



# Fuel Subsidies and Climate Finance

## Using climate finance to remove fossil fuel subsidies

- Globally, countries spent USD 523 billion on fossil fuel consumption subsidies in 2011, presenting a major barrier for a paradigm shift away from fossil fuels. These numbers dwarf the climate finance pledges made by developed countries.
- According to International Energy Agency (IEA) models, removing fossil fuel subsidies would drastically decrease global greenhouse gas (GHG) emissions. Removal of fossil fuel subsidies must be carefully designed in order to limit negative social and economic effects and gain public support.
- Fossil fuel subsidies can constitute a major barrier for climate finance to actually reduce emissions. Besides that, a transition to lower subsidies or complete removal can create the “multiplier” effect that climate finance needs to fill the current gap in pledges.
- Climate Focus proposes to use climate finance mechanisms, to support the removal of fossil fuel subsidies through a range of policies and programmes that limit negative effects, provide co-benefits and help consumers adjust their fuel consumption to the new price levels.

## Introduction

According to the International Energy Agency (IEA), fossil fuels consumption was subsidised in the amount of USD 523 billion in 2011.<sup>1</sup> An additional USD 100 billion is estimated for fossil fuel production subsidies.<sup>2</sup> OECD countries provide about USD 45-75 billion in subsidies annually,<sup>3</sup> with the remaining majority arising in developing countries. The highest subsidy levels are to be found in oil producing countries.

Figure 1 shows the countries with the highest levels of fossil fuel subsidy. Notably, the list includes several countries which were also top 40 recipients of climate finance in recent years (so-called fast start finance) such as China, Indonesia, Iraq (within OPEC), India and Mexico.<sup>4</sup>

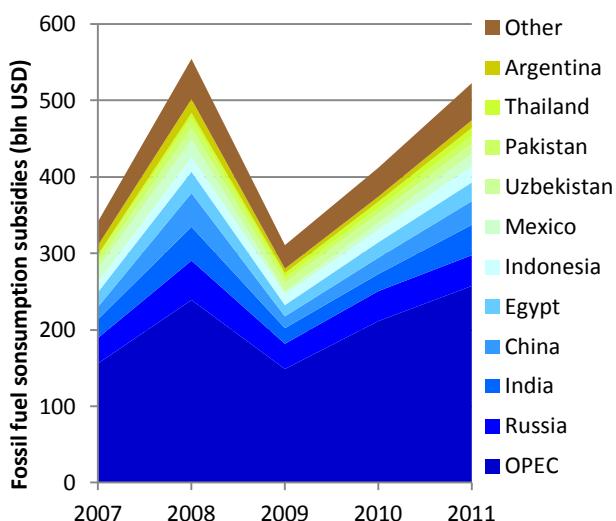


Figure 1: Top 20 countries in terms of absolute fossil fuel consumption subsidies, OPEC countries shown together.<sup>5</sup>

<sup>1</sup> IEA, World Energy Outlook 2012.

<sup>2</sup> IEA, OPEC, OECD, World Bank Joint Report, Analysis of the scope of energy subsidies and suggestions for the G-20 initiative, 16 June 2010.

<sup>3</sup> Based on average figures from 2005-2010. See OECD, "Inventory of estimated budgetary support and tax expenditures for fossil fuels", 2011.

<sup>4</sup> UNFCCC, Climate Portal for Climate Change, 5 March 2013.

<sup>5</sup> IEA Estimates of Fossil Fuel Consumption Subsidies, [www.iea.org](http://www.iea.org).



The amount of money spent on fossil fuel subsidies dwarfs the amount spent on international climate finance. Under the Cancun Agreements, developed nations have committed to mobilise USD 100 billion in international climate finance from public and private sources annually by 2020. However, there remains significant uncertainty as to where this funding will come from. Furthermore, in the period 2010-2012 developed countries already experienced difficulty in mobilizing even USD 10 billion per year in fast-start finance.<sup>6</sup> Based on these figures, roughly 50 times more money was spent world-wide on fuel subsidies than on fast start climate finance in 2011.

Fossil fuel subsidies often have goals that are directly opposed to those of climate finance. Conversely, the IEA estimates that phasing out consumption-based fuel subsidies up to 2020 would reduce CO<sub>2</sub> emissions by 2 gigatonnes (Gt) by 2020.<sup>7</sup> Potentially, this could create large savings on government budgets which could be used for other purposes and partly leverage the amounts of climate finance pledged.

The importance of abolishing fossil fuel subsidies has gained international momentum and recognition. In 2009, 53 countries in the G-20 and Asia-Pacific Economic Cooperation (APEC) forums committed to phasing out ‘wasteful’ fossil fuel subsidies in a way that ensures protection of poor and vulnerable groups.<sup>8</sup> However, most governments have yet to define how they will implement this commitment.

