

# Energy Price Reform in Saudi Arabia



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# *Overview*

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**Low domestic energy prices entail substantial cost:**

**Rapid growth in domestic consumption**

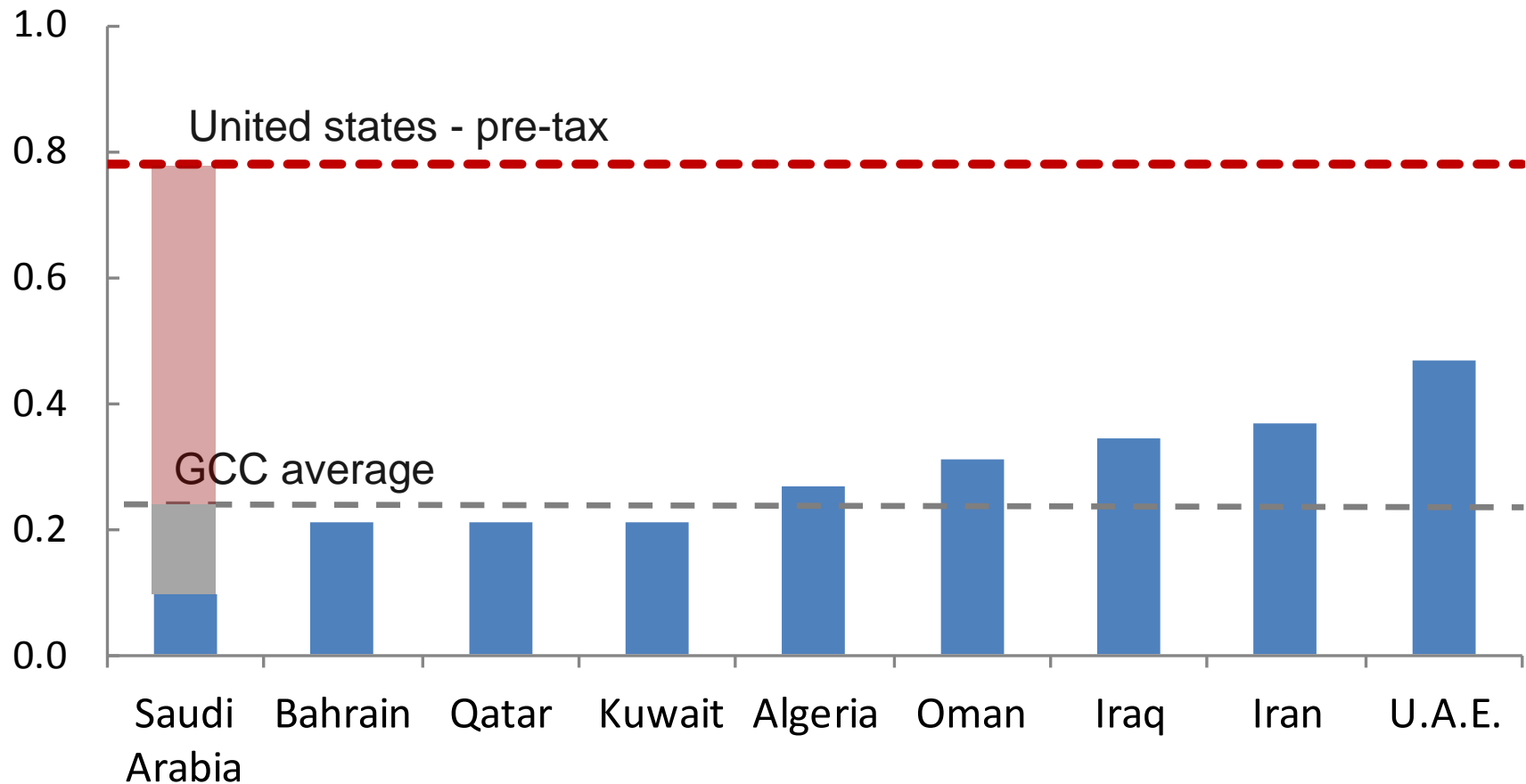
