the difficulty of reform. It shows how some subsidies, such as coal production subsidies, are comparatively easy to reform, have a substantial environmental impact, and, therefore, should be prioritized over the less environmentally beneficial and more difficult kinds of reforms in the other categories. The second category would be subsidies that are relatively easy to reform but are less environmentally damaging (e.g., tax reductions for specific sectors such as ferries or fishing), as well as subsidies that are more difficult to reform but have a major environmental impact (e.g., transport fuels sold at fixed prices to all consumers). These subsidies could be

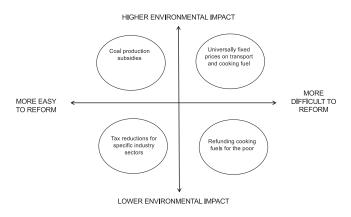


Figure 2. Examples of fossil fuel subsidies organized according to ease of reform and environmental impact

subject to later phase-out dates than the first category. Finally, subsidies that are difficult to reform and have a smaller environmental impact (e.g., refunds for cooking fuels only available to the poor) could be subject to softer commitments, possibly without any phase-out dates. This would accommodate developments in countries such as India, where universal and more environmentally damaging subsidies have increasingly been replaced by more targeted and thus less damaging subsidies. 17

These two dimensions can be supplemented with other criteria, such as social justice. For instance, reform of subsidies in industrialized countries or that that disproportionately benefit the rich (e.g., subsidies that lower gasoline prices for all consumers) could be prioritized over other subsidies. Targeting subsidies in industrialized countries would further allow them to lead by example and avoid the criticism of hypocrisy which is inherent in such countries lecturing developing countries on fossil fuel subsidy reform while maintaining their own.

Beyond future commitments within the G20 or UN, the approach sketched above could also be applied in the context of ongoing negotiations on a new Agreement on Climate Change, Trade and Sustainability. As part of these negotiations, six countries-Costa Rica, Fiji, Iceland, New Zealand, Norway, and Switzerland—are aiming to develop the first-ever set of legally binding rules targeting fossil fuel subsidies. In doing so, they will need to specify their scope, setting out which subsidies are covered by the Agreement. The countries may

further choose to apply specific rules (e.g., prohibitions) to a subset of fossil fuel subsidies.

Prohibitions could thus focus on the introduction of subsidies that are most likely to have a significant impact on greenhouse gas emissions, such as new subsidies for fossil fuel production.5 Doing so would align the Agreement with the finding that new fossil fuel production is not aligned with the Paris Agreement's long-term goal to keep global warming below 1.5°C.¹⁸ Moreover,

taking into account the ease of reform could lead to flexibility provisions for certain types of subsidies (e.g., later phase-out dates, exemptions, or the provision of technical assistance), such as subsidies aimed at providing energy access for low-income households.

International institutions can help drive subsidy reform at the domestic level, but the influence they exert depends on how attuned they are to the domestic political factors that determine the success of reform efforts. The ongoing support for fossil fuels in COVID-19 recovery packages underscores the importance of increasing the precision of fossil fuel subsidy commitments as soon as possible. With mounting attention for the adverse environmental and socioeconomic impacts of fossil fuel subsidies, governments have an important opportunity to sharpen and better target international commitments.

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