

# Energy Efficiency and Subsidy Reform: A Virtuous Circle

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## What We Do

Consumer Fossil Fuel Subsidies

Producer Fossil Fuel Subsidies

Renewable Energy Subsidies &  
Fossil Fuel Exit

Energy Subsidies & Trade

Energy Subsidies & Gender

Fossil Fuel Subsidies & Sustainable  
Development

Energy Subsidies Data

Fossil Fuel Subsidies & Climate  
Change

Fossil Fuel Subsidy SWAPs

Fossil Fuel Subsidies & Health

Fossil Fuel Subsidies & Social

## Placing a Spotlight on Subsidies

GSI programs and research place a spotlight on subsidies and the corrosive effect they have on economic development, governance and environmental quality. We work with governments and partners to help remove subsidies that work against sustainable development.

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# What is an energy subsidy?

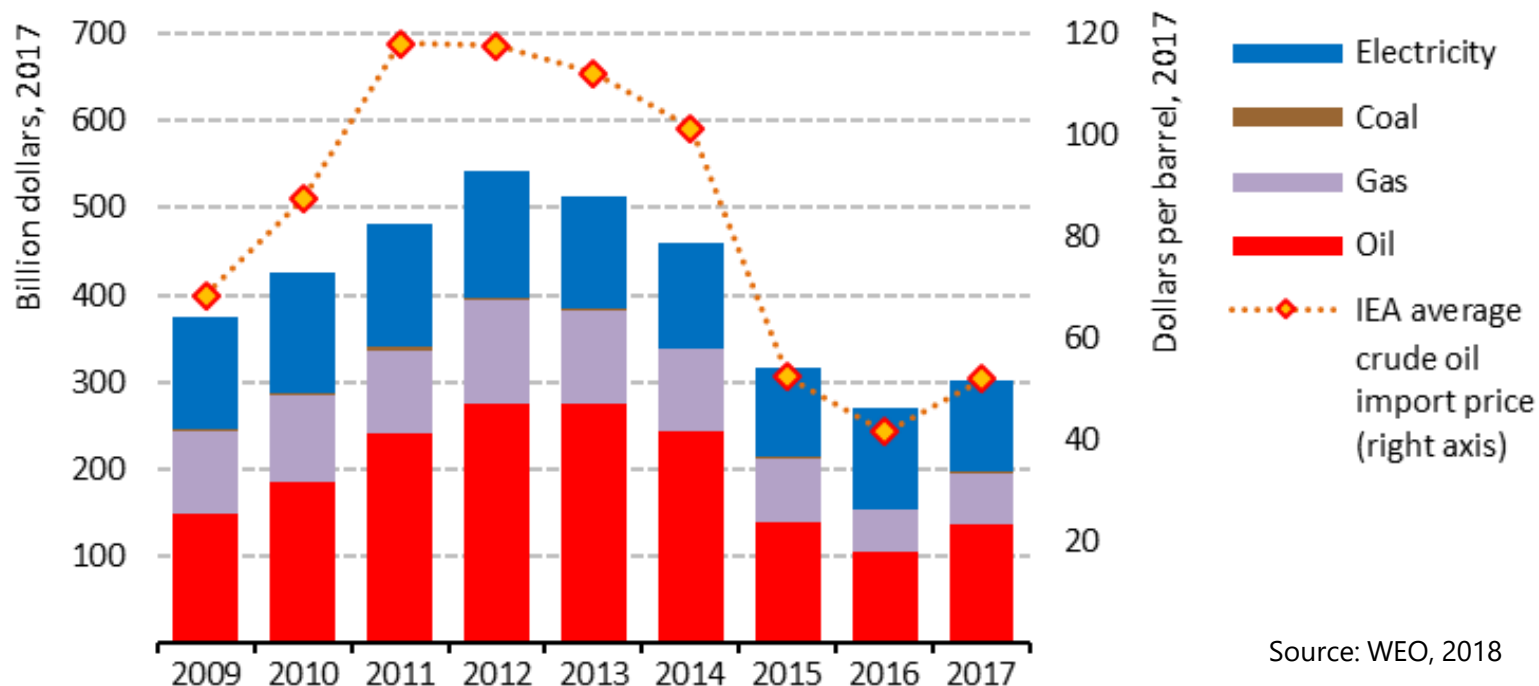
- A deliberate policy action by government that specifically targets a particular energy source (e.g. coal, oil, gas, electricity) with one or more of the following effects:
  1. Reducing the net cost of energy purchased
  2. Reducing the cost of production or delivery of energy
  3. Increasing revenues retained by energy suppliers
- Consumer subsidies distort the price for energy (the amount paid by consumers does not reflect the actual cost)

