



Delivering INDCs and SDGs through Fossil-Fuel Subsidy Reform

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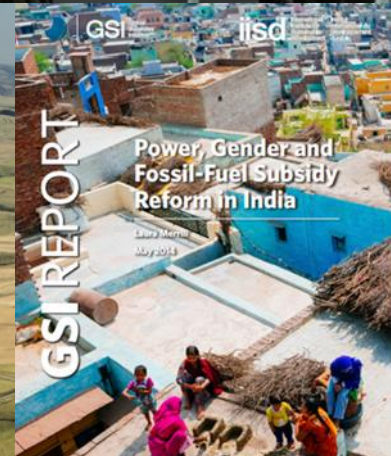
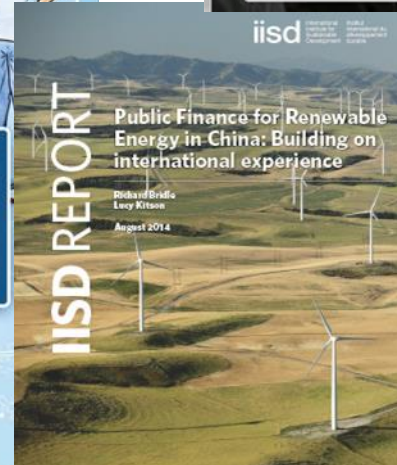
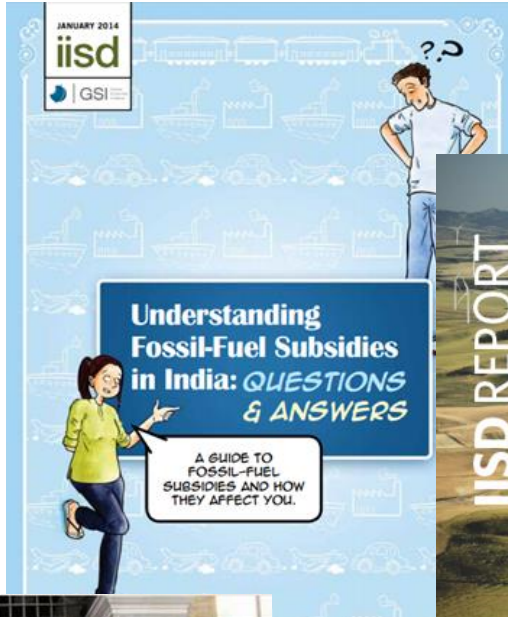
INDONESIA ENERGY SUBSIDY REVIEW

A biannual survey of energy subsidy policies



Highlights

- In fiscal year 2013, the Indonesian Government allocated IDR 199.9 trillion (US\$ 18.0 billion) of the government budget to petroleum product subsidies and IDR 100.0 trillion (US\$ 9.0 billion) to electricity subsidies. This amounted to a total of
- In the first week of January 2014, state petroleum company PT Pertamina attempted to raise the price of 12kg-cylinder LPG from IDR 5,850 (US\$ 0.53) per kg to IDR 9,800 (US\$ 0.88) per kg, a 68 per cent increase. The move was hotly contested and 24 hours the price increase was rolled



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SUMMARY OF THE LIMA CLIMATE CHANGE CONFERENCE: 1-14 DECEMBER 2014

The Lima Climate Change Conference convened from 1-14 December 2014, in Lima, Peru. It included the 20th session of the Conference of the Parties (COP 20) to the UN Framework

A BRIEF HISTORY OF THE UNFCCC AND THE KYOTO PROTOCOL

The international political response to climate change began with the adoption of the UNFCCC in 1992, which sets out a framework for action aimed at stabilizing atmospheric concentrations of greenhouse gases (GHGs) to avoid "dangerous



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Financing the Sustainable Development Goals through Fossil-fuel Subsidy Reform:

Opportunities in Southeast Asia, India and China

Findings of the links between SDGs and FFSR

1. Sheer size of spending: 4 times scale of renewables, 4 times OECD aid, but not delivering as a social welfare policy tool
2. Not supportive of the other SDGs especially renewable energy take-off
3. Shift to targeted social welfare programmes away from universal subsidies to fossil fuels
4. Ability to tax fossil fuels after the removal of subsidies

