4

Fossil Fuel Subsidies

Key Issues

Subsidies for the production and consumption of fossil fuels exist in most, arguably all countries of the world, in spite of them undermining global efforts to curb climate change. Consumer subsidies are directed at the fossil fuel use of households or companies. They include free electricity or electricity at a reduced price, cooking fuels such as kerosene sold at below-market prices, petrol prices fixed at levels as low as USD 0.10 per litre and – depending on the definition – reductions in the value-added tax (VAT) and taxes on fossil fuels as well as prices that do not reflect the externalities associated with using the fuel. Producer subsidies are directed at the production of fossil fuels, and include inter alia tax rebates and loans, financial and technical support for exploring potential fossil fuel resources such as new oil or gas fields, direct financial transfers, and so forth.

Unlike most other policies in place to mitigate climate change, reforming such subsidies provides fiscal and macroeconomic benefits. Yet, fossil fuel subsidy reform received limited attention at the international level until the 2009 G20 commitment to phase out or reform inefficient fossil fuel subsidies (Van de Graaf and Blondeel, 2018). On the domestic level, policies constituting fossil subsidies have been reformed quite often (frequently only to be reintroduced or expanded at a later stage), but historically such reform has been driven by economic objectives rather than environmental ones (Skovgaard and van Asselt, 2018b). While the subsequent chapters will discuss this commitment and other efforts by the international economic institutions to address fossil fuel subsidies, this chapter will provide an introduction to the subject and the efforts to promote their reform by other institutions than the ones studied here. The chapter starts with a discussion of the different definitions of fossil fuel subsidies, definitions that have far-reaching political consequences, followed by an overview of the estimates of the size and scope of existing fossil fuel subsidies. Subsequently, I discuss the domestic politics of fossil fuel subsidies and their reform, followed by an overview of the efforts to address fossil fuel subsidies of other institutions than the ones studied in this book.

4.1 Definitions of Fossil Fuel Subsidies

There is no agreement on how to define energy subsidies (Gerasimchuk, 2014; Koplow, 2018; OECD Secretariat, 2010b). This disagreement has far-reaching consequences for the measurement of the global and national levels of fossil fuel energy subsidies and the countries that are considered as having fossil fuel subsidies. Few observers dispute that policies that lower the price paid by consumers below the market price, for example, fixing the price of petrol at USD 0.30 per litre as it has been the case in Iran (Kojima, 2016), constitute an energy subsidy. Yet, several other types of policies may be defined as fossil fuel subsidies depending on the definition. Few if any policies are defined as fossil fuel subsidies by the policymakers that adopt them, but they may subsequently be defined as fossil fuel subsidies by other actors.

An important distinction is the one between attempts to identify (and often also measure) fossil fuel subsidies that rely on an inventory approach and those that rely on a price-gap approach. These two approaches depend implicitly or explicitly on different definitions of fossil fuel subsidies, for example, the price-gap approach relies on definitions of fossil fuel subsidies that define such subsidies in terms of prices being below a given benchmark.

The inventory approach focuses on government policies and defines as fossil fuel subsidies those policies that confer benefits to particular fossil fuel producing or consuming activities. On the consumption side, the inventory approach identifies as subsidies policies including direct spending on the lowering of fossil fuel prices, reduced tax or VAT rates on fossil fuels, and so forth. On the production side, it identifies a broader range of policies as subsidies (although this varies somewhat between different kinds of inventory approaches), including the public provision of infrastructure for fossil fuels (e.g. pipelines, railroads); tax reductions; insurances, loans and guarantees provided with more favourable conditions than what the market offers; research and development; as well as government ownership of fossil fuel extraction enterprises (e.g. loss-making coalmines). The focus on policies means that the inventory approach often leads to debates regarding whether a given policy actually confers such benefits. The inventory approach requires extensive data gathering to identify the subsidies within a given country, and inventories sometimes do not include all subsidies within a country due to data limitations (Kojima and Koplow, 2015; Koplow, 2018). Importantly, inventory approaches rely on different definitions of fossil fuel subsidies, all of them characterised by defining fossil fuel subsidies in terms of policies conferring benefits on the consumption and/or production of fossil fuels. One prominent example of such a definition is the World Trade Organization (WTO)'s definition of subsidies (of all kinds not just those concerning fossil fuels) as a financial contribution by

a government that confers a benefit to the recipient (World Trade Organization, 1994, Article 1). Yet, it is also possible to include non-financial contributions, for example, policies reducing risk, under the definition of subsidies (Koplow, 2018).