## **Fossil Fuel Subsidies are roughly:**

- 4 times level of renewable subsidies
- 4 times OECD Development Assistance
- 6 times the amount needed for meeting climate finance objectives
- 22 times the size of current donor adaptation funds

# Consumer subsidies largely follow the global market price...

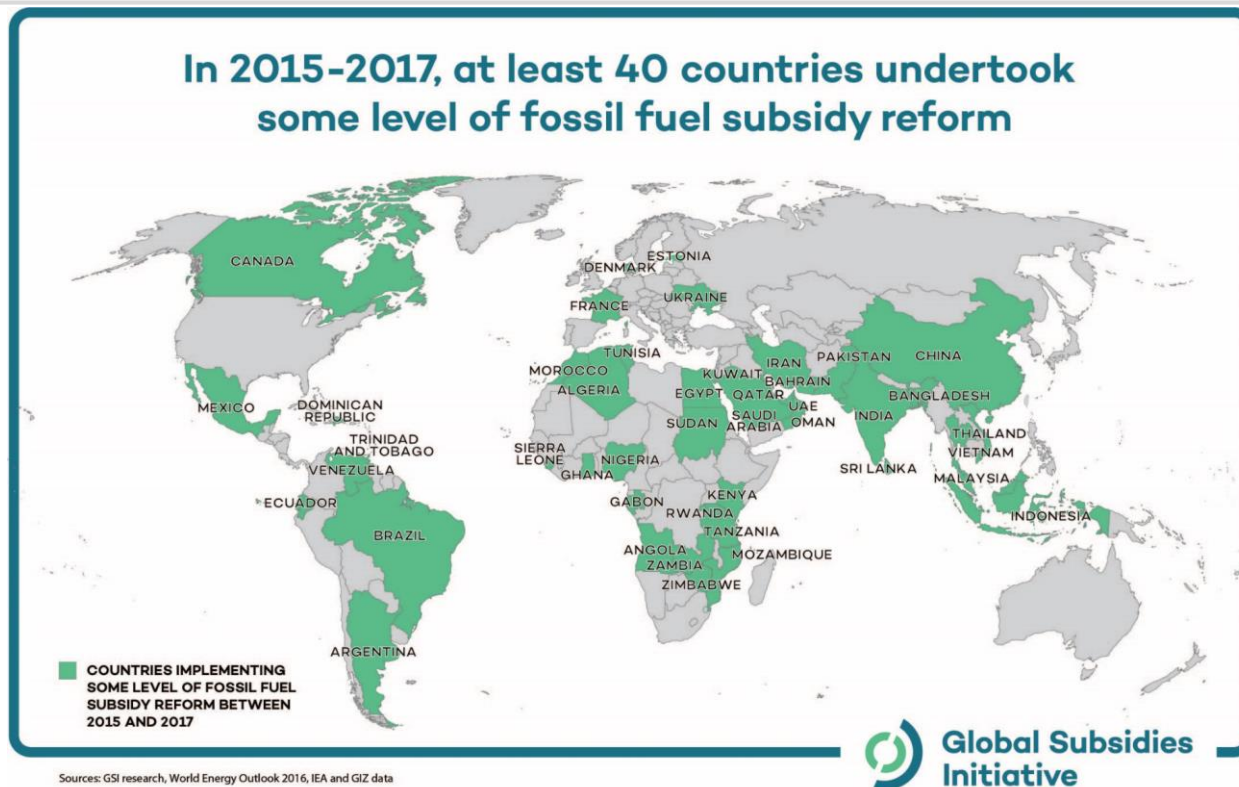
Estimated value of global fossil-fuel consumption subsidies, 2009-17