**Foregone export revenues are high**

**Disproportionately benefit higher-income groups**

**Cross country experiences suggest comprehensive energy price reform plans needed**

# *Saudi Arabia has one of the lowest energy prices in the world*

## Gasoline prices in 2014



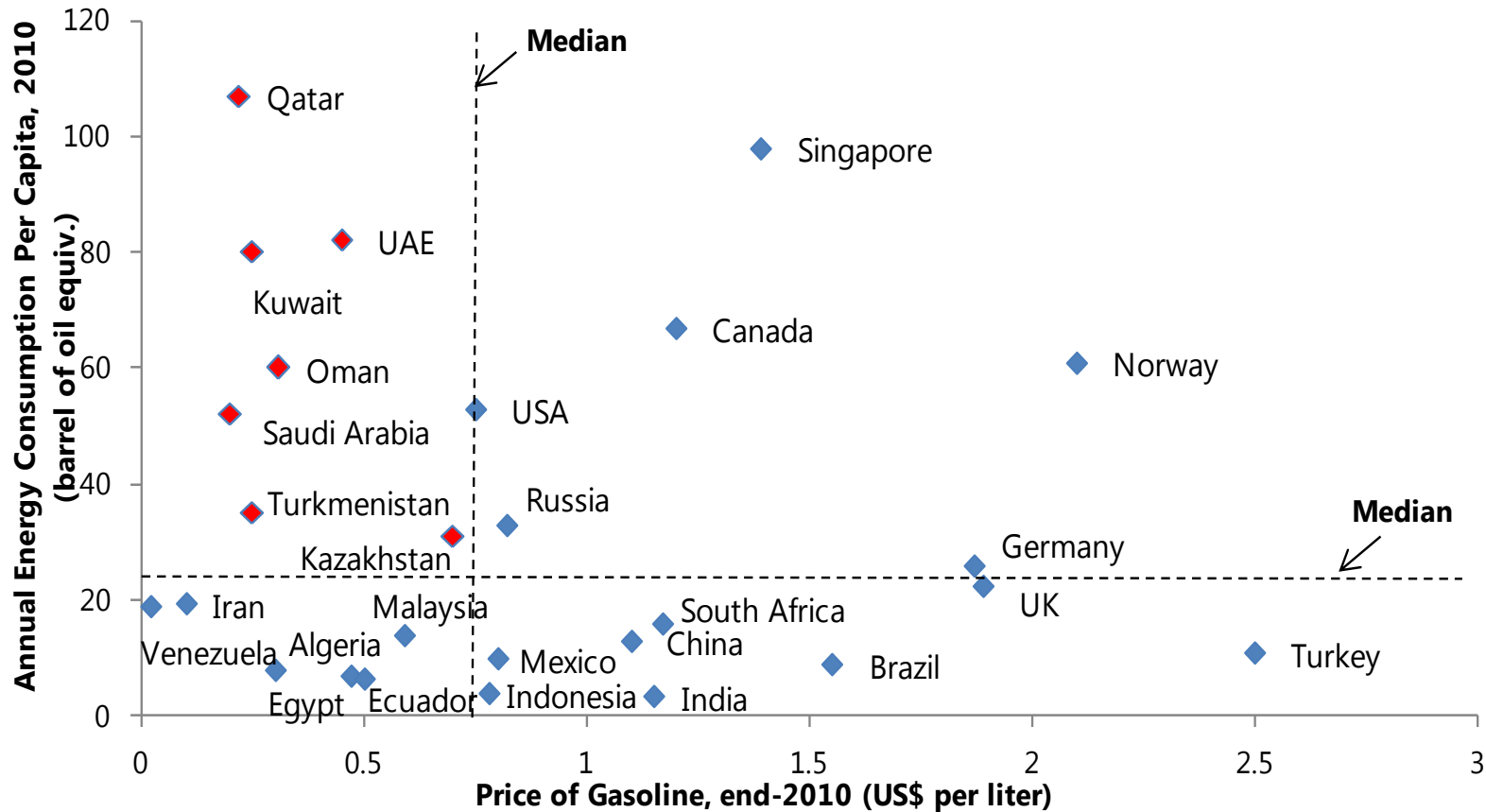
*... which suggests high implicit cost of low energy prices*