Case studies from Indonesia and Philippines

Available at
www.iisd.org/gsi
<http://bit.ly/1V7jhyu>



Laura Merrill
with Vivian Chung

September 2014

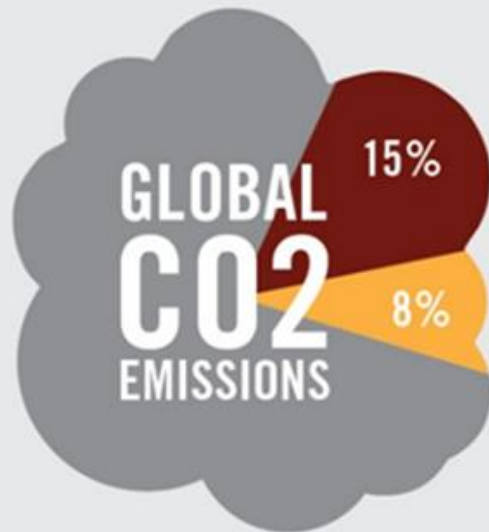
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PAYING THE POLLUTER

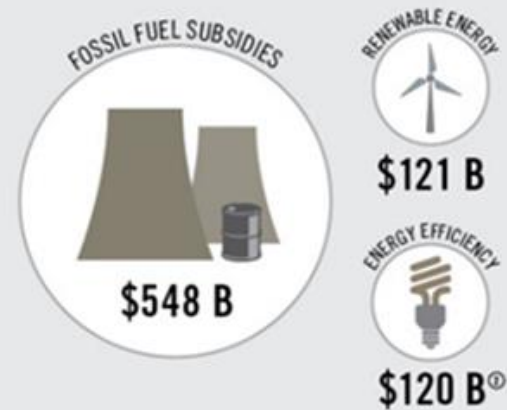
How fossil fuel subsidies hold us back from a low-carbon future

HARMFUL INCENTIVES



15% of global CO₂ emissions receive an incentive of \$110 per tonne in the form of fossil fuel subsidies, while only 8% are subject to a carbon price.^①

WRONG PRIORITIES

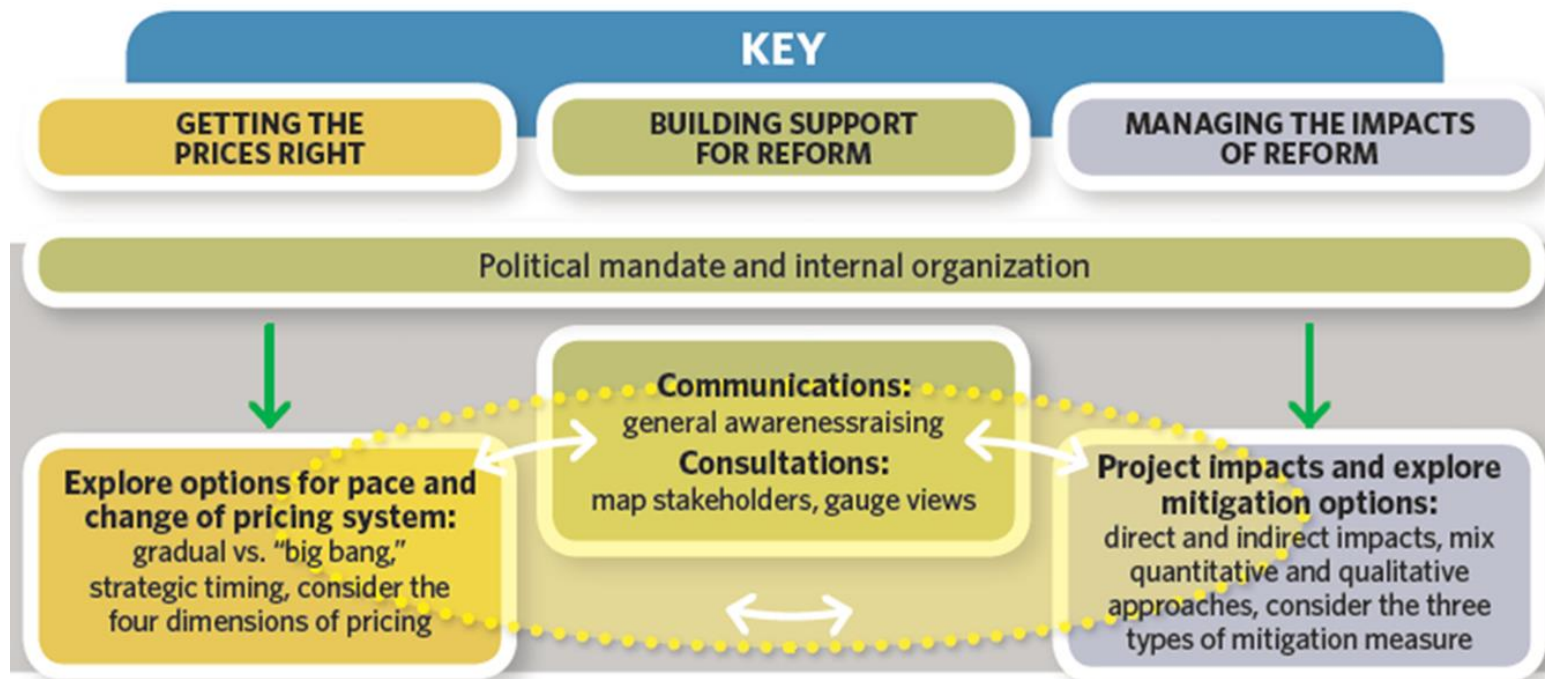


Fossil fuel subsidies stood at \$548 billion dollars in 2013. This is four times the value of subsidies to renewable energy. It is also more than four times the amount invested globally in improving energy efficiency.^③