Source: WEO, 2018

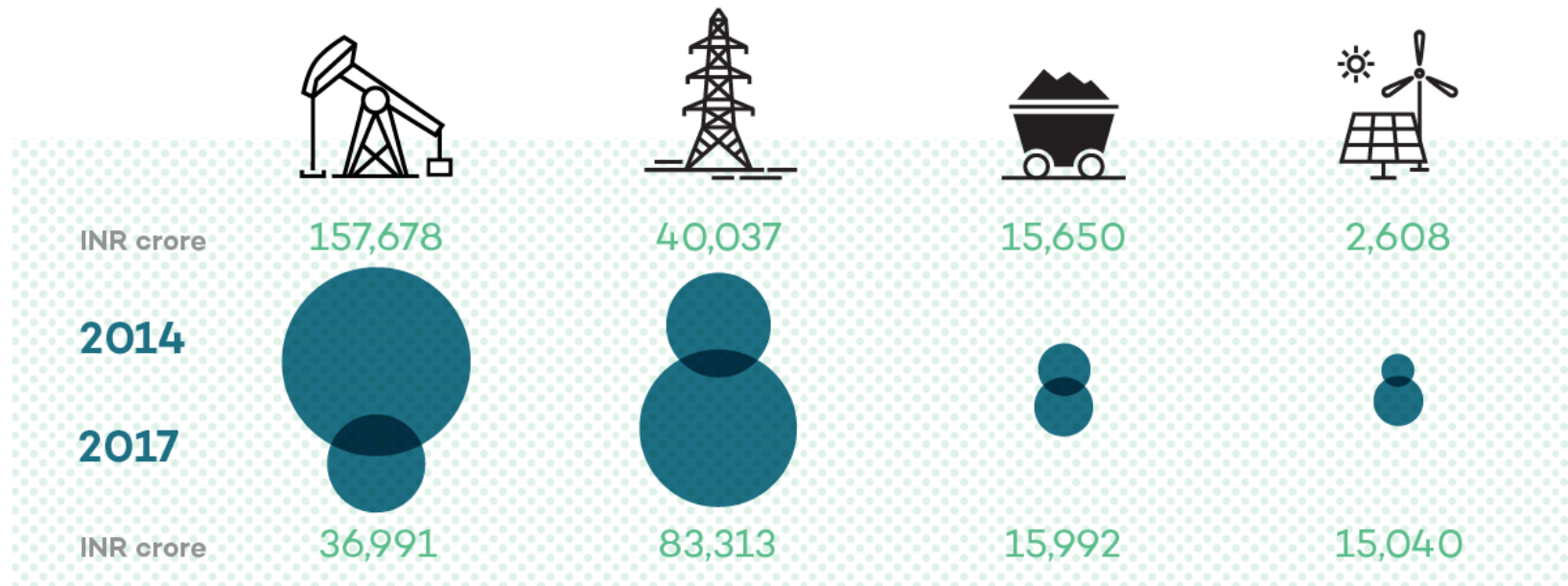
**Lower prices and bolder policies mean that the value of global fossil-fuel consumption subsidies declined to 2016 (to \$260 billion). Rose to \$302 billion in 2017**

## ... but many countries are implementing subsidy reform



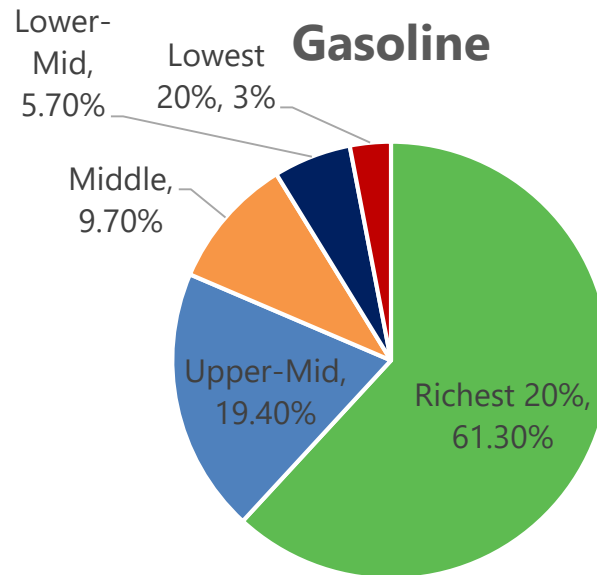
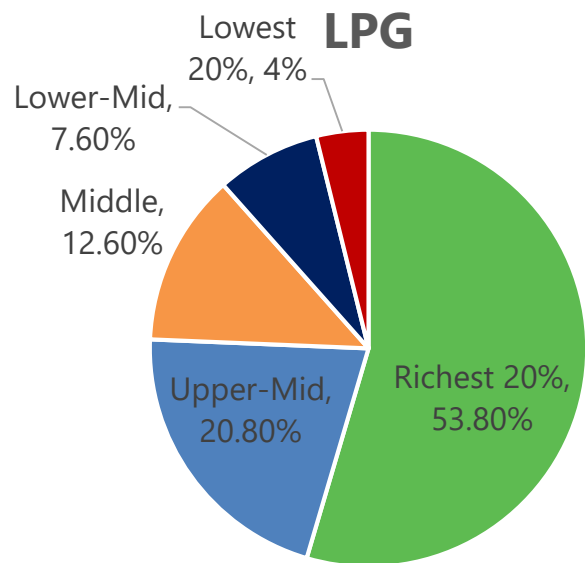
**Relatively low oil prices from mid-2014 provided the opportunity for the phase-out of consumer subsidies in several countries, by making their withdrawal less painful.**