## Implied Energy Cost for Saudi Arabia in 2014

	Implied Cost 1/	
	US\$ mn	percent share
Gasoline (Premium 95)	n.a.	n.a.
Gasoline (Premium)	18,333	22.1%
Diesel (Gas oil)	32,736	39.4%
LPG		
Public	1,267	1.5%
Oil Industry	409	0.5%
Fuel Oil		
Public	16,823	20.3%
Oil Industry	1,693	2.0%
<b>Total Petroleum products</b>	<b>71,261</b>	<b>85.9%</b>
Natural Gas		
Public	9,617	11.6%
Oil Industry	2,109	2.5%
<b>Total Natural gas</b>	<b>11,726</b>	<b>14.1%</b>
<b>Total oil and gas</b>	<b>82,987</b>	<b>100.0%</b>
<b>% of GDP</b>	<b>11.1%</b>	
<b>Electricity</b>	<b>11,348</b>	
<b>% of GDP</b>	<b>1.5%</b>	

# Per capita domestic consumption is high

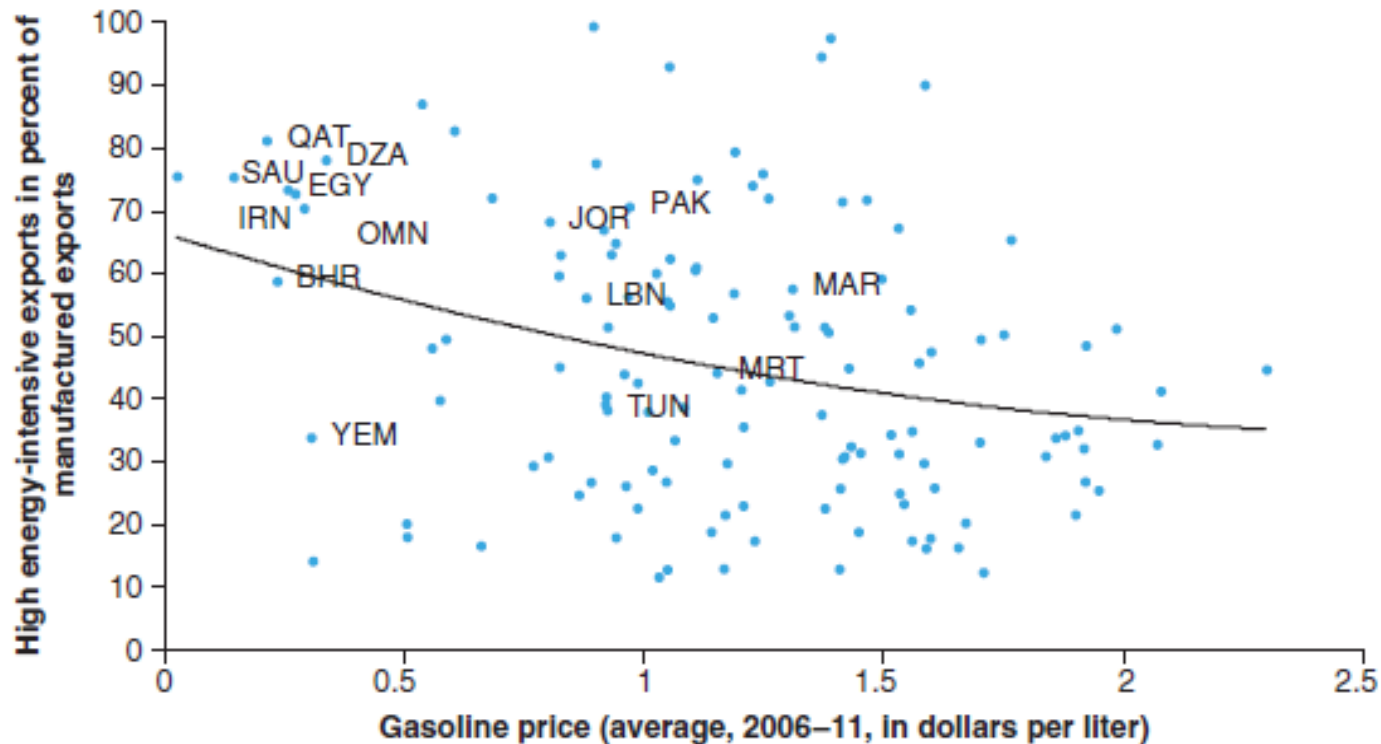
## Energy Consumption vs. Price of Gasoline