SOURCES:

- ① International Energy Agency (IEA) 2013, 'Redrawing the Energy Climate Map'
- ② IEA (2014), 'Energy Efficiency Market Report 2014'
- ③ IEA (2014), 'World Energy Outlook'
- ④ Bridle, R. 2014 'The Annual Cost of Energy Subsidies is Greater than the Total Cost of Meeting 2020 Renewable Energy Targets in the Middle East and North Africa', The Global Subsidies Initiative
- ⑤ IMF (2014), 'Getting Energy Prices Right'

Consumer subsidies: National action



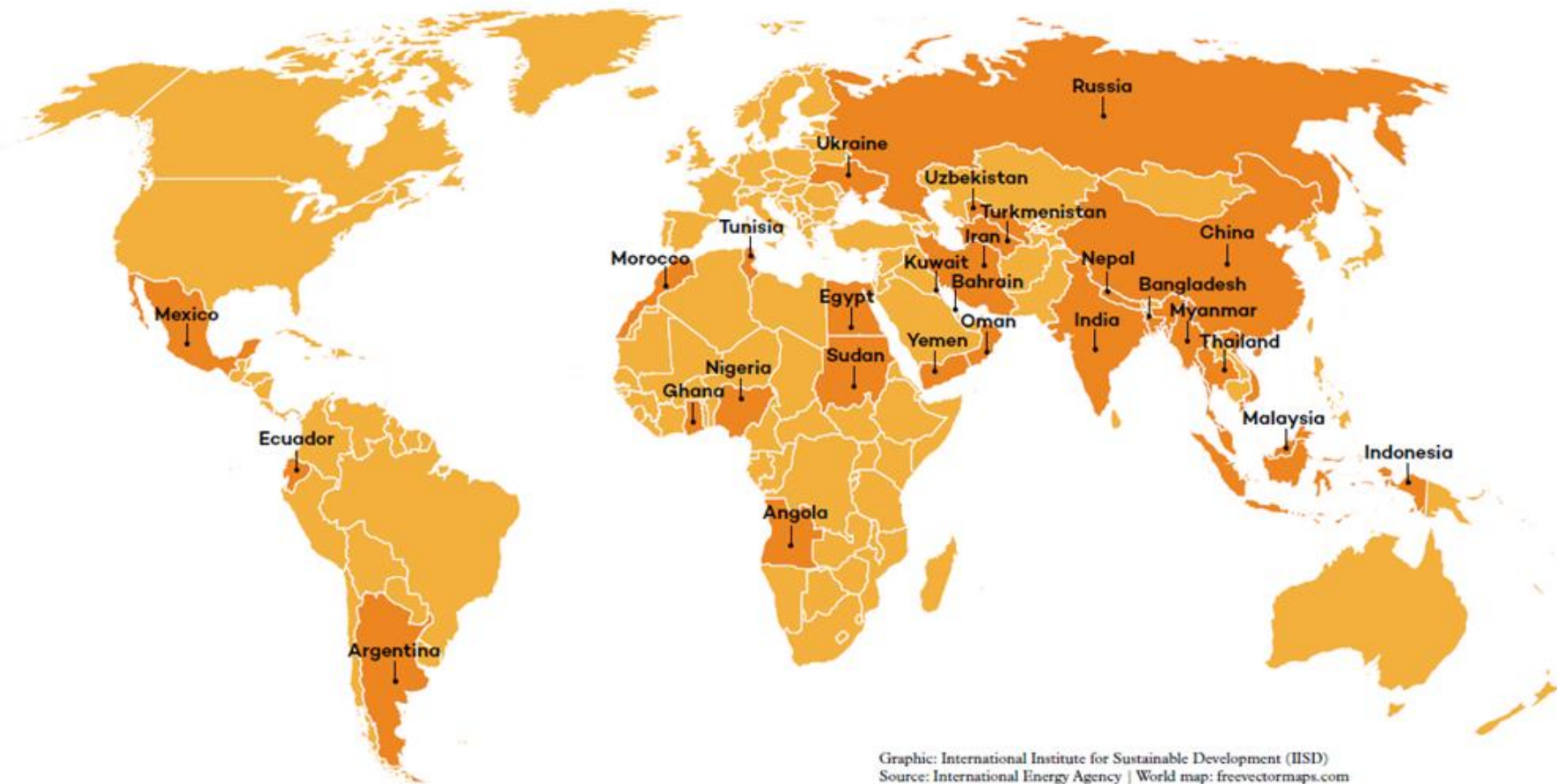
Source: GSI-IISD, Beaton et al. 2013, A Guidebook to Fossil-fuel Subsidy Reform for Policy Makers in Southeast Asia, <http://www.iisd.org/gsi/fossil-fuel-subsidies/guidebook>