The price-gap approach focuses on the consumer price of fossil fuels rather than the policies influencing such prices. Specifically, it identifies whether the consumer prices are below a given benchmark price and estimates the combined value of the difference between the two prices. The benchmark price is generally based on the international market price of a given fossil fuel, often with the transport and distribution costs and/or VAT added, and in some cases also taxes corresponding to the externalities (e.g. air pollution, climate change, traffic accidents) of using the fuel (Clements et al., 2013; Coady et al., 2015; Gerasimchuk, 2014; Koplow, 2009; Steenblik and OECD, 2003). The level of the benchmark price is crucial for estimates of the size of total fossil fuel subsidies, as a high benchmark price will lead to high estimates of total fossil fuel subsidies at the global and national level. The price-gap approach only identifies the effects of fossil fuel subsidies that influence consumer prices, and hence producer subsidies are included in such studies only to the degree that they have an effect on consumer prices, which they rarely do, as most fossil fuels (e.g. gas or oil) are sold in global markets.

Definitional aspects are also important as regards determining which policies should be reformed or phased out. Both the G20 and the Asia-Pacific Economic Cooperation (APEC) made the commitment 'to rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption' (APEC, 2009; G20 Heads of State and Government, 2009b). This wording raises questions regarding the exact interpretation of the terms 'rationalize', 'medium term' and most importantly for the issue of defining fossil fuel subsidies, 'inefficient' and 'encourage wasteful consumption'. As is discussed in Chapters 5–8, much of the discussion has focused on whether a country's fossil fuel subsidies are indeed inefficient and encourage wasteful consumption.

4.2 The Size and Scope of Fossil Fuel Subsidies

The size and scope of global fossil fuel subsidies depend on which of the aforementioned definitions is being used. Subsidies for the consumption and production of coal, natural gas, oil and products derived from these fuels (e.g. diesel, regular petrol, kerosene, liquid petroleum gas) are considered fossil fuel subsidies, as are subsidies for electricity and heat production based on fossil fuels (Kojima and Koplow, 2015). Subsidies for biofuels are generally not considered fossil fuel subsidies. In terms of geographical scope, most or virtually all countries (depending

¹ The first APEC commitment did not contain the word 'inefficient', but subsequent ones did.

on the definition used) have some kind of fossil fuel subsidies in place. Policies subsidising the consumption of fossil fuels are more substantial in developing countries, whereas policies subsidising their production are common in both developed and developing countries. Price-gap estimates differ in their estimates of fossil fuel subsidies in developed and developing countries. Those which use benchmark prices without externalities, such as the International Energy Agency (IEA, 2018), find that fossil fuel subsidies are much smaller in developing countries than in developed ones, whereas those that include externalities, most notably the IMF (2019), find that developed countries account for more than a quarter of global subsidies. All estimates find that fossil fuel exporting countries have larger subsidies (compared to the size of their populations and GDP) than fossil fuel importing ones.

Studies of fossil fuel subsidies focus mainly on national policies, excluding development finance from multilateral development banks, multilateral and bilateral development institutions for fossil fuel production and consumption, which have been estimated at tens of billions of dollars (Kim and Urpelainen, 2013; Oil Change International et al., 2017). Political debates among policymakers, including the institutions studied in this book, have focused on national level subsidies, and consequently this book will mainly focus on how they have addressed this issue.