## Big shifts in India's energy subsidies from 2014-2017 (INR crore)



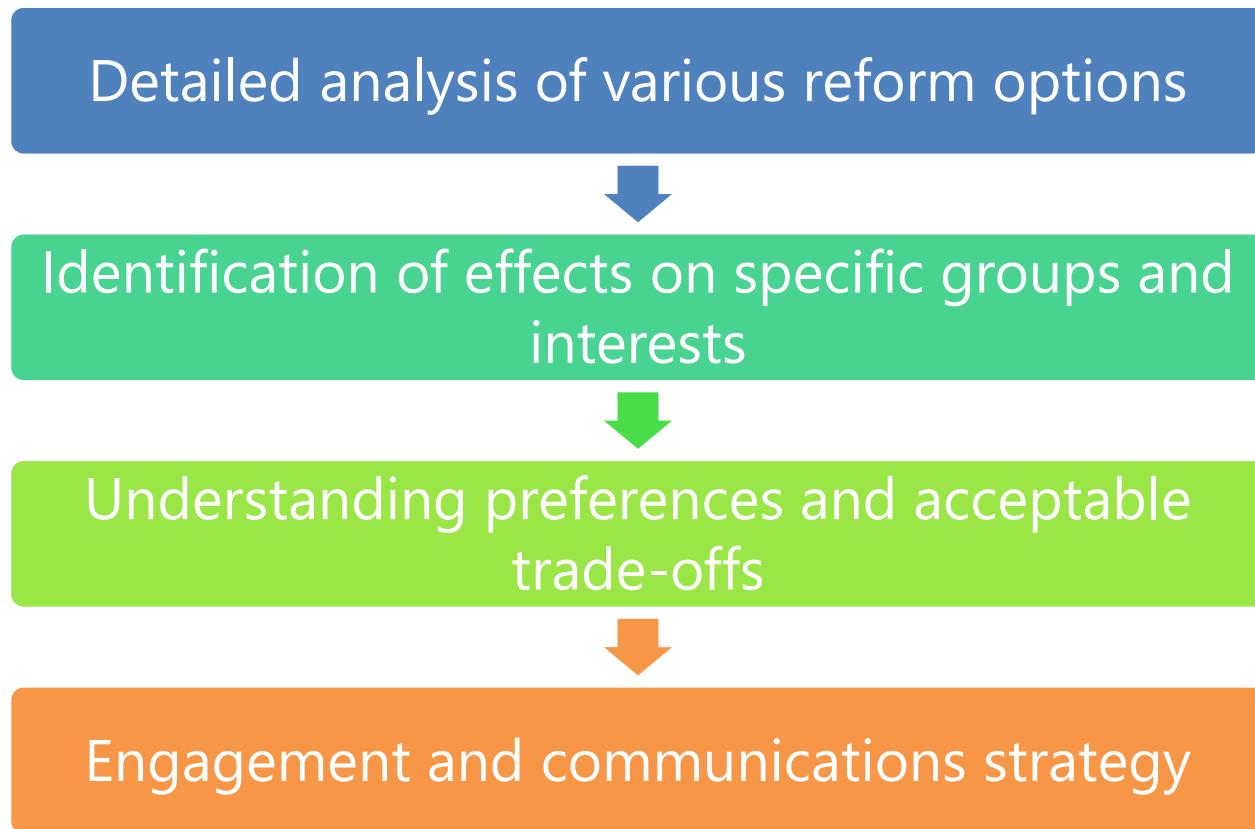
# Who are the real beneficiaries of subsidies?