Fossil-Fuel Subsidy Reform

Many countries at least partially increased subsidized prices for fossil energy over the last two years.

● Countries implementing reforms in 2013–2014



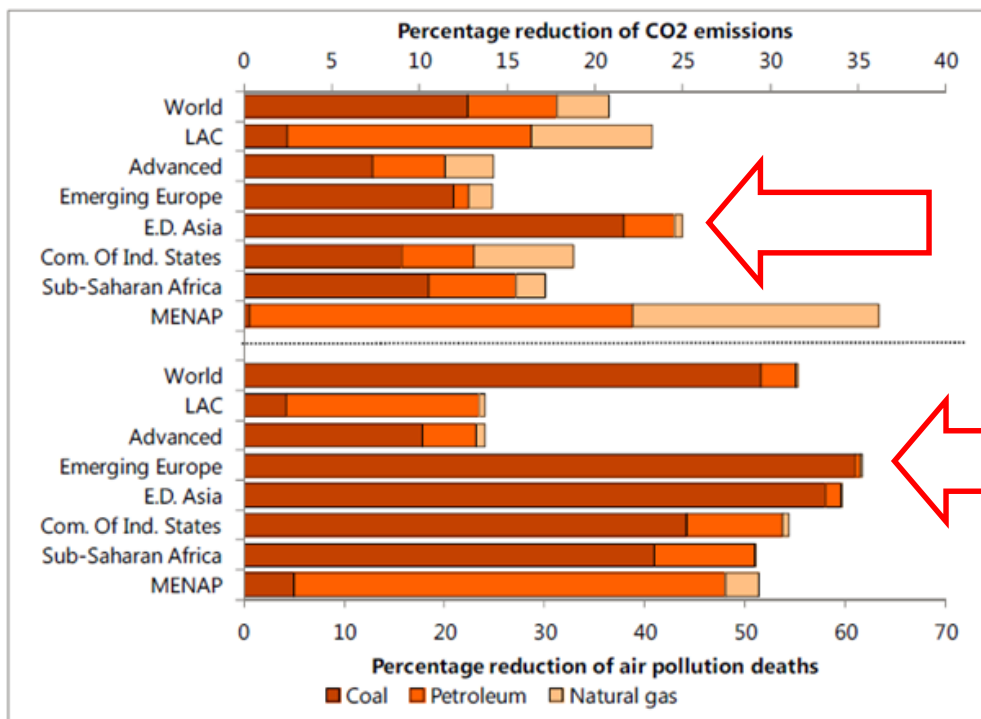
Consumer subsidies: GHG emissions impact

- **8 % reduction** in GHG emissions or 6.1 gigatonnes of carbon dioxide (by 2050) based on 2008 figures, including an emissions cap on OECD and Brazil, increases the reduction to 10 per cent) (Burniaux & Chateau, 2014).
- **20 % decrease** in carbon dioxide emissions based on global removal of consumer pre- and post-tax fossil-fuel subsidies (IMF, 2015).
- **12 % reduction** in energy sector emissions by 2020, equivalent to a reduction of carbon dioxide emissions of 369 million tonnes (Mt), from accelerating the (partial) phase-out of subsidies to fossil-fuel consumption (part of the IEA's 4-for-2°C scenario (IEA, 2013)
- **6.4 % GHG emissions reduction** by 2050 based on removing all consumer subsidies by 2020 (Schwanitz et al, 2014).
- **26 % of global carbon emissions** between 1980 and 2010 were driven by subsidies to fossil fuels (Stefanski, 2014).
- **8 % reduction in carbon dioxide emissions** from a phase-out of coal subsidies (Anderson & McKibbin, 1997).
- Country-specific reductions: **China, a 3.72 %** carbon dioxide reduction between 2006 and 2010 (Lin & Ouyang, 2014); India, a 1.3 to 1.8 % reduction, 2031 (Asian Development Bank [ADB], forthcoming), Indonesia, a 5.3 to 9.3 per cent reduction by 2030 (ADB, forthcoming); Thailand, a 2.8 per cent reduction by 2025 (ADB, forthcoming).