Sources: BP statistical review 2010, Country authorities, Gasoline prices GTZ online data and Fund staff calculations.

# *Low energy prices have promoted energy intensive industries*

## High Energy-Intensive Exports and Gasoline Price, 2011<sup>1</sup>



Sources: UN COMTRADE database; and IMF staff calculations.

<sup>1</sup> Excludes petroleum production and refining.

# High energy consumption crowds out exports

## Saudi Arabia: Trends in Oil Consumption and Exports

( in percent change)

	2011	2012	2013	2014	avg. 2011-14
<b>Oil consumption</b>	5.8	7.0	5.6	6.8	6.3
<b>Oil exports</b>	6.9	4.0	-0.9	-2.7	1.8
<b>Crude oil exports</b>	8.6	5.0	-0.1	-5.5	2.0
<b>Refined oil products exports</b>	-5.2	-4.0	-8.2	24.5	1.8
<b>Real non-oil GDP</b>	8.1	5.5	6.4	5.1	6.3

Sources: Country authorities.

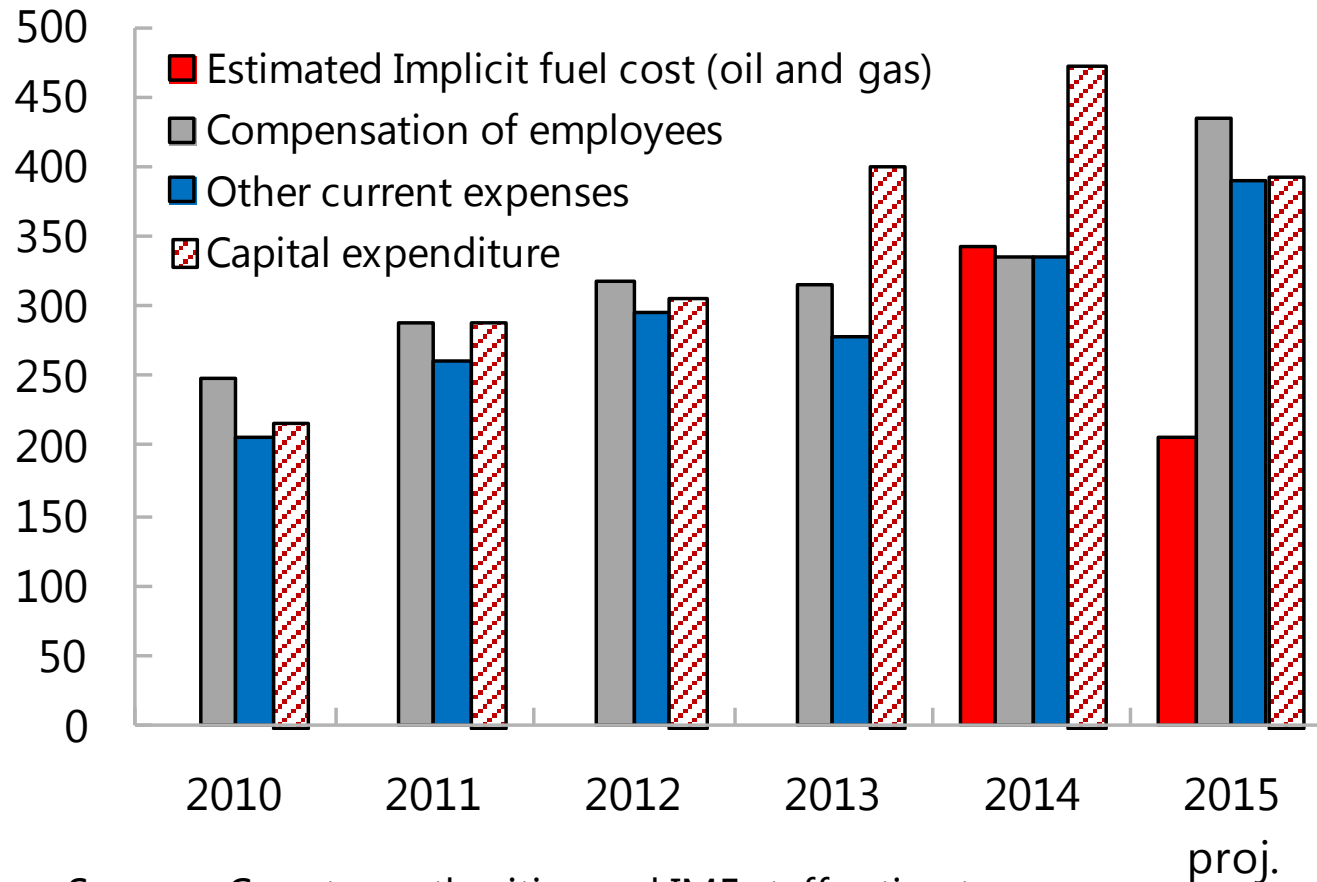
### At current rate of consumption growth:

