

Decarbonisation of energy systems is a central component of low carbon development. But the existence of fossil-fuel subsidies in many middle-income countries effectively results in 'negative' carbon pricing, restricting the potential for much needed investment in low carbon energy technologies. The elimination of fossil-fuel subsidies is therefore an important step towards low carbon development. This case study analyses attempts made by the Ghanaian government to

remove fossil-fuel subsidies. Fossil-fuel subsidies are an inefficient means of protecting the incomes of the poor and their removal offers an opportunity to deliver targeted pro-poor policy, which can also contribute to the development of adaptive capacity. Subsidy reform also provides substantial benefits in relation to climate change mitigation. However, the limited financial capacity of developing countries means that international support is required.

## Fossil-fuel subsidy reform may be more achievable if...

- donors can initiate debate and award developing country governments with accurate information from which to act. This case study shows that data from independent analysis of the costs and impacts of subsidies can help establish public support for reform.
- subsidy reform is gradual. The reforms in Ghana occurred at a fast pace; this meant that the repercussions of reform were felt quickly. Although it may not always be feasible, gradual fossil-fuel subsidy reform may offer a means of reducing public opposition.
- international finance is available to assist developing countries in moving away from fossil-fuel use. The Ghanaian government lacked the financial capacity to offer low carbon alternatives to fossil fuels and implement pro-poor policy. Providing alternatives to fossil fuels is likely to contribute to establishing wider public support for fossil-fuel subsidy reform and helps developing countries move towards low carbon development.

## Learning lessons from the Ghanaian experience

## Fossil-fuel subsidy reform is a complicated process which can evoke strong public opposition

The Ghanaian government's experience demonstrates the difficulty that comes with undertaking fossil-fuel subsidy reform. Street protests which occurred following the government's second attempt at reform, showed that public opposition to fuel price rises are likely to be significant. Furthermore, the political party which gained office after the defeat of the New Patriot Party garnered public support by advocating the repeal of the internationally-linked price mechanism.

# Possil-fuel subsidies represent an inefficient means of protecting the incomes of poor households

Despite the fact that fuel subsidies reduce living costs for the poorest in society, they do not represent a cost-efficient means of achieving this end. A larger proportion of the benefits which accrue from fossil-fuel subsidies are captured by higher-income groups. Moreover, the cross-subsidisation of kerosene meant that misappropriation occurred; this led to non-targeted groups benefiting from subsidisation. In this situation a conditional cash transfer programme could offer a more efficient means of awarding financial support to the poor.

# 3 Effective and targeted communications are critical for building a public case for fossil-fuel subsidy reform

The Ghanaian government undertook a multi-faceted media campaign which utilised radio, newspapers and high profile politicians to make clear that the removal of subsidies would allow for an increase in social spending, which would compensate low-income groups through the provision of better targeted pro-poor policies. However, the fact that this strategy was ultimately unsuccessful shows that it needed to be combined with other approaches. For example, a concerted effort to mobilise voting support from the poorer sections of society who benefit from reform may have helped re-election.

### A closer look at Ghana's reform process

The New Patriot Party government made several attempts to reform Ghana's fossil-fuel pricing structure and these took different approaches.

**2001:** The first of these occurred in early 2001, where an effort was made to liberalise fuel prices in line with a wider International Monetary Fund (IMF) Poverty Reduction and Growth Programme. In the hope of addressing the debt of the state-owned Tema Oil Refinery (TOR), an extensive price hike of ex-refinery petroleum occurred and an automatic price setting mechanism was established which linked domestic oil prices to international ones (Laan *et al.* 2010). Kerosene and Liquid Petroleum Gas (LPG), both fuels relied upon by the poor, were cross-subsidised with the aim of reducing the impacts of reform upon low-income groups. However, rising global oil prices towards the end of 2002 put pressure on the government to discard the price setting mechanism, enabling the TOR's debt to continue to grow.

2003: The government reintroduced the pricing mechanism again in early 2003. This resulted in a 90 per cent increase in fuel prices (Bacon and Kojima 2006 cited in Laan et al. 2010). This caused average real incomes to fall by 8.5 per cent, and hit the bottom quintile hardest despite the fact that cross-subsidisation was continued (IMF 2006 cited in *ibid*.). The repeated rise of fuel prices was met with considerable opposition from the public, and pressure exerted upon the government resulted in a retraction of the fuel pricing mechanism. This policy stance was maintained by the government during 2004 owing to an approaching national election. The total cost of fuel subsidies that year amounted to 2.2 per cent of Gross Domestic Product (GDP); however, a further 1 per cent of GDP was also required to support the operation of the TOR (Coady and Newhouse 2006).