Environment Gains from Removing Fossil-fuel Subsidies, 2013

(Percent reductions in CO₂ emissions on top axis; percent reductions in air pollution deaths on bottom axis)



Global: More than 20% reduction CO₂

Global: 55% reduction air pollution deaths

Source: Authors' calculations, based on sources in Appendix Table 2.

Note: CIS = Commonwealth of Independent States; ED Asia = Emerging and Developing Asia, LAC = Latin America and the Caribbean; MENAP = Middle East, North Africa, Afghanistan, and Pakistan.

<http://www.imf.org/external/pubs/ft/wp/2015/wp15105.pdf>





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Fossil-fuel Subsidies and Climate Change

[http://www.norden.org/
en/theme/green-growth](http://www.norden.org/en/theme/green-growth)

NORDISKE ARBEJDSPAPIRER
N O R D I C W O R K I N G P A P E R S

Fossil-Fuel Subsidies and Climate Change

Options for policy-makers within their Intended Nationally
Determined Contributions

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<http://dx.doi.org/10.6027/NA2015-905>

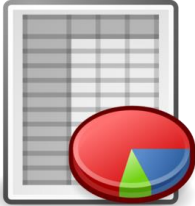




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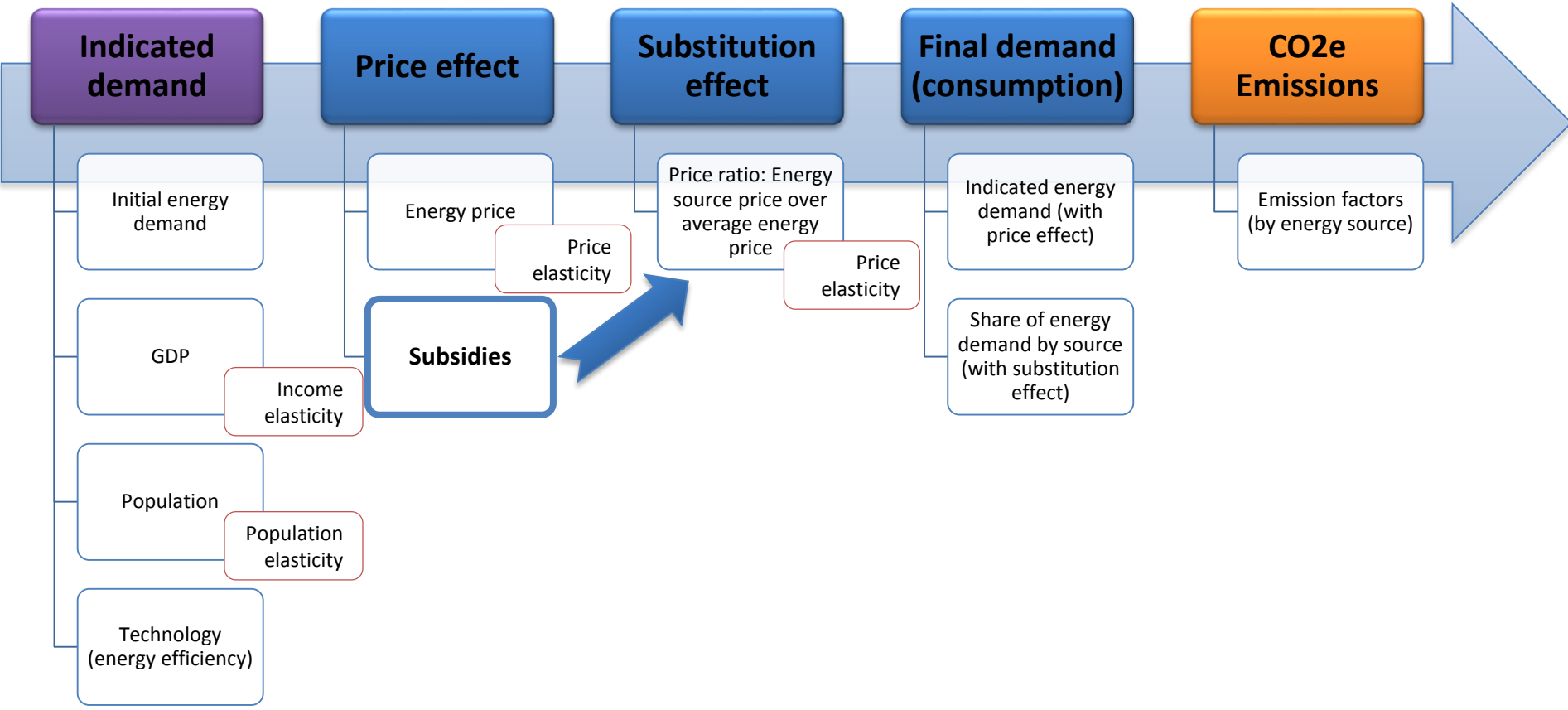