- Additional future demand could crowd out refined exports by 2021.
- By 2040, 8.4 mbd of oil would be consumed domestically (equivalent to current exports).

# *Energy price reforms could help retain priority spending during fiscal adjustment*

## Saudi Arabia: Government Expenditure and Implicit Fuel Cost

(SAR billion)



Sources: Country authorities and IMF staff estimates.

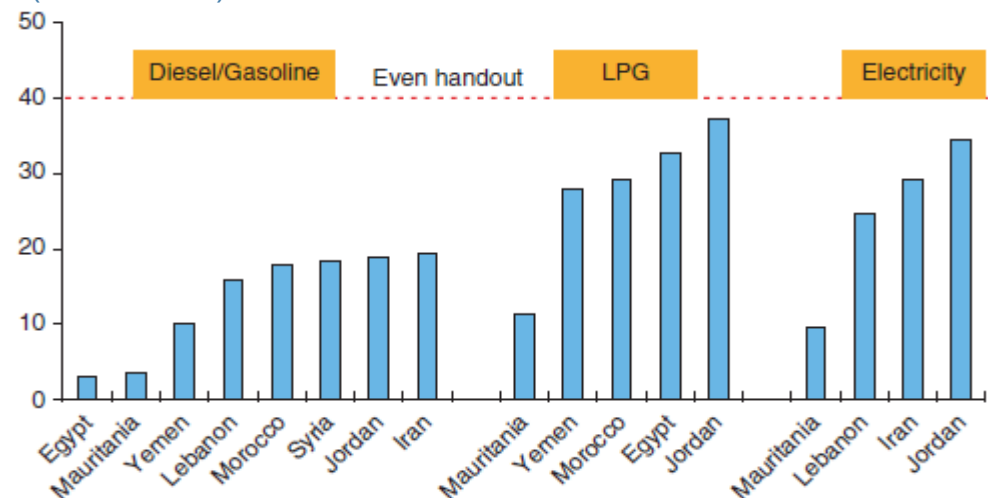


# *International experience: low energy prices disproportionately