## Global survey of energy subsidy beneficiaries



Source: IMF Working Paper 2010

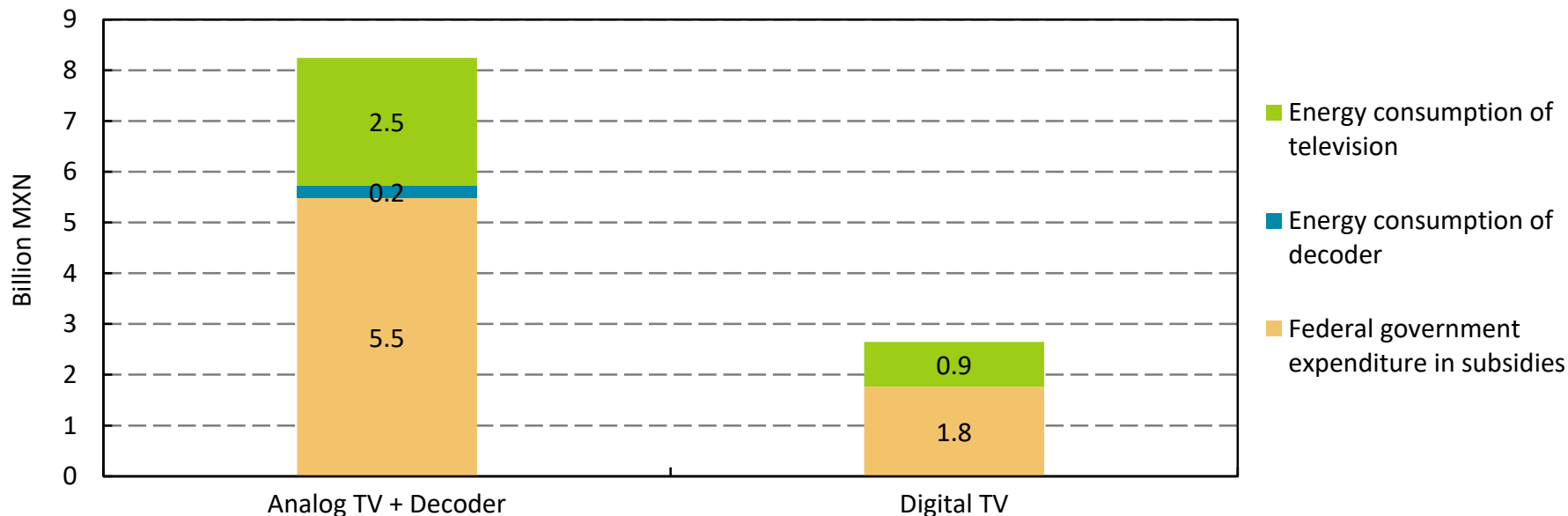
# What are the steps in reforming subsidies?