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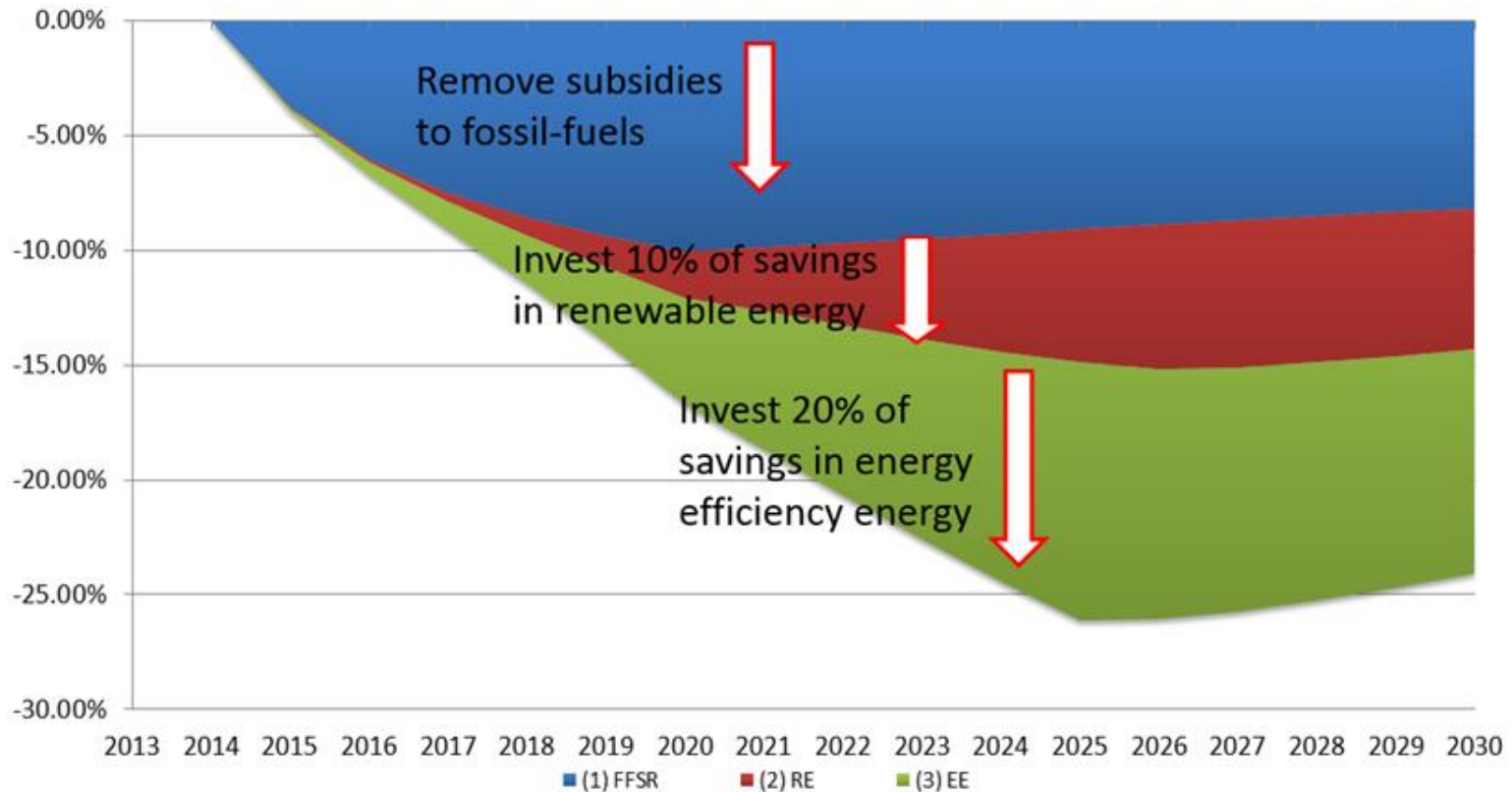
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	<p>Intended Nationally Determined Contributions (INDCs)</p> <p>Global emissions reductions of between 6 and 13 per cent are estimated from the phase-out of fossil-fuel subsidies. Parties aiming to reform fossil-fuel subsidies in the short to medium term could include estimates from emissions reductions from FFSR within INDCs for pre-2020 and post-2020 actions. Estimates of the impact of FFSR on national GHG emission reductions can be made using economic and energy models, for example with the Global Subsidies Initiative Integrated Fiscal (GSI-IF) Model.</p>
	<p>2015 UNFCCC Agreement</p> <p>The current negotiating text, <i>Lima Call to Action</i>, includes references to fossil-fuel subsidies and negotiators should try to maintain this text. Carbon pricing is also recognized within both the preamble and financing sections and should also remain. Fossil-fuel subsidies are a form of negative carbon pricing. Negotiators should consider explicitly adding FFSR wording alongside carbon pricing. FFSR is no substitute for a global agreement and defined policy targets for emission reductions. Emission reductions from subsidy reform are increased in the presence of such a cap.</p>
	<p>Technical Experts Meeting (TEM)</p> <p>In Lima, parties called for a TEM on policy options such as carbon pricing and the removal of fossil-fuel subsidies, and more parties could call for such a TEM. The official side events at the UNFCCC for the past four years on FFSR organized by the Global Subsidies Initiative and Friends of Fossil Fuel Subsidy Reform could be built on.</p>
	<p>Nationally Appropriate Mitigation Actions (NAMAs)</p> <p>Fossil fuel subsidy reform can be included as a NAMA routed within practical projects and programs that both directly enable smooth reforms and are designed to maximize national emission reductions and energy transition pathways alongside reform through complimentary low-carbon energy and transportation investments. These NAMAs can be based on existing transportation and energy sector NAMAs.</p>
	<p>Domestic Savings</p> <p>FFSR will unlock significant savings for governments in the longer term that can be used to support government priorities including national climate mitigation and adaptation strategies. Donor funding can support the process of reform. Countries can consider the reinvestment of subsidy savings back into national energy systems and low-carbon energy pathways. Currently, total funding for technical advice on FFSR is between US\$8 million and US\$10 million a year, in comparison to the subsidies themselves of US\$543 billion.</p>