Given the crucial importance of reducing fuel subsidies to the success of climate finance (see below), we propose to use climate finance to help reduce fuel subsidies. This can be done through:

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<sup>6</sup> Clifford Polycarp et al. “Developed Country Fast-Start Climate Finance Pledges: A Summary of Self-Reported Information”, World Resources Institute, November 2012.

<sup>7</sup> IEA, OECD and World Bank, “The Scope of Fossil Fuel Subsidies in 2009 and a Roadmap for Phasing Out Fossil Fuel Subsidies”, 2010.

<sup>8</sup> IISD, Fossil Fuels – At what cost?, Moscow, 2012.

- a) providing a vehicle to support subsidy reform; and
- b) helping the economy adapt to higher fuel prices with energy efficiency programs and other climate policies.

## Fossil fuel subsidies

Fossil fuel subsidies consist of consumption subsidies and production subsidies. Consumption subsidies artificially lower the price of fossil fuels for industry, business and domestic consumers and tend to increase demand. Production subsidies seek to lower the cost of production, thus increasing supply. The form of subsidies can vary significantly, and may range from direct transfers and regulation of end-user prices to tax breaks, loan guarantees and market-access restrictions.<sup>9</sup>

In many countries fossil fuel subsidies are established with the stated intention of reducing energy poverty and sharing natural resource wealth. However, IEA studies have shown that subsidies on the whole disproportionately benefit middle and high income earners who, on average, consume more energy.<sup>10</sup> Another common rationale provided for fossil fuel subsidies is supporting industrial development and employment and increasing domestic energy production.<sup>11</sup>

In contrast to the stated objectives of the subsidies, analyses have pointed to a range of negative effects of fossil fuel subsidies. These include:

1. Creation of **large burdens on state budgets** and, if a certain fuel price level is guaranteed by the government, creating particular strain in times of high fuel prices, leading to difficulty in budget planning (note the annual variation in figure 1).
2. Creation of incentives for higher and less efficient levels of consumption, as well as **inefficient production** leading to increased local pollution and global emissions levels.

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<sup>9</sup> IEA, OECD and World Bank, *supra* note 7.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.



### Case Study – Fuel Subsidies Reform in Indonesia

Fuel subsidies and proposals for reform are highly contentious in Indonesia where in 2011 the government spent USD 18.1 billion subsidizing fuel products.<sup>12</sup> Reports have found these subsidies to have a range of negative consequences and have not succeeded in alleviating poverty.<sup>13</sup> Attempts to reduce subsidies by increasing government-controlled fuel prices have historically faced violent public opposition. However, more successful reforms were implemented in 2005 and 2008 when the government introduced a number of social support programmes, including cash transfers to poor families and the reallocation of some funds to education, health and infrastructure programs.<sup>14</sup>

3. Their disproportionate benefit of middle and high income earners means that fossil fuel subsidies are **socially-regressive** in nature.<sup>15</sup>
4. Fuel subsidies **discourage investment** in energy infrastructure, such as in oil exporting countries like Nigeria, where it is cheaper to import refined oil products than to refine the oil domestically.
5. Large diversity in fuel prices between nations due to subsidies often leads to the creation of **illegal fuel markets** (fuel smuggling).<sup>16</sup>

While there are clearly important benefits to be achieved from removing fossil fuel subsidies, their

<sup>12</sup> Global Study Initiative (GSI) “Indonesia’s Fuel Subsidies: Action plan for reform” (2012) available at [www.iisd.org](http://www.iisd.org).

<sup>13</sup> Global Study Initiative (GSI) “People’s Guideline to Energy Subsidies in Indonesia” (2011) available at [www.iisd.org](http://www.iisd.org).

<sup>14</sup> Ibid

<sup>15</sup>IISD, Breaking Down Political Barriers to Fossil Fuel Subsidy Reform, this is confirmed in various case studies, including: AfDB, Vincent Castel, Reforming Energy Subsidies in Egypt (2012).

<sup>16</sup> African Development Bank Group, Fuel subsidies in Africa (2012), available at: [www.afdb.org](http://www.afdb.org).

removal brings economic, social and political risks. Raising energy prices can cause inflation and might even trigger social unrest. While the rich tend to benefit disproportionately, the poor tend to suffer most from their removal. This is because the poor often spend a larger proportion of its income on energy. Reforms therefore require social protection or compensation measures.<sup>17</sup>

## The potential role of climate finance in phasing out fossil fuel subsidies

The presence of fossil fuel subsidies in a country receiving climate finance can form a key barrier to the success of emission reduction programmes in the energy sector.<sup>18</sup> Energy efficiency programmes, for example, will be less likely to succeed where wasteful use continues to be encouraged through artificially low prices. Similarly, such subsidies make it difficult for renewable energy to compete with fossil fuels, thereby reducing the effectiveness of renewables programmes.

Given this important link, it is logical that the design of climate finance-supported programmes in the energy sector should pay close attention to subsidies, and other policies affecting energy prices. Taking this a step further, however, climate finance can potentially provide a viable means of attaining funding and capacity-building for a broad spectrum of policies and measures required for removing fossil fuel subsidies, mitigating negative consequences and leveraging co-benefits. This can have the dual benefit of facilitating the effectiveness of climate finance and, through reducing strain on public finances, providing an important “multiplier” or leverage effect that could be crucial to ensuring adequate global funding for responding to climate change.

<sup>17</sup> AfDB, Vincent Castel, Reforming Energy Subsidies in Egypt (2012).

<sup>18</sup> Ecorys, Climate Focus et al, Design options for sectoral carbon market mechanisms, (Rotterdam 2012), page 52.



Many of the key features of successful subsidy removal identified in the literature, as well as a range of potential mitigating measures already find many parallels in existing climate finance mechanisms. Potential measures include the following:

1. **Research and analysis** to map out a structured taxonomy of subsidies, assess their success and identify the likely effects of removal, thus allowing for comparing their costs and benefits and informing decisions on removal.<sup>19</sup>
2. The development of supporting **legal, regulatory and institutional frameworks** to ensure effective subsidy removal and introduce mitigation measures, ensuring consistency with domestic and international law. The kind of regulatory change required will depend on the structure of the subsidy. In the case of a direct price controls, for example, it may only be necessary to remove the price control, while in the case of, say, market access restrictions required measures may include redefining rules on market access and ensuring such rules are compatible with international trade law.
3. Programmes for **raising capacities** to implement the range of measures to support subsidy removal. This may include training officials in assessing the effectiveness of subsidies, the design and implementation of new rules and the development of support programmes.
4. Developing measurement, reporting and verification (**MRV**) frameworks to track the success of reforms and inform ongoing adjustments.
5. Developing policies and programmes that reduce dependence on fuel subsidies, including through **energy efficiency** measures, expansion of rural electrification and renewable energy and transportation infrastructure. This can help to reduce the economy's vulnerability to changes in fuel prices as result of decreasing fuel subsidy levels.
6. **Enabling public acceptance** of subsidy removal. In the first place, this can be achieved through undertaking appropriate support programmes to protect the most vulnerable from rises in fuel prices. The example of Indonesia (see box above), among several others,<sup>20</sup> shows that measures such as cash transfers or social programmes can greatly increase public support for reforms while ensuring equitability. Secondly, public acceptance can be supported through effective communication and outreach. This can include establishing fora for stakeholder consultation and input and undertaking information campaigns to inform the public on the benefits of subsidy removal and how they will be affected.

These measures could be achieved through a range of climate finance programmes. One potential vehicle to allocate climate finance towards these objectives is nationally appropriate mitigation actions (NAMAs). NAMAs refer to climate change mitigation actions in developing countries and cover anything from policies, programs or projects to sectoral and national mitigation goals. They are founded on the principle that action taken to address and mitigate climate change should be appropriate for the national circumstances and development needs of a country. NAMAs seek involvement from both the public and private sectors and may access developed country support through technology transfer, finance and capacity building.<sup>21</sup>

Other programmes supported by climate finance include the World Bank's Programme for Market Readiness (PMR) or the initiatives around New Market Mechanisms (NMM). Both aim at implementing market or regulatory reforms that enable and/or support low-carbon development which, as described above, is unlikely to be effective where fossil fuel subsidies artificially distort energy prices.

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<sup>19</sup> Global Subsidies Initiative, "Tax and royalty-related subsidies to oil extraction: (...)" (2010).

<sup>20</sup> See IEA, OECD and World Bank, *supra* note 7.

<sup>21</sup> Climate Focus, Design Options for NAMAs and their regulatory framework (Amsterdam, 2011).



## Conclusion

Experience has shown that fossil fuel subsidies are often economically inefficient, encourage wasteful consumption of resources and fail to meet their intended goal of protecting the poor. They may also act as a major barrier to the effectiveness of climate finance-supported programmes to reduce emissions in the energy sector. As momentum for reform increases, climate finance can support the removal of fossil fuel subsidies through a range of policies and programmes that target the least effective subsidies, limit negative effects, provide co-benefits and help consumers adjust their fuel consumption to the new price levels.

For more information on this discussion paper:

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