### Energy Subsidy Reform and Sustainable Development Goals (SDGs)

Yuliia Oharenko Issyk-Kul, Kyrgyzstan, 26 June 2018





### Contents



- 1. Why reform fossil fuel subsidies?
- 2. 3 Step approach to subsidy reform
- 3. Case studies on subsidy reform
- 4. Conclusions

### Why reform Fossil Fuel Subsidies (FFS)? Fossil fuel subsidies and the SDGs



- Fossil fuel subsidies disproportionately benefit wealthier households
- Subsidy reforms in combination with targeted social welfare programmes can address poverty
- Outdoor air pollution estimated to cause 3 million premature deaths worldwide in 2012
- Removing subsidies and taxing fossil fuels could cut global air pollution by half
- Women often do not benefit directly from fossil fuel subsidies
- Social welfare programmes and targeted cash transfer can be designed to empower women
- Subsidies can hinder the uptake of new low-carbon technologies
- Risk of creating stranded assets
- Fossil fuel subsidy reform could result in significant emissions reductions.
- Risk of creating stranded assets
- 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE

Est

Ň**ŗ**ŧŧŧ

**3** GOOD HEALTH AND WELL-BEING

\_⁄h/€

Ø

**5** GENDER EQUALITY

- Decoupling economic growth from natural resource use is fundamental.
- Removing fossil fuel subsidies reduces the global demand for fossil fuels



Fossil fuel subsidies are 3.5 times larger than the financing required to meet the SDGs for basic social protection, universal health and education [→"Means of Implementation" (SDG17)]

A primary reason for reform often Fiscal Pressure

# Goal 12 of the Sustainable Development Goals (SDGs)



**SDG 12.c Rationalize inefficient fossil-fuel subsidies** that encourage wasteful consumption **by removing market distortions**, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.

**Indicator 12.c.1** Amount of **fossil fuel subsidies** per unit of GDP (**production** and **consumption**) and as a proportion of total national expenditure on fossil fuels.

UNSTATS (2016), Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2016/2/Rev.1)

## Experiences with Subsidy Reform – Where?

• Many case studies from which to identify good practice





## 3 Step Approach: Pricing, Impacts and Political Strategy



## **Key Principles**



- In most countries, reform is a *process*, not an *event*. Subsidies exist for a reason – without tackling these reasons, subsidies return.
- Country circumstances very individual, but common needs in terms of planning and <u>preparation</u>.
- Key task: good preparation in three areas
  - 1. **Pricing**: How prices are changed and the pricing systems that are introduced as an alternative to ad hoc subsidized prices.
  - 2. **Managing Impacts**: Protecting the vulnerable and the economy from the shock of higher prices.
  - **3. Building Support**: Internal (government) and external (public) consultation and communication.

# Pricing (1) – 4 Dimensions



#### 4. Enforcement

Degree to which fuel pricing in real life follows official policy arrangements

#### 1. Subsidies

Degree to which policy reduces the end-price of fossil fuels by shifting costs

#### 2. Pass-through

Degree to which domestic prices change to match international price fluctuations

### 3. Transparency

Degree to which price composition and regulation is open & transparent

- Ultimately, need system that has some degree of **price indexation**
- For technical and political acceptability, a robust regulator

# Pricing (2) – Common Systems



- Many options, but some form of indexation key
- Automatic / formula-based adjustment common stepping stone

	Features	Pros and cons
Market pricing	Deregulation, with anti-trust regulation	Non-distortionary, drives efficiency. Requires long-term investment in competitive market for fair prices.
Automatic / formula-based adjustment	<ul> <li>Fixed rules for adjustment, usually per fixed time period (every 2 weeks, month, quarter etc.) or fixed in world oil prices (e.g. +/-X%). May be indexed to world prices or follow fixed schedule.</li> <li>Can accommodate many modules, e.g. variable tax, price floor/ceilings, "fixed" subsidy etc.</li> </ul>	Flexible. Controlled way to introduce shifting prices. May result in large subsidies if adjustment period is long or vulnerable to political pressure. May reverse price increases if world prices fall.
Stabiliization Fund	Fund collects revenue when oil prices are low; subsidizes when oil prices are high.	Seldom if ever self-financing.
Discriminatory pricing	Cross-subsidies, dual-pricing, rationing	Hard to administrate, tend to create major losses through black markets
Ad hoc	Prices adjusted as and when necessary by political decision-makers	Tends to create large subsidies and large unpredictable price changes.

# Managing Impacts (1)



- Absolute vs. relative distribution
- Changing prices affect the cost of living
  - Direct impacts
  - Indirect impacts
- Need to assess impacts & develop mitigation strategy





- Two extremes: "Gradual" vs. "Big bang"
- Gradual generally advised... but depends on context and objectives

	Gradual	"Big bang"	
Macro			
Fiscal	Initially low but gradually accumulating savings	Immediate and significant saving	
Inflation	Low but long-term	High but short-term	
Social and micro			
Households &	Low to moderate. Time for production and	High impacts. No time for	
businesses	consumption to adjust.	adjustments.	
Political			
Opposition	Medium but gives time to organize	High	
Political capital	Medium but ongoing	High but one-off	
Administrative			
Risk poor strategy	Low to moderate. Impacts can help inform	High. Hard to predict impacts.	
	plans.		
Energy markets			
Reduced demand	Gradual	Instantaneous	
Risk of hoarding	High, esp. if price schedule is known.	Low.	



