



EXECUTIVE SUMMARY

Time to change the game

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Fossil fuel subsidies and climate

Key points

- Fossil fuel subsidies are expensive. They were at over \$500 billion globally in 2011, and up to \$90 billion in the OECD alone.
- These subsidies are increasing and are a major obstacle to green investment, and seriously undermine attempts to put a price on carbon.
- In developing countries the majority of benefits from fossil fuel subsidies go to the richest 20% of households.
- Domestic and international support for fossil fuels dwarfs spending on health and education in a number of countries, and outstrips climate finance and aid.
- Phasing out fossil fuel subsidies in G20 countries by 2020 (and globally by 2025), with proper safeguards for the poor, would enable the triple win of inclusive green growth.

Fossil fuel subsidies undermine international efforts to avert dangerous climate change and represent a drain on national budgets. They also fail in one of their core objectives: to benefit the poorest. Phasing out fossil fuel subsidies would create a win-win scenario. It would eliminate the perverse incentives that drive up carbon emissions, create price signals for investment in a low-carbon transition and reduce pressure on public finances.

This report documents the scale of fossil fuel subsidies and sets out a practical agenda for their elimination in the context of the global goal of tackling climate change. It spells out the real costs of fossil fuel subsidies within the top developed-country emitters (the E11),¹ the G20, and more broadly across developing countries, and outlines ways to achieve their global phase-out by 2025.

Estimates of the level of subsidies vary. According to the latest figures from the International Energy Agency (IEA), subsidies to fossil fuel producers totalled \$523 billion in 2011 (IEA, 2012a). These represent one element in an overall envelope of government finance totalling \$1 trillion to exploit the world's natural resources (Dobbs et al., 2011). They are part of a wider system that obstructs efforts to halt climate change. If governments are to keep their promise to avoid dangerous climate change by holding global warming to the 2-degree commitment, they need to make carbon emissions progressively more costly through a clear and explicit price on emissions.

There is, as yet, no global carbon market, but in the European Union Emissions Trading System, governments have allowed the price of emissions to drop to less than \$7 per tonne.

If their aim is to avoid dangerous climate change, governments are shooting themselves in both feet. They are subsidising the very activities that are pushing the world towards dangerous climate change, and creating barriers to investment in low-carbon development and subsidy incentives that encourage investment in carbon-intensive energy. Coal, the most carbon-intensive fuel of all, is taxed less than any other source of energy and is, in some countries, actively subsidised (OECD, 2013a). For every \$1 spent to support renewable energy, another \$6 are spent on fossil fuel subsidies (IEA, 2013).

Subsidies in OECD countries

The Organisation for Economic Co-operation and Development (OECD) estimates that its members spend \$55-90 billion a year through a range of support to fossil fuels (OECD, 2012). Using this dataset we estimate that the top 11 rich-country emitters (E11) spent \$74 billion on subsidies in 2011, with the highest level of subsidies in Russia, the United States, Australia, Germany and the United Kingdom (see Figure 1). In effect, each of the 11.6 billion tonnes of carbon emitted from the E11 countries in 2010 came with an average subsidy of \$7 a tonne – around \$112 for every adult in the E11.²

These subsidies take different forms, including:

- Germany: financial assistance of €1.9 billion in 2011 to the hard coal sector
- The United States: \$1 billion fuel tax exemption for farmers, \$1 billion for the strategic petroleum reserve, and \$0.5 billion for fossil energy research and development in 2011
- The United Kingdom: tax concessions of £280 million in 2011 for oil and gas production.

In addition, these subsidies outweigh the support provided to fast-start climate finance³ by a ratio of 7:1. It is clear, therefore, that eliminating rich-country fossil fuel subsidies would enable a low-carbon transition while unlocking new opportunities for energy cooperation.

Subsidies in emerging markets

Many emerging markets also spend heavily on fossil fuel subsidies, particularly those in the Middle East and North Africa. Governments often try to justify this by citing their industrial

policy and poverty reduction goals.

However, fossil fuel subsidies inhibit the development of efficient and low-carbon economies, while the benefits of subsidies largely bypass the poor. According to the International Monetary Fund (IMF), it is quite typical for the poorest 20% of households to receive less than 7% of the benefits generated by fossil fuel subsidies (Arze del Granado et al., 2010). Meanwhile, several countries, including Egypt, Indonesia, Pakistan and Venezuela, spend at least twice as much on fossil fuel subsidies as on public health. While subsidy phase-out demands careful design and implementation, several countries have demonstrated that bold action is possible, with gains for both budget stability and equity in public spending (Vagliasindi, 2012).