As mentioned previously, the different definitions translate into diverging estimates of the global economic costs or size of fossil fuel subsidies (not including support through development finance). The IEA uses a price-gap approach with a benchmark price including distribution, transportation and VAT but not externalities, and its estimate is not global but covers forty of the largest developing and emerging countries. This widely used estimate puts global consumption subsidies in 2017 at just over USD 300 billion, and generally fluctuating between USD 250 and 600 billion (IEA, 2015, 2016, 2017, 2018), depending mainly on the oil price. All told, the IEA estimate is at the low end of the range. The OECD has provided an estimate combining a price-gap and inventory approach (discussed in detail in Chapter 6) and covering the thirty-five OECD countries plus eight partner countries (Argentina, Brazil, China, Colombia, India, Indonesia, Russia and South Africa). The OECD estimates fossil fuel support in these countries studied in 2016 at USD 151 billion, and fluctuating between USD 150 and 250 billion in the years 2010–16 (OECD, 2018b). The OECD and the IEA have more recently started combining their estimates, and arrive at an estimate of USD 340 billion, fluctuating between USD 300 and 600 billion in the period 2010–17 for the countries covered by their combined estimate (OECD and IEA, 2019). The IMF's estimate (discussed in detail in Chapter 7) covers 153 countries and includes both producer² and consumer

² The producer subsidies constituting a very small part of the IMF's total estimate.

subsidies, the latter calculated on the basis of a benchmark price including various externalities to arrive at its estimate of USD 5.2 trillion estimate for 2017 (Coady et al., 2019). The IMF's estimate is about ten times higher than the IEA's mainly due to the inclusion of non-priced externalities, but also due to its global scope. Importantly, these estimates do not tell us about who bears the costs of the subsidies. The estimates differ implicitly in this respect, as the IEA and OECD estimates concern the fiscal costs to public budgets of providing the subsidies, while the IMF estimates mainly concern the costs to society of using fossil fuels.

In terms of environmental consequences, fossil fuel subsidies are distinguished from other subsidies in targeting fossil fuels, which implies that they by definition have a negative impact on climate change. Different estimates exist of the direct effects of fossil fuel subsidies in terms of encouraging the use of fossil fuels and hence causing CO₂ emissions (Skovgaard and Van Asselt, 2019). These estimates differ in terms of their scope, in terms of the countries and subsidies covered (production subsidies and a range of consumption subsidies are often not included), as well as the methodology used and the time horizon. The estimates find that the emissions reductions alone from phasing out fossil fuel subsidies range from 1 to 23 per cent of the emissions in the countries covered (Burniaux and Château, 2011; Coady et al., 2015, 2019; Jewell et al., 2018). According to the conservative estimate of Jewell et al. (2018), reforming fossil fuel subsidies could deliver a quarter of the emissions reductions pledged under the Paris Agreement. These figures would be higher if the savings from reforms were redirected towards renewable energy (Jakob and Hilaire, 2015; Schmidt et al., 2017). Perhaps most importantly, these estimates cannot capture the political economic effects of breaking the lock-in of fossil fuel subsides in terms of fossil fuel infrastructure as well as the political power of fossil fuel corporate actors locking societies into fossil fuelbased modes of production and consumption (Erickson et al., 2020; Newell and Johnstone, 2018). Beyond climate change, fossil fuel subsidies lead to local air pollution, inter alia through the burning of coal and diesel, with effects on health that accounts for close to half of the global externalities of fossil fuel use according to the IMF (Coady et al., 2015, 2019; Parry et al., 2014).

In terms of redistributive consequences, proponents of fossil fuel consumption subsidies often justify them by framing them as a tool for poverty reduction, especially in developing countries (Rentschler and Bazilian, 2017a; Rentschler and Bazilian, 2017b). Yet, studies of the allocation of fossil fuel subsidies find that most of them are captured by the higher income segments of society. For instance, Arze del Granado, Coady and Gillingham (2012, p. 2241) in their study of twenty developing countries found that 'the richest 20% of households capture on average six times more in fuel subsidies than the poorest 20%'. Fossil fuel subsidies

are regressive because they tend to be universal while subsidising goods that people with a higher income have more opportunities to enjoy, for example, fuel for cars.

