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## **Do Policies for Phasing Out Fossil Fuel Subsidies Deliver What They Promise?**

*Social Gains and Repercussions in Iran, Indonesia and Ghana*

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## Acronyms

<b>BLT</b>	Bantuan Langsung Tunai cash transfer programme, Indonesia
<b>CHCS</b>	Community Health Compound Scheme
<b>DML</b>	Deregulation Mitigating Levy
<b>FOB</b>	Free On Board Prices
<b>GDP</b>	Gross domestic production
<b>GHG</b>	Greenhouse gases
<b>GNPC</b>	Ghana National Petroleum Company
<b>GPRS II</b>	Growth and Poverty Reduction Strategy, Ghana
<b>IHEID</b>	The Graduate Institute of International and Development Studies in Geneva
<b>ILO</b>	International Labour Organization
<b>IMF</b>	International Monetary Fund
<b>IRNA</b>	Islamic Republic News Agency, Iran
<b>LEAP</b>	Livelihood Empowerment against Poverty
<b>LPG</b>	Liquid Petroleum Gas
<b>MEMR</b>	Ministry of Energy and Mineral Resources, Indonesia
<b>NHIS</b>	National Health Insurance Scheme, Ghana
<b>NIOC</b>	National Iranian Oil Company
<b>NIOPDC</b>	National Iranian Oil Products Distribution Company
<b>NPA</b>	National Petroleum Authority, Ghana
<b>PSIA</b>	Poverty and Social Impact Assessment
<b>TOR</b>	Tema Oil Refinery
<b>UNP</b>	Unified Petroleum Fund
<b>UNRISD</b>	United Nations Research Institute for Social Development
<b>USD</b>	United States dollar

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## Abstract

Fossil fuel subsidies reform has been intensively debated and promoted as a concrete step towards sustainable development, with anticipated benefits of reduced carbon emissions, saved public spending, and improved social distribution. But does this “triple-win” policy deliver what it promises? This working paper focuses on the social “win”—the narrative of social and distributional gains of the energy subsidies reform.

The research follows a comparative analysis approach. Three countries were selected as target for in-depth case studies based on their diverse political, economic and social contexts: Ghana, Indonesia and Iran. We examine in each case the distributional effects of subsidy removal, the design and implementation of social programmes and their impact on welfare, as well as the political economy around sustainability of the reform. Based on comparative studies across the three cases, a set of political, economic and social factors are identified to have key impact on the social outcome of reforms. The key conclusions are as follows.

**There is no quick fix for social “win”.** Instead, the social outcome is influenced by a set of political, economic and social factors at different levels. Governments need to put the energy subsidies reform in the bigger context and manage the complex mix of influencing factors, to anchor the policy on a broad coalition of interests.

**Long-term political commitment to subsidies reform is key.** A clearly communicated commitment would help win trust from the public in energy subsidies reforms and support for the government to implement relevant policies. A long-term and gradual reform strategy which takes into account both immediate cushion and long-term distributional effects is essential to achieving social gains.

**Social gain needs to have a prominent role in energy subsidy reforms.** The three case studies indicate a clear dynamic between social gains and subsidy reform processes. Thorough analysis using a social lens approach can identify important factors to be taken into account for reform policies to be sustained and more importantly, deliver a social win. Rather than to be taken as a given, a social win from fossil fuel subsidy reforms requires the social dimension to be a central part of the reform policy.

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# 1. Introduction

Environmental benefits, greater economic efficiency and increased funds for public spending—fossil fuel subsidy reform has been put forward as a first vital step towards a green economy. A large body of literature argues for a “triple win” scenario in phasing out these subsidies through reducing carbon emissions, reducing public debt, and leveraging funds for the government to invest in social protection.<sup>1</sup>

However, there exist substantial obstacles to achieving this “triple win” outcome. So far, very few countries have successfully implemented energy subsidy reforms. Although subsidy reforms have been estimated to potentially reduce global CO<sub>2</sub> emission by 13 per cent by 2050 (Burniaux et al. 2009), few actual figures for emission reduction exist, partly due to the recent nature of most reforms. It has also been recognized that phasing out energy subsidies has a potential negative impact on the poor, and that measures have to be taken to offset this impact.<sup>2</sup> Certain reports have also looked into specific country-level social protection programmes for energy subsidy reform (Beaton and Lontoh 2010; Hassanzadeh 2012), yet there is a lack of comparative studies on the determining factors for the success or failure of these programmes.