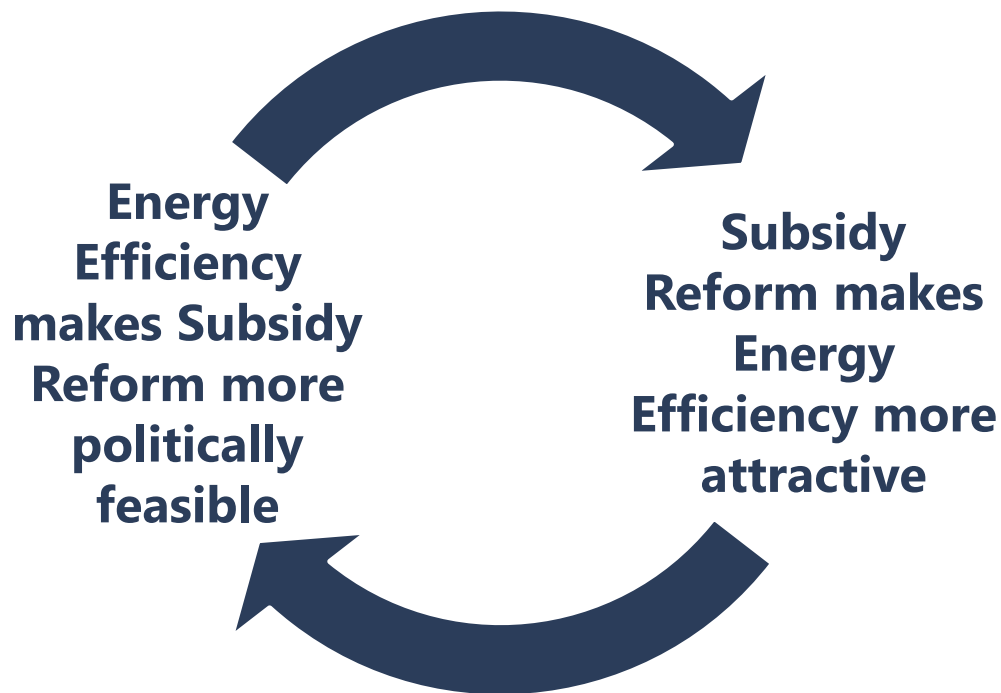


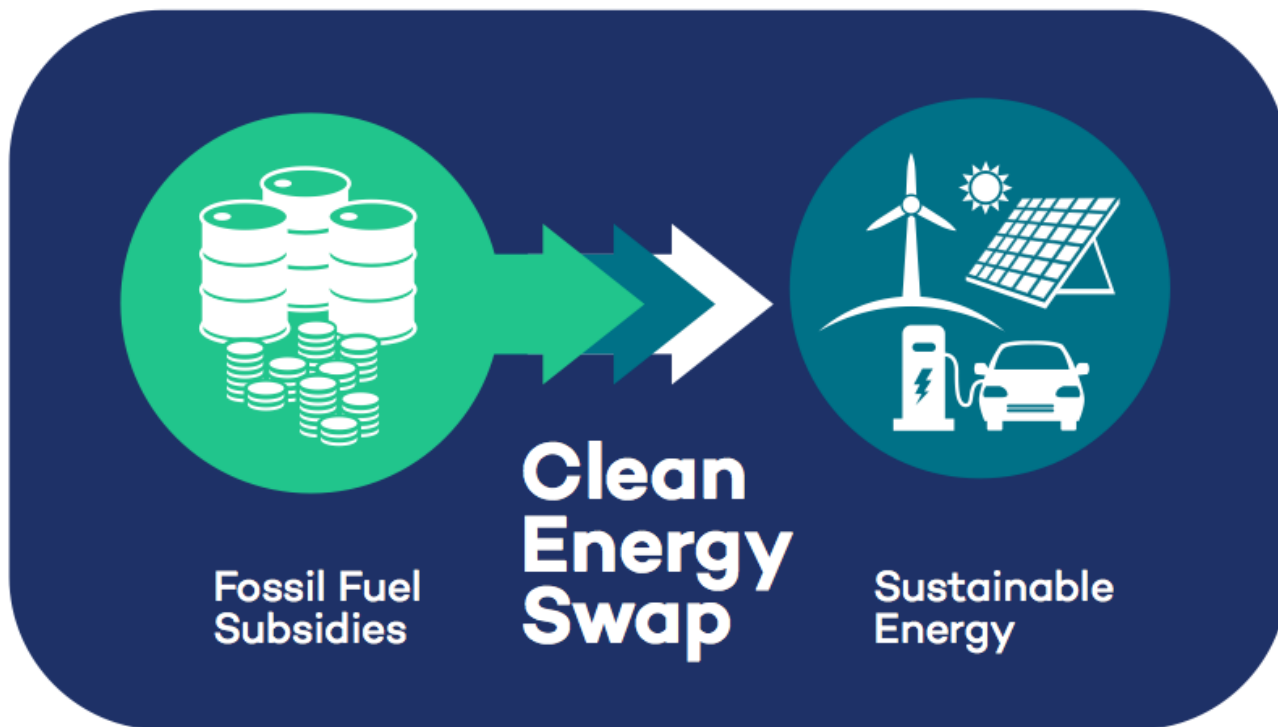
# Efficiency reduces the impact of subsidy reform

Comparison of annual expenses by households and Mexican government with analogue television and decoder versus digital television