4.3 The Domestic Politics of Fossil Fuel Subsidies and Their Reform

Irrespective of the definition of fossil fuel subsidies that is used, such subsidies have proven difficult to reform (Skovgaard and van Asselt, 2018b, 2019). While the world has arguably witnessed an increase in the number of fossil fuel subsidy reforms since the Pittsburgh commitment in 2009 (Rentschler and Bazilian, 2017b; Van de Graaf and Blondeel, 2018), fossil fuel subsidies still persist globally, and the decline in the IEA's estimates of global subsidies seem more driven by lower oil prices than by reform. Furthermore, it is far from certain to what degree fossil fuel subsidy reforms have been driven by the G20 commitment and the increasing international attention to fossil fuel subsidies. The reforms seem driven mainly by economic concerns, particularly fiscal deficits and the desire to provide more targeted social assistance to the poor (Rentschler and Bazilian, 2017b; Skovgaard and van Asselt, 2018a). The subsidies that have been reformed consist mainly of consumption subsidies in middle-income developing countries such as Egypt, India, Indonesia, Iran and the Philippines (Van de Graaf and Blondeel, 2018), as well as coal production subsidies in developed countries, especially EU member states such as Germany and Spain (Gençsü et al., 2017). The former group have increased and liberalised fuel prices and targeted subsidies at the poor, whereas the latter group have phased out coal subsidies gradually while providing support to communities dependent on coal mining (e.g. retraining of workers; see Zinecker et al., 2018).

An important aspect of the persistence of fossil fuel subsidies is that successful reform has often been followed by the reversal to old levels of subsidies After all, domestic actors have tried to reform fossil fuel subsidies as long as these subsidies have been in existence. Several attempts at fossil fuel subsidy reform have also failed, some before the adoption of the reform and some after implementation, inter alia due to public protests (e.g. in Ecuador and Sudan).

The literature on the politics of fossil fuel subsidies and their reform has identified several factors driving fossil fuel subsidies and the possibilities of reforming them. Here, I draw on the three kinds of factors identified in Skovgaard and van Asselt (2018c). First, the interests, strategies and organisation of actors – including both individuals and collective actors – that promote reform or try to keep subsidies in place. Their strategies include putting fossil fuel subsidies on the national political agenda or trying to block such efforts; framing fossil fuel subsidies in particular ways, building coalitions to promote or counter reform; and

communicating the benefits of subsidies or their reform to policymakers and the public. Fossil fuel subsidies have been framed, on the one hand, in terms of their economic or environmental cost and on the other, as important tools for reducing poverty or improving national development and competitiveness. Beyond the strategies of actors, their degree of organisation also matters, particularly as regards actors benefitting from subsidies (Victor, 2009). Actors opposed to fossil fuel subsidies tend to be less organised in interest groups than those supporting subsidies, yet both form alliances cutting across different political parties, ministries, and non-governmental organisations (Skovgaard and van Asselt, 2019). One reason for the higher degree of organisation of the proponents of subsidies is that the benefits of fossil fuel subsidies are tangible and concentrated in specific groups (e.g. fossil fuel producers, beneficiaries of consumer subsidies), whereas the benefits of fossil fuel subsidy reform are less tangible and more diffuse across time and space (e.g. improved public budgets and environment; see Inchauste and Victor, 2017).

Second, ideational factors, including the aforementioned definitional issues as well as knowledge about fossil fuel subsidies and their environmental and socio-economic effects, also influence the politics of fossil fuel subsidies. Established discourses regarding issues such as development, competitiveness and environmental protection constitute important ideational contexts that may shape whether a particular framing is successful or not, e.g. may the framing of fossil fuel subsidies as environmentally harmful fail in countries in which environmental protection is not defined as important (Skovgaard and van Asselt, 2018c). Importantly, the existence of fossil fuel subsidies is a sensitive issue in several (especially developed) countries, and governments are often reluctant to acknowledge that a given policy constitutes a fossil fuel subsidy.