This study examines the third of the three wins, that is, the narrative of the social and distributional gains of a fossil fuel subsidy reform. The overarching research question is: How important is the social dimension to fossil fuel subsidy reforms, and what economic and political factors influence the social outcomes of such reforms? Before looking into this question, the following sub-questions must be answered: (i) What are the distributional effects of a subsidy removal, and who are the vulnerable populations? (ii) Are the leveraged funds spent on social programmes, and to what extent do they benefit the most affected social groups? (iii) How do political structures affect the implementation and sustainability of such reforms? To address the questions above, we will look at three cases of recent energy subsidy reforms in selected countries and engage in comparative country-by-country analysis. With this, the report attempts to identify the key factors important for the social and distributional outcome of such reforms. It seeks to closely examine the social dimension of this proposed first step towards a green economy, and highlight its vital role in the pursuit of sustainable development.

The countries studied are Iran, Indonesia and Ghana, all countries with recent experience in cutting fossil fuel subsidies. Although the topic has been heavily debated, only a few countries have implemented large-scale subsidy reforms. The countries were also chosen to represent different geographical, economic, political, energy security and international contexts, to better understand the variety of factors that potentially can influence a reform process. The three countries have all been branded as success stories in the triple win debate. We will take a closer look at this proposition.

The study identifies the main linkages between subsidy reform and distributional impacts. We follow the “social lens” approach outlined by Cook et al. (2012) and examine how subsidy policy impacts different social groups and how the policies have been designed to minimize these impacts. By social impacts we mean consequences affecting the relations between social groups, income distribution and poverty. This is our main outcome variable. Together with other development indicators such as wage, education and health among low-income households, they form our criteria for policy

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<sup>1</sup> Bacon and Masami 2006; World Bank 2008; Ellis 2010; Beaton and Lontoh 2010; Jackson 2011; IMF 2008, 2012, 2013a.

<sup>2</sup> IMF 2013a; Ellis 2010; World Bank 2008.

success on the social dimension. Social unrest and the source behind it is also a central factor in this aspect. Poverty is not only defined by the countries' respective poverty lines, but also in terms of vulnerability to changes. Vulnerability is here understood as the risk towards households' ability to provide basic needs, a probability of real income fall (Barrientos 2010; Mkandawire 2005). Some groups of low-income households will have a greater risk of real income reduction from energy price increases than others, and looking at standard policy indicators alone would not be sufficient for understanding the process of change resulting from subsidy reforms.

To facilitate comparative analysis, all three cases are analysed through the same analytical framework and have a common structure. This framework is grounded in the process of subsidy cuts, and examines (i) the energy price increases and its distributional effects, (ii) the social programmes established to mitigate these effects and (iii) the political process surrounding the implementation and durability of the reform. In the first step of this process, we look at the price effects of the reform programme. The effects of a fossil fuel price increase have been modelled in many general equilibrium analyses, and we use these results together with practical experiences to identify the impacts for different parts of the population. Second, we examine how the additional public funds generated from the subsidy removal are spent. We aim to identify social groups that benefit from these funds, and whether these leveraged funds address the distributional impacts of subsidy reforms, even more, whether they go one step further to exploit the distributional win outlined in the literature. Finally, we explore the political process surrounding the implementation of subsidy reform, whether it reflects the social effects of the reform, and how power relations influence the durability of the reform.

The comparative analysis was done by looking at the three aspects of subsidy reform outlined above across all three countries. Similarities between key processes were found, and variations examined. The comparative analysis tries to identify a set of factors influencing the social impact of subsidy reform. The different contexts of the three countries make this exercise challenging, but also provide variation and an opportunity to observe different factors at play. The main outcomes of our country studies were compared, and to avoid excessive simplification, sets of factors important in all three cases were identified. Rather than providing a shortlist of a few globally generalizable factors, we present conceptual categories of factors shown to have a substantial impact on the policy outcome in our cases.

The report has six main parts. The following three parts are case studies of Iran, Indonesia and Ghana. A detailed description of the reform process is presented for all

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