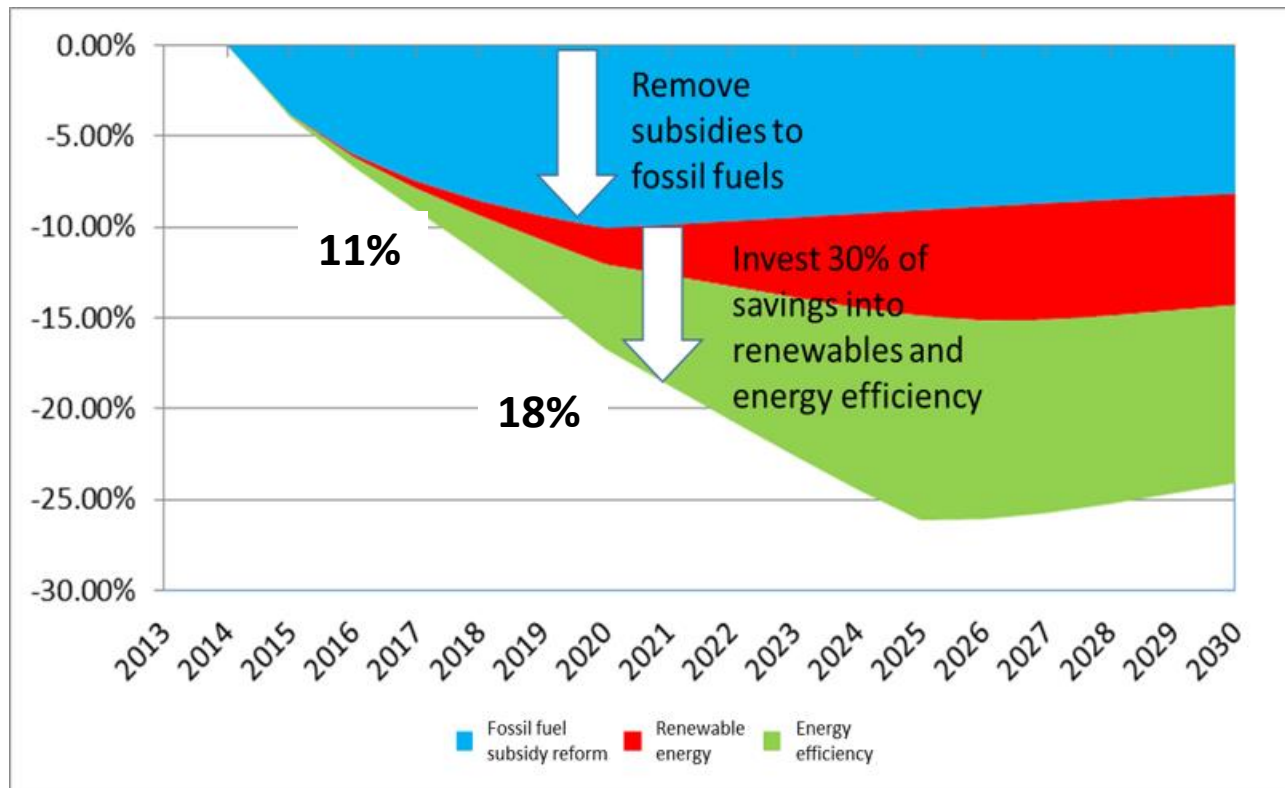
**The Mexican government is providing 14 million LED TVs to low-income households. The USD 102.4 million cost is expected to be recovered through avoided consumption and reduced subsidies**





Reforming **fossil fuel subsidies**  
will generate \$avings that  
can be re-invested towards  
**sustainable energy.**