The third group of factors is more structural and includes macroeconomic developments and the socio-political characteristics of a country. In terms of macroeconomic factors, both fossil fuel reserves (Overland, 2010) and high fossil fuel prices (Benes et al., 2015; Rentschler and Bazilian, 2017b) are associated with higher subsidies, whereas rapid changes to fossil fuel prices have offered windows of opportunity for reform (Benes et al., 2015). Furthermore, states with weak institutional capacity and authoritarian rule are more likely to subsidise fossil fuels, inter alia because they lack the capacity to implement more complex welfare policy instruments such as cash transfers (Cheon et al., 2013; Lockwood, 2015; Victor, 2009). Finally, there is an element of path dependency to fossil fuel subsidies, which means that once in place they are difficult to remove. The path dependency may be due to fossil fuel subsidies empowering actors benefitting from them – particularly fossil fuel extraction companies – and thus contributing to carbon lock-in (Newell and Johnstone, 2018) or becoming part of the social contract between the state and its citizens (Moerenhout, 2018).

4.4 Other International Efforts to Promote Fossil Fuel Subsidy Reform

Beyond the institutions studied in this book, a range of other institutions have been important to the efforts to reform fossil fuel subsidies. In general, their involvement with fossil fuel subsidies has increased since 2009. First, the IEA stands out on the basis of its extensive work on defining and measuring fossil fuel subsidies. These efforts date back to before 2009, most notably the 1999 issue of the IEA's World Energy Outlook, which included fossil fuel subsidies among its key foci (IEA, 2000). The most important part of the IEA's work on fossil fuel subsidies has been its estimates of the total size of fossil fuel subsidies in major non-OECD economies, which was first published in 2006 and has since provided a crucial knowledge base for addressing fossil fuel subsidies. This estimate is probably the most widely used estimate of the size of global fossil fuel subsidies. As mentioned earlier, it covers only forty of the largest emerging and developing countries, and it is thus somewhat misleading to refer to it as an estimate of global subsidies, although it covers a very sizeable share of global subsidies. Importantly, the IEA employs a price-gap approach to measuring fossil fuel subsidies based on a benchmark price corresponding to 'the full cost of supply or, where appropriate, the international market price, adjusted for the costs of transportation and distribution, and value-added tax' (IEA, 2016, p. 97, fn. 8). The IEA was one of the four institutions (together with the World Bank, the OECD and Organization for Petroleum Exporting Countries [OPEC]) that was requested by the G20 to measure the magnitude and the consequences of such subsidies (G20 Heads of State and Government, 2009b).

Of the other institutions requested by the G20 to study fossil fuel subsidies, the World Bank also has a long-running track record. World Bank studies on energy subsidies in general date back to the 1980s (World Bank, 1983), and studies on fossil fuel subsidies specifically to the 1990s (Larsen and Shah, 1992). In terms of policy, the World Bank's programmes induced developing countries to reform their energy subsidies (which almost always went to fossil fuels) as part of wider reform packages (Van de Graaf and Blondeel, 2018). However, the World Bank's attention to fossil fuel subsidies waxed and waned until around 2009, when its focus on fossil fuel subsidies reached a consistent level. The World Bank published numerous publications on fossil fuel subsidies in developing countries, particularly on the best way to phase out such subsidies (Kojima, 2016; World Bank, 2013b; World Bank with contributions from International Monetary Fund (IMF), 2014).

In terms of concrete efforts to induce countries to reform their fossil fuel subsidies, the Bank has focused explicitly on fossil fuel subsidies (rather than just subsidies in general). It has done so in terms of country specific recommendations (see e.g. Diop, 2014; Peszko et al., 2019) and assistance to such reform, for example, in the shape of expertise; workshops for learning from other countries;

and financial support for policy dialogue, communication and the targeting of subsidies, and so forth. (McCulloch, 2017; Skovgaard, 2018). Notable in this respect is the Bank's Energy Sector Management Assistance Program (ESMAP), which has developed both an 'Energy Subsidy Reform Technical Assistance Facility' providing knowledge in the shape of an analysis of the environmental, fiscal, economic, political and social impacts of fossil fuel subsidy reform, as well as support for policy dialogue and the design of reform (World Bank, 2015). ESMAP has also developed the 'Energy Subsidy Reform Assessment Framework' (ESRAF), a guide to analysing energy subsidies, the impact of subsidy reform and the political context for subsidy reform (Flochel and Gooptu, 2016). However, the World Bank has also previously been criticised for providing billions of dollars in funding for fossil fuel production, inter alia coal- and gas-fired power plants, pipelines as well as oil and gas exploration, in spite of commitments to phase out such lending (The Big Shift Global, 2019).