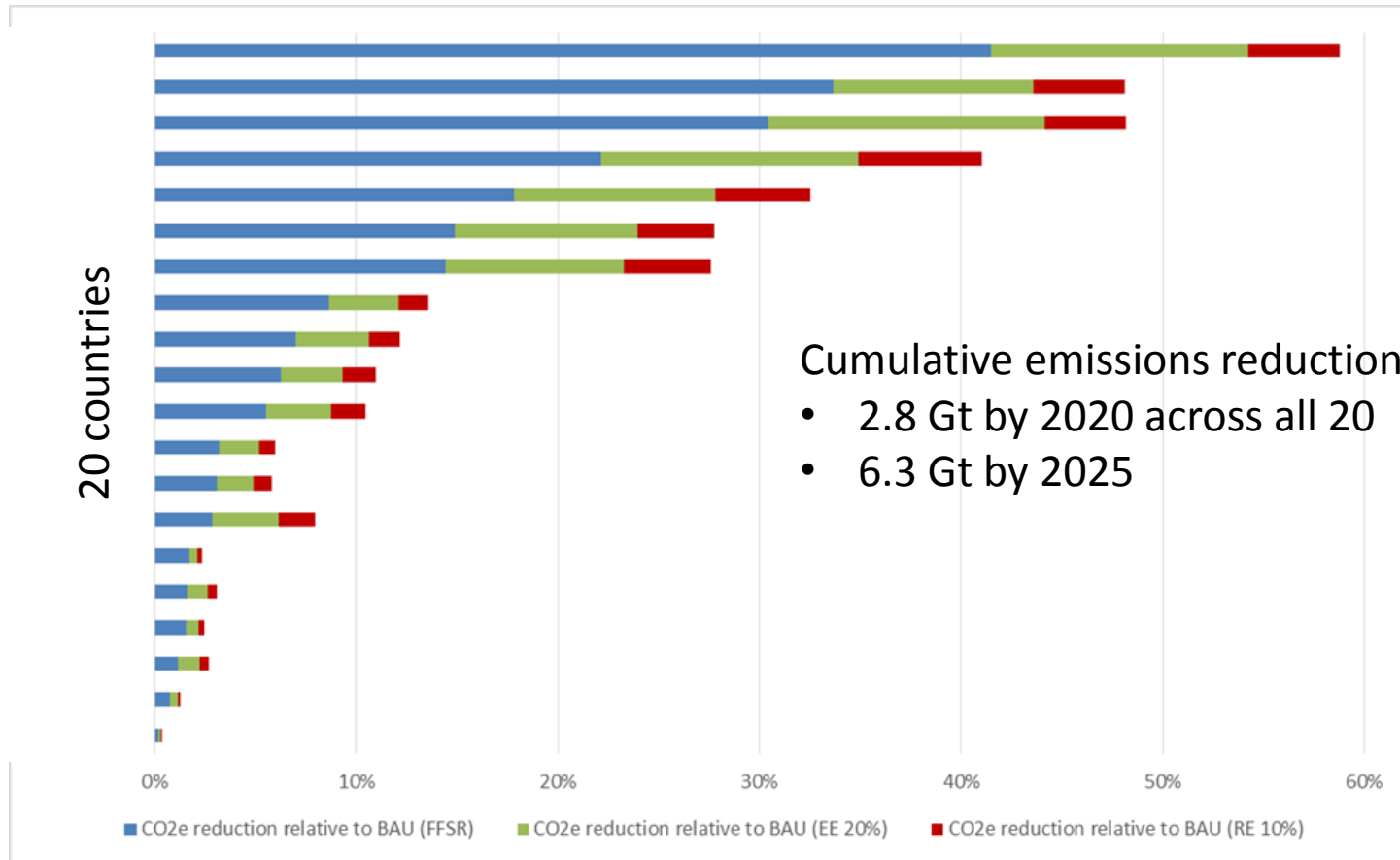
GSI-Integrated Fiscal model: emissions reductions from fossil fuel subsidy removal