- A portfolio approach is common. 1.
- 2 The "cure can be worse than the disease".
- Look to what works now... but don't forget to invest in the future. 3.

#### **Illustrative Types of Policy**

٠	Infrastructure to enable access	to ke	ey services,	e.g.	power, clean	water,	transport,	irrigation.
---	---------------------------------	-------	--------------	------	--------------	--------	------------	-------------

- Subsidized goods or services, e.g. food, water; transport, health, education.
- Cash transfers

(usually low-income)

Households

**Businesses** 

- Unconditional (UCTs), usually short-term
- Conditional (CCT), typically maternal healthcare, nutrition, school attendance 0
- Social security programs, e.g. health insurance, pensions
- Job creation schemes: public works; internship programs; training; microcredit
- Minimum wage, tax reductions
- Targeted energy subsidies, usually for energy access reasons
- Relaxation or adjustment of sectoral price controls ٠ ntensive) energy-
  - Free or low-cost energy-efficiency audits
  - Credit facilities for energy-efficiency investments
  - Cash transfers, usually short-term, e.g. to transport operators

# Building Support



- Need for a whole-of-government approach
- Listening before talking: research attitudes, audience segmentation
- Simple and varied messages targeted at specific stakeholder groups



# Mutually Supportive and Reinforcing

- Need for ongoing interaction between Ministries and task forces responsible for thinking on pricing, impacts and political strategy
- Evidence-based approach in all three areas





# **International Experience: Case Studies**



# Indonesia – Impacts, Building Support

- From 2005-2015, energy subsidies ~3% GDP
- Fixed prices for gasoline, diesel, kerosene, LPG, electricity
- Subsidy challenges ongoing but a lot of experiences to learn from. Major reforms in 2015; ~US\$ 16 bn in savings

Impacts	Building Support	
<ul> <li>History of large price increases</li> <li>Mix of short-term (BLT/BLSM cash transfer, public works) and long-term (expansions in education, health) portfolio approach</li> <li>Interrelation between reforms and growth of social safety net capacity investments</li> </ul>	<ul> <li>Strong domestic opposition to subsidy reform, ~79% against in 2014</li> <li>Major signalling on reform in 2014 elections from all sides</li> <li>Significant outreach around price increases</li> </ul>	

# Indonesia – Pricing



# India – Pricing, Managing Impacts



- From 2008-2015, energy subsidies 0.5-1.5% GDP
- Fixed prices for gasoline, diesel, kerosene, LPG, electricity
- Gasoline & diesel subsidies reformed; targeted LPG subsidies; kerosene phase-out; electricity tariff challenges

Pricing		Managing Impacts	
•	Successful big bang reform of gasoline subsidies in 2010 Successful gradual reform of diesel subsidies in 2014-15, though helped by falling world oil prices Full deregulation planned	<ul> <li>Improved targeting: Direct Benefit Transfer for domestic LPG (DBTL) and preferential electricity tariffs for agriculture and small household users.</li> </ul>	

# Iran – Pricing, Building Support



- From 2011-2013, petroleum subsidies ~7-10% GDP
- Major price reforms in 2010, 2014, 2015 alongside price changes to many other products: basic foods, medical supplies, water, power and sewage

Pricing		Building Support	
<ul> <li>Subsidies largely a cost: domestic oil</li> <li>In 2010, create a structure for mote 60 liters per week Abolished 2014.</li> <li>Savings eroded by</li> </ul>	<ul> <li>an opportunity</li> <li>production</li> <li>3-tier tariff</li> <li>or fuels; first</li> <li>subsidized.</li> </ul>	Major high-level discussions ongoing for many months before reforms take place Cash transfer system created (see next slide for details), including new banking	
not indexed prop	erlv		

Suite of tools includes:

- Pricing system (tiered) short-term
- Cash transfers (largely universal, 95% receive, originally set at around US\$ 45 per month for a 4-person family) – ongoing
- Price controls
- In 2013 food handouts

The importance of targeting

 Cash transfer: High cost because of program's universality + contributes to inflationary pressure

# Conclusions

9

- Subsidy reform is moving forward in much of the world and fiscal pressure (savings) often a primary driver
- Plans for fossil fuel subsidies reform should be approached holistically
- International experience shows importance of planning around pricing, mitigation and building support—even when date for reform is unknown
- Fossil fuel subsidies reform directly supports attainment of SDG 12.c but indirectly contributes to at least 5 more goals.

## Yuliia Oharenko, yuliia.oharenko@iisd.net

https://www.iisd.org/gsi/

**Thank You** 



iisd thereafter the transformed to the transformed

A GUIDEBOOK TO FOSSIL-FUEL SUBSIDY REFORM FOR POLICY-MAKERS IN SOUTHEAST ASIA