The third of the four institutions requested to study fossil fuel subsidies by the G20, OPEC, had not previously addressed fossil fuel subsidies. OPEC was included among the four institutions due to the insistence of Saudi Arabia (interview with senior OECD officials, 29 April 2015) and has been less active than the other three institutions (Lang, 2011), and has been involved in fewer reports to the G20 than the other institutions. The lower level of involvement is evident in in that OPEC has contributed to fewer of the reports to the G20 than the other institutions (IEA, OECD, et al., 2010; OECD and IEA, 2019). The OPEC member states are among those countries with the highest fossil fuel subsidies total and per capita, and benefit from the fossil fuel subsidies in other countries in terms of increased exports (Jewell et al., 2018).

The institutions discussed in the preceding text cover energy and development. Other international energy and development institutions, such as the International Renewable Energy Agency (IRENA) and the UN Development Programme (UNDP), have been much less vocal concerning fossil fuel subsidies. As regards institutions addressing other issues than economic, development and energy issues, the picture is also rather mixed. Concerning environmental institutions, the United Nations Framework Convention on Climate Change (UNFCCC) is mainly notable due to its lack of attention to fossil fuel subsidies (van Asselt et al., 2018). The Kyoto Protocol contained a brief reference to the reduction or phasing out of subsidies in greenhouse gas emitting sectors (UNFCCC, 1997), but both the United Nations Framework Convention on Climate Change and the Paris Agreement remain silent on the issue. Opposition from oil-exporting countries as well as the general reluctance within the UNFCCC regarding addressing energy issues have meant that the attempts of some countries to place fossil fuel subsidies

within the UNFCCC have been unsuccessful (van Asselt and Kulovesi, 2017; van Asselt et al., 2018). Yet, thirteen countries have chosen to mention fossil fuel subsidy reform in the Intended Nationally Determined Contributions (INDCs) they have submitted in the context of the Paris Agreement, several of them committing to such reform (Terton et al., 2015). More implicitly, Article 2.1.c of the Paris Agreement specifies that the objectives of the Agreement shall be met inter alia by making 'finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development' (UNFCCC, 2015). Although fossil fuel subsidies are not specifically mentioned, they are generally not consistent with a pathway to low greenhouse gas emissions. Yet, the provision does not place any obligations on states to reform fossil fuel subsidies.

Perhaps due to their broader scope covering sustainability and development, the Sustainable Development Goals (SDGs) include more specific commitments to the reform of fossil fuel subsidies in their Target 12.c, which commits all countries to undertaking efforts to rationalise inefficient fossil fuel subsidies that encourage wasteful consumption. The wording of Target 12.c is rather similar to the G20 commitment in its emphasis on *inefficient* fossil fuel subsidies encouraging *wasteful consumption*, but leaves even more freedom to states, especially as they commit only to *rationalising* and not to phasing out such subsidies. Furthermore, the Goal does not include a reference to when such subsidies should be rationalised the way the G20 commitment refers to as the medium term. The effects of the SDG commitment as well as the Nationally Determined Contributions commitments under the Paris Agreement remain to be studied but constitute a move towards more attention to fossil fuel subsidies among environmental institutions.

The UN Environment Programme (UNEP) has been active in promoting fossil fuel subsidy reform through the production of knowledge in terms of reports on fossil fuel subsidies and most importantly an internationally agreed approach to measuring fossil fuel subsidies in the context of the SDGs (developed together with the OECD and the International Institute for Sustainable Development [IISD]; UNEP, OECD and IISD, 2019). It has also promoted the norm of fossil fuel subsidy reform and linked it to the SDGs (UNEP, 2019).