2006: Fossil-fuel subsidies continued to be a significant drain upon Ghana's budget. To address this, a new tack was taken. If subsidies were to be removed, a stronger and more coherent case for their elimination would have to be made to the public in order to gain legitimacy. The government sought help from the IMF to gain a greater

# Governments may expose themselves to high levels of protest and anger if they remove fuel subsidies abruptly; even when they try to deflect the heat

Although the New Patriot Party government attempted to remove fuel pricing from their jurisdiction through the creation of the National Petroleum Authority (NPA), this action turned out to be meaningless; the repeal of the pricing mechanism in 2008 demonstrated this. In the end, political popularity triumphed over de-subsidisation.



understanding of the implications that alterations in fuel prices would have upon different sections of society. It was found that wealthier households were disproportionately benefiting from fuel subsidies and their removal would affect the lowest quintile most (Coady and Newhouse 2006). The analysis examined the *direct* (amount of income spent on fuel) and *indirect* (higher prices of goods and services) effects of increasing fuel prices.

Once analysis was complete, the findings from the study formed part of a communications campaign undertaken by the government to alter the public's perception of subsidies. The weight of the issue was demonstrated when President Kufor made a public announcement stressing the imperative of reform. It was also stated that the financial benefits that would accrue from reform would enable a subsequent increase in social spending. Newspaper advertising space was utilised in order to outline the extent of fuel subsidies in comparison to neighbouring countries, radio announcements were used, and the IMF report was made easily accessible. The fact that an external body concurred with government sentiment added further weight behind the idea of reform (Laan et al. 2010).

This third attempt at fossil-fuel subsidy reform was centred upon the creation of a pricing mechanism that kept domestic prices in line with international prices; this was controlled by an independent governing body, the National Petroleum Authority (NPA). The NPA is comprised of government officials, trade union and oil

company representatives, experts and some NGO representatives (Coady and Newhouse 2006). By removing fuel pricing from the domain of the government, politically unpopular price increases would be seen as out of government control and it was hoped that this would prevent future governments from re-introducing repealed subsidies. Information detailing the separate components which made up the price of fuel was also made easily available, making the pricing mechanism more transparent. Two new components were added: the Deregulation Mitigating Levy (DML) and the Unified Petroleum Fund (UNP). The DML constituted 5 per cent of the total cost of fuel and was included as a means of amounting revenue to go towards efforts to decrease the impact of price rises on the poor. In addition to this, funds gained through the UNP (2 per cent of the total fuel cost) were channelled towards efforts to distribute petroleum fuels to rural areas (Laan et al. 2010).

In order to reduce the impacts of price reform on the poorest, the government set about developing social policies aimed at compensating for price rises. The crosssubsidisation of LPG and kerosene was maintained and the following policies were introduced:

- Fees for state-run secondary and primary schools were removed:
- A price ceiling was placed upon fares for public transport;
- The number of public buses increased;
- Spending on the existing Community Health Compound Scheme, which focuses upon delivering healthcare to the poorest areas, was increased;
- Greater support was given to an existing rural electrification scheme;
- The minimum wage increased from US\$ 1.24 to US\$ 1.50 (Coady et al. 2006; Laan et al. 2010).

Despite these reforms, escalating oil prices in 2007 and 2008 pressurised the Ghanaian government into abandoning the price tracking mechanism and the government froze its price ceilings between May and November 2008. In addition to this, the cross-subsidisation of LPG and kerosene meant that misappropriation occurred; kerosene was combined with diesel for motor vehicles in order to reduce fuel costs (Laan et al. 2010).

Although international oil prices were in decline, the cost of energy became a hot issue in the run-up to the 2009 national election. The main opposition party, the National Democratic Congress (NDC), played upon anger at the high cost of fuel and courted the electorate by guaranteeing that a win for the NDC would result in a reduction of fuel costs. The NDC's electoral campaign was successful; and as promised, fuel prices were lowered.

## Fossil-fuel subsidy reform: a 'triple' win?

In this case, attempts to remove fossil-fuel subsidies were driven by a desire to cut government spending and allow the heavily indebted state-owned TOR to become financially stable. However, policy reform of this nature can also serve goals related to low carbon climate resilient development (LCCRD).

Addressing climate change requires that countries move away from fossil-fuel intensive development and onto a low carbon trajectory; fossil-fuel subsidies are a major impediment to this goal. Their removal has clear benefits in relation to climate change mitigation efforts. A recent IEA (2011) report estimated that, relative to a baseline, the phasing out of fossil-fuel consumption subsidies by 2020 would lead to a 5 per cent reduction of greenhouse gas (GHG) emissions. Such subsidies distort markets and inhibit the competiveness of renewable energy technologies, reducing the likelihood of much needed capital investment. Their existence, therefore, impedes the urgent task of decarbonising energy systems. In addition to this, low fossil-fuel prices, which do not accurately reflect the true economic and environmental costs associated with such energy sources, fail to incentivise households to use energy in an efficient manner (Coady and Newhouse 2006; IEA 2011).