GSI-IF model: reallocation scenarios % reduction in CO2e to BAU



GSI-IF model: reallocation scenarios % reduction in CO2e to BAU, average 11% from FFSR alone



Energy Fiscal Policy inclusion within INDCs?



Country	Inclusion
Morocco, India, Ethiopia, Singapore, Viet Nam	In relation to past and future reform to lower emissions
China, Mexico	In relation to energy sector reforms and carbon pricing
New Zealand	In relation to international support for the issue via Friends of Fossil Fuel Subsidy Reform

- A means of delivering emissions reductions in themselves
- Using fiscal policies to help implement INDCs

Morocco

- 2004–2006 reforms: kerosene, and reduction in gasoline and diesel subsidies, and in 2012-2015: gasoline , fuel oil subsidies phased out, diesel eliminated in January 2015.
- 2004-2006
 - Mitigation Measures: New nationwide safety net (NIHD): benefits for 15% of population between 2005 and 2010
 - Cash Transfer Programmes: TAYSSIR provided cash transfers to households in selected poor rural districts conditional on primary school attendance. Similarly, a pilot health insurance program (RAMED) was introduced in 2008.
- 20012–2015 reforms
 - Targeting of reforms : subsidies on fuels consumed mostly by the wealthy removed first, leaving a smaller and better targeted set of subsidies in place (e.g., on LPG).
 - Expansion of existing safety nets: TAYSSIR was expanded, reaching 450,000 students (15% population) in 2011, and 1,000,000 subsequently.
 - Lifeline Electricity Tariff: subsidies retained on first electricity block (100 kWh)
 - Public Transport Pricing: government attempt to limit public transport fare increases
- Renewable energy targets 2 GW of wind, 2 GW of solar and a 2 GW increase in hydropower capacity by 2020 or 42% of the country's total installed electricity generation capacity. Much of Morocco's energy needs are imports so this is a shift towards harnessing national renewable resources.



How to get involved?

Government: Join the Friends communiqué



FFFSR Friends of Fossil Fuel Subsidy Reform

The Communiqué Media room Events

Support the Communiqué

Join the growing international support for reform of fossil-fuel subsidies, a significant climate-change mitigation measure, and the economic, social and environmental co-benefits. The Communiqué calls on the international community to phase out subsidies to fossil fuels through three principles:

1. policy transparency
2. ambitious reform
3. targeted support for the poorest

The declaration will be presented to the Paris climate conference in December. **Support the Communiqué now** and join our efforts to create a sustainable future.

[Read the full communiqué](#)

[Become a Supporter](#)



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Consumer subsidies: National action

- Highly dynamic, since 2009 at least partial reforms attempted in many countries, including:
 - Argentina, Bolivia, Egypt, Ghana, Morocco, Mozambique, India, Indonesia, Malaysia, Nigeria, Pakistan, Sudan, Thailand, Vietnam, Yemen, UAE, Zambia
- Not a question of if but how
- Now a question of ensuring quality of reforms, moving savings towards:
 - Recognising emissions reductions
 - Re-investment of savings into energy infrastructure, low carbon energy and mass transit systems
 - Re-investment into health and education
 - Development of comprehensive social welfare systems
 - Taxation of fossil-fuels to provide on going revenues to fund the SDGs and transition to a low-carbon economy