Subsidies through development cooperation

Domestic subsidies are not the only problem. International financial institutions (IFIs) also support carbon-intensive energy systems. Over 75% of energy-project support⁴ from IFIs to 12 of the top developing-country emitters⁵ went to fossil fuel projects. There has been no significant shift in this trend: in the last financial year alone (2012-13), the World Bank Group increased its lending for fossil fuel projects to \$2.7 billion, including continued lending for oil and gas exploration (Oil Change International, 2013).

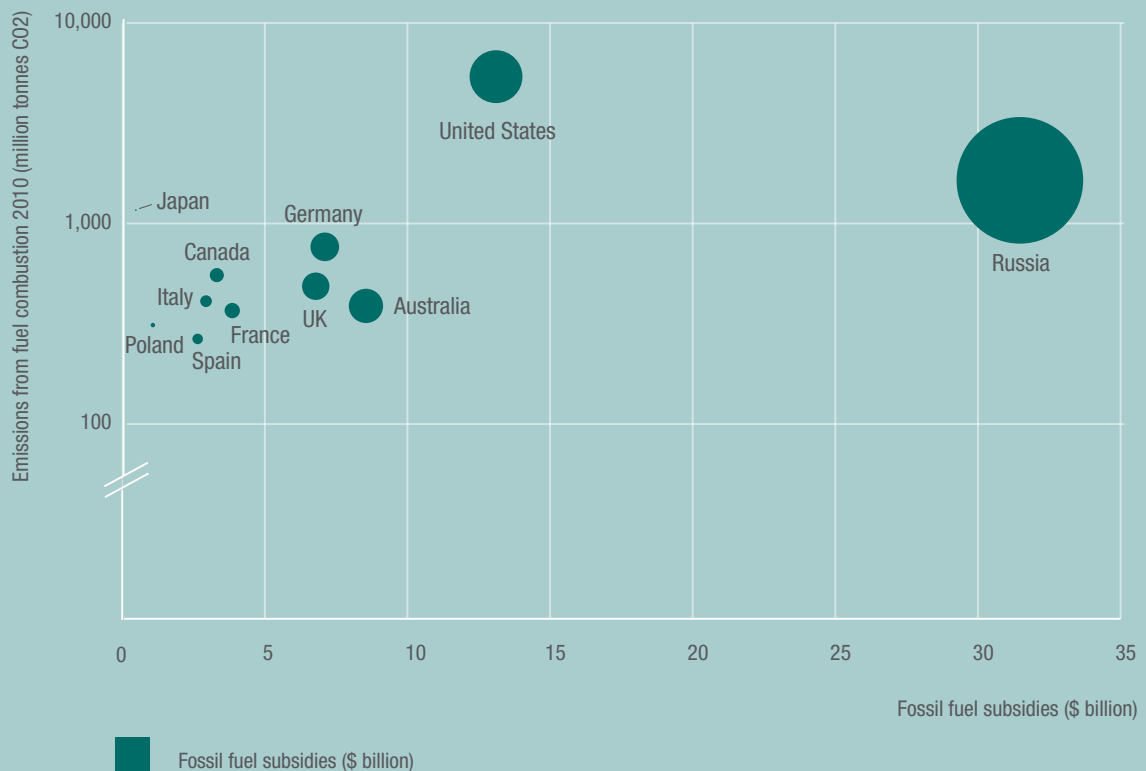
Multilateral action to phase out fossil fuel subsidies

Global action to cut fossil fuel subsidies is long overdue. Collectively, the G20 accounted for 78% of global carbon emissions from fuel combustion in 2010. It has already agreed in principle to phase out fossil fuel subsidies. Now is the time to translate principle into practice by setting clear and ambitious goals and timelines for action. That ambition should extend to the elimination of all G20 fossil fuel subsidies by 2020, with rich-country members making a ‘down payment’ commitment to phase out all subsidies to coal and to oil and gas exploration by 2015.