Also trade institutions are more notable in terms of what they have not done than what they have done. In spite of persistent calls for the WTO to adopt measures disciplining fossil fuel subsidies the way that they discipline several other subsidies, it has not done so, and other trade institutions have generally not addressed the issue (Bièvre et al., 2017; Steenblik et al., 2018). In 2017, twelve WTO member states called for the WTO to adopt measures disciplining fossil fuel subsidies, thus utilising one of the most effective incentive-based instruments in international governance, namely retaliatory trade measures sanctioned

by the WTO dispute settlement mechanism. However, this proposal has not found sufficient support from the rest of the WTO member states. One reason for the inaction is that most fossil fuel subsidies are not clearly trade distorting in the way that, for instance, several agricultural and renewable energy subsidies are (Steenblik et al., 2018). Countries could in principle (within the WTO or another trade institution) agree to sanction subsidies not because they are trade distorting but because of their environmental effects, as indeed was the case with draft versions of the currently abandoned Trans-Pacific Partnership Agreement (Steenblik et al., 2018). Yet, at the time of writing support for exploring this option within the WTO has come from only a few countries. The negotiations on an Agreement on Climate Change, Trade and Sustainability launched in 2019 by New Zealand, Costa Rica, Fiji and Iceland to use trade rules to tackle climate change and other environmental issues, specifically address fossil fuel subsidies (Costa Rica et al., 2019). Yet, it is too early to assess the eventual role of such an agreement in promoting fossil fuel subsidies.

Forums of smaller groups of states have been more successful in addressing fossil fuel subsidies, particularly promoting the norm of fossil fuel subsidy reform. Besides the G20, APEC adopted a commitment similar to the G20's just a few weeks later, and has also adopted voluntary reporting and peer-review processes, in which member states can report their fossil fuel subsidies and some of them even undergo peer reviews (Verkuijl and van Asselt, 2020). In 2016, both the North American Leaders' Forum – the heads of state of Canada, Mexico and the United States – and the G7 adopted commitments similar to the G20's but with 2025 as the phase-out date (unlike the G20 commitment which does not include a phase-out date). Furthermore, the Friends of Fossil Fuel Subsidy Reform was established in 2010 on the initiative of New Zealand (Rive, 2018). The Friends is an informal group of – at the time of writing – nine non-G20 countries (Costa Rica, Denmark, Ethiopia, Finland, New Zealand, Norway, Sweden, Switzerland and Uruguay) working to promote the norm of fossil fuel subsidy reform. Its activities include the 2015 Communiqué on fossil fuel subsidies inviting states and non-state actors to support accelerated action to eliminate inefficient fossil fuel subsidies (Friends of Fossil Fuel Subsidy Reform, 2015), voluntary peer review and agenda-setting, including the aforementioned call for WTO to address fossil fuel subsidies.

Finally, among the civil society actors promoting fossil fuel subsidy reform, the International Institute for Sustainable Development (IISD) and its Global Subsidies Initiative GSI stand out (Lemphers et al., 2018). The IISD established the GSI in 2005 to provide knowledge about (initially mainly biofuel, since 2009 mainly fossil fuel) subsidies and promote their reform. It has been involved in international analyses of fossil fuel subsidies and concrete reforms of subsidies.

4.5 Summary

This chapter demonstrates the intricacies of the politics of fossil fuel subsidies. In spite of the widespread international commitments to reforming fossil fuel subsidies and their economic and environmental benefits, these subsidies persist globally. Domestic factors, inter alia the efforts of actors benefitting from the subsidies, lack of awareness of the subsidies, fossil fuel reserves and (weak) governance capacity, have been the main obstacles to fossil fuel subsidy reform. Surprisingly, international environmental institutions have been quiet as regards addressing such subsidies, which puts the activities of the economic institutions into perspective and underscores why it is relevant to study these activities.