# Reallocation to Clean Energy increases FFSR Impact



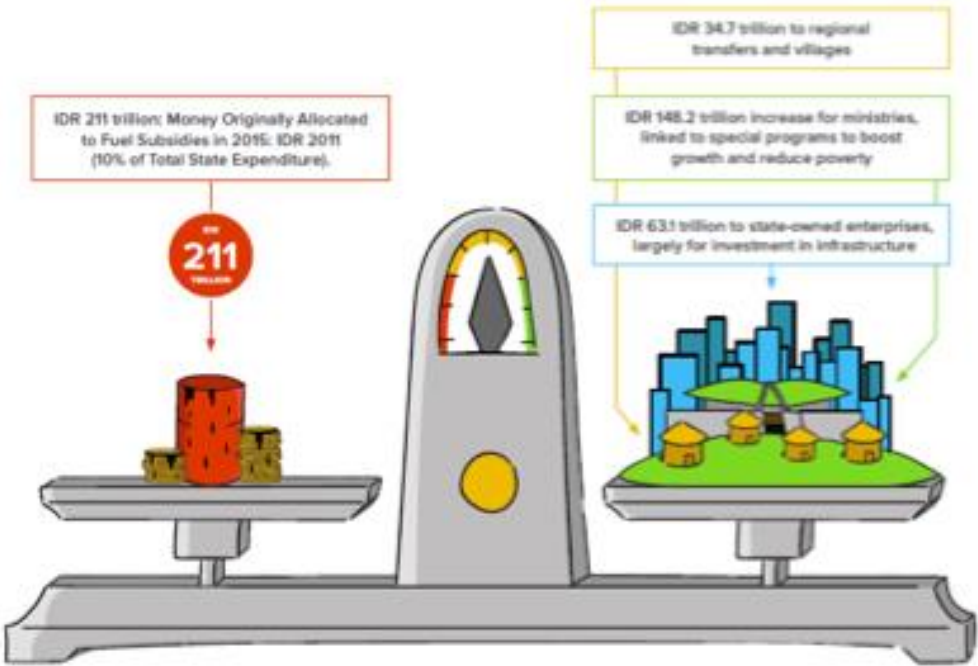
<http://www.iisd.org/library/making-switch-fossil-fuel-subsidies-sustainable-energy>



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# Fossil Fuel Subsidy Swap in Indonesia (2015)



## International recognition

S&P	May 2013 Stable BB+	May 2015 Positive BB+
Moody's	January 2012 Stable Baa3	Feb 2017 Positive Baa3
Fitch	Dec 2011 Stable BBB-	Dec 2016 Positive BBB-

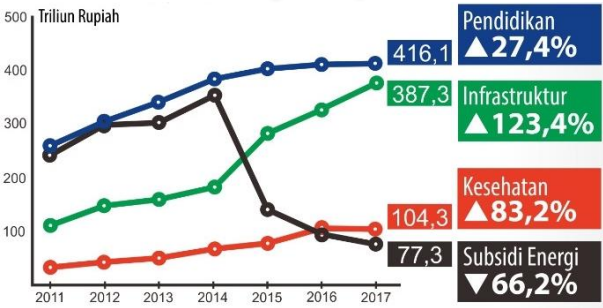
<https://www.iisd.org/sites/default/files/publications/financing-development-with-fossil-fuel-subsidies-indonesia.pdf>

Reallocating subsidy saving  
More efficient spending

More efficient economy

- Better infrastructure can contribute to lower logistic time and cost
- Ease traffic jam with public transport - quality of life
- New grid delivering more power and less interruption

## INCREASING ECONOMIC VALUE FROM ENERGY USE



FINANCING DEVELOPMENT WITH FOSSIL FUEL SUBSIDIES: THE REALLOCATION OF INDONESIA'S GASOLINE AND DIESEL SUBSIDIES IN 2015

Report prepared by:  
Alberto Bertoldi  
Dimitry Demaree  
David Arango  
Guillaume Marquet  
May 2016

IISD  
Global Subsidies Initiative  
PIEB

**IISD are currently working with the Ministry of Energy and CUTS Lusaka to develop two subsidy swaps to tackle these problems:**

1. Phase out diesel generators and replace with cheaper solar energy. Recent auctions show that prices for solar are now lower than diesel generation, so a transition would reduce costs for the national utility ZESCO
2. Reduce access to subsidized electricity in the mining sector. Some of the additional revenues generated could be allocated to fund energy efficiency and clean energy projects to further improve mining sector efficiency



- Energy subsidies are a significant draw on public budgets
  - Around 261 billion USD around the world, with national share of GDP reaching up to 14%
  - Savings could be reinvested into a range of development priorities
  - “Swaps” into energy efficiency would increase positive impact of subsidy reform
- Subsidy reform is progressing across the world
  - Focus more on (larger) consumer subsidies rather than producer subsidies
  - Reducing public expenditure often a primary driver, not energy efficiency
  - Concerns centre on the poor and vulnerable, and industrial competitiveness
- Energy efficiency reduces the impact of subsidy reform...
  - ...and subsidy reform supports energy efficiency
  - (So far) Only few examples of formally reallocating fiscal savings to energy efficiency

# Questions?

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