Delivering on this ambition will require early practical measures. It is a matter of concern that there is no agreed definition of a fossil fuel subsidy – and you can’t reach an agreement to cut what you can’t measure. The G20 governments could buttress an ambitious agreement to end fossil fuel subsidies by backing the creation of an international inventory of fossil fuel support, building on the work of the OECD, IEA and

Figure 1: Fossil fuel subsidies and emissions in the E11

SOURCES: OECD (2012), GSI (2012), IEA (2012B), IEA (2012C)



IMF. In the same way that the international community developed an agreement to cut agricultural subsidies based on shared definitions, governments need common approaches for estimating fossil fuel subsidies. International cooperation will also be needed to protect the poorest from rising energy prices in developing countries while subsidies are phased out, and to facilitate data collection, sharing and analysis on subsidies and investment in climate-relevant sectors.

Climate change negotiations provide an early opportunity to start the drive towards eliminating fossil fuel subsidies. Currently the role of subsidies in contributing to dangerous climate change is not acknowledged in the UNFCCC. As governments meet this month in Warsaw for the Conference of Parties (CoP) talks, the G20 countries could agree a timeline for fossil fuel subsidy phase-out. Aside from the immediate benefits of reduced carbon emissions, early action on subsidies could boost prospects for a wider

climate deal at the key 2015 Climate Change Summit in Paris.

To summarise the actions envisaged in this report, we propose:

- that G20 countries use the Warsaw CoP meeting to agree a broad timeline for action
- that G20 governments call on technical agencies to agree a common definition of fossil fuel subsidies
- that G20 governments commit to phasing out all fossil fuel subsidies by 2020, with early action by rich-country members on subsidies to coal and to oil and gas exploration by 2015
- that governments and donors work together to ensure that measures are put in place to protect vulnerable groups from the impact of subsidy removal.

Endnotes

1. E11 = United States, Russia, Japan, Germany, Canada, United Kingdom, Italy, Australia, France, Poland and Spain.
2. E11 adult population is 663 million (CIA, 2011).
3. During the UNFCCC conference in Copenhagen in 2009 developed countries pledged to provide new and additional resources, approaching USD 30 billion for the period 2010 - 2012 and with balanced allocation between mitigation and adaptation. This collective commitment has come to be known as 'fast-start finance' (UNFCCC, 2013).
4. Energy project support between 2008 and 2011.
5. Algeria, Brazil, Egypt, India, Indonesia, Kazakhstan, Nigeria, Saudi Arabia, South Africa, Thailand, Uzbekistan and Venezuela (based on 2011 emissions).
6. Data on Russian fossil fuel subsidies compiled using information from IEA (\$16.9 billion natural gas consumption subsidy – 2010) and GSI (\$14.4 billion upstream oil and gas subsidies – 2010) (IEA, 2012b, GSI, 2012).

References

- Arze del Granado, J., Coady, D., & Gillingham, R. (2010) *The Unequal Benefits of Fuel Subsidies: A Review of Evidence for Developing Countries*. Washington, D.C.: IMF.
- CIA. (2011). *The World Factbook*. Washington, D.C.: CIA.
- Dobbs, R., Oppenheim, J., Thompson, F., Brinkman, M., & Zornes, M. (2011) *Resource revolution: meeting the world's energy, materials, food*.
- GSI (2012) *Fossil Fuels – At What Cost? Government support for upstream oil and gas activities in Russia*. Geneva: GSI.
- IEA (2012a) *World Energy Outlook 2012*. Paris: IEA.
- IEA (2012b) *Energy Subsidies*. Retrieved October 9, 2013 from <http://www.iea.org/subsidy/index.html>
- IEA (2012c) *CO2 Emissions from Fossil Fuel Combustion 2012 Edition*. Paris: IEA.
- IEA (2013) *Redrawing the Energy-Climate Map*. Paris: IEA.
- OECD (2012) *Inventory of Estimated Budgetary Support and Tax Expenditures for Fossil Fuels 2013*. Paris: OECD.
- OECD (2013a) *Taxing Energy Use – A Graphical Analysis*. Paris: OECD.
- Oil Change International (2013) *World Bank Group Increases Lending for Fossil Fuels and Large Hydro; Continues to Fail on Delivering Energy Access to the Poor*. Washington, D.C.: Oil Change International.
- UNFCCC (2013, October 23) *Fast-start Finance* Retrieved October 23, 2013 from http://unfccc.int/cooperation_support/financial_mechanism/fast_start_finance/items/5646.php
- Vagliasindi, M. (2012) *Implementing Energy Subsidy Reforms*. Washington, D.C.: World Bank.