Despite the fact that fossil-fuel subsidies are often defended as a means of protecting the real incomes of poor households, in many instances – as this case study has demonstrated – it is higher-income households who benefit to a greater extent (IEG 2008). In addition to this, generous subsidies constitute a significant drain upon the public purse. Accordingly, the poor can lose out in two respects:

- They receive little of the benefit of the existence of subsidies, and;
- 2 Subsidies often come at the expense of better targeted pro-poor social programmes.

Fossil-fuel subsidies represent an inefficient means of addressing poverty and their reform offers opportunities to develop social policies that effectively address the needs of low-income groups. As noted above, after removing subsidies the Ghanaian government introduced and expanded a host of pro-poor policies. This included the removal of primary and secondary state school fees and greater investment in a community health programme. Poverty reduction policies which are well targeted offer the most value for money; fossil-fuel subsidies are costly and often badly targeted.

Effective poverty reduction policy also has benefits in relation to climate change adaptation. Efforts made to reduce the vulnerability of the poor through a focus on the development of infrastructure and access to basic services can also improve their resilience to climate-related shocks and stresses. Attempts to improve the poor's access to education, health care services and energy will contribute to the development of adaptive capacity, which is the foundation of pro-poor climate change adaptation.

In this case, the money saved from subsidy reform was channelled towards better targeted pro-poor policy, at the expense of investment in low carbon energy alternatives to fossil fuels, simply because the government could not afford to invest in both. The experience of Ghana shows that in real world situations, a trade-off between poverty and low carbon goals can be as likely, if not likelier, than

synergy. Low income developing countries will often lack the capacity to initiate low carbon development policy without assistance from external funding sources. This highlights the need for substantial climate finance to be channelled towards low carbon energy infrastructure in developing countries.

The above discussion has argued that the removal of fossil-fuel subsidies does indeed have a role to play in relation to LCCRD but remains a hostage to political fortunes. Although issues regarding climate change were not the driving force behind subsidy reform in the case of Ghana, such policy can be beneficial for both low carbon and climate resilience objectives. Lower-income developing countries cannot be expected to successfully address all three elements of LCCRD and for this reason climate finance has a key role to play.

## Political popularity vs. fossil-fuel subsidy removal

As the case of Ghana has shown, the removal of fossil-fuel subsidies is a thorny process that is tied to the political economy context. The NPP government's first two attempts at subsidy reform were met with lively public opposition, which included street protests (Laan *et al.* 2010). These instances of reform highlight a trade-off between maintaining political popularity and addressing the unsustainable proportion of GDP channelled towards fossil-fuel subsidisation.

The NPP government's third attempt at subsidy reform managed to successfully negotiate the previously challenging trade-off by employing some of the above approaches. A concerted effort was made to address the opacity of subsidies by highlighting the costs and beneficiaries. Further, this was achieved through the use of the government's administrative apparatus. However, these measures ultimately proved insufficient as negative public sentiment towards escalating oil prices in 2008 led the government to freeze prices and the NPP party lost the next election. Political support for subsidy removal may have been stronger if efforts were also put into providing alternative energy sources. However, in this case, such a strategy would have required substantial donor support. A further problem relates to the fact that petroleum transport fuels cannot be easily substituted.

## Authorship

This *Case Study* was written by Guy Crawford, a Research Assistant at IDS. It complements the Low Carbon Energy Learning Cycle of the Learning Hub. The opinions expressed are those of the author and do not necessarily reflect the views of IDS.

The political economy of fossil-fuel reform

A recent report which examined the political economy of fossil-fuel subsidies, made four recommendations to assist reform:

- 1 Efforts should be made to compensate powerful interests who will lose out from reform or policy needs to be developed in such a way that it is thoroughly protected from their opposition (the democratic grounding of this suggestion is arguably questionable);
- 2 The cost and purpose of subsidies should be made transparent;
- 3 If removal is too difficult, redesigning subsidies will help reduce negative impacts;
- 4 Developed administrative tools assist efforts to reform.

Source: Victor (2009).

#### **Further reading**

Coady, D. and Newhouse, D. (2006) 'Ghana: Evaluating the Fiscal and Social Costs of Increases in Domestic Fuel Prices', in A. Coudouel, A. Dani and S. Paternostro (eds), Poverty and Social Analysis of Reforms: Lessons and Examples from Implementation, Washington, DC: World Bank

IEA (2011) World Energy Outlook Factsheet, www.iea.org/weo/docs/weo2011/factsheets.pdf (accessed 19 January 2012)

Independent Evaluation Group (IEG) (2008) Climate Change and the World Bank Group, Phase 1 – An Evaluation of World Bank Win-Win Energy Policy Reforms, Washington, DC: World Bank

Laan, T.; Beaton, C. and Presta, B. (2010) 'Strategies for Reforming Fossil-Fuel Subsidies: Practical lessons from Ghana, France and Senegal', *The Global Subsidies Initiative, Untold Billions: Fossil-fuel Subsidies, Their Impact and the Path to Reform*, Geneva: IISD, www.globalsubsidies.org/files/assets/strategies\_ffs.pdf (accessed 20 January 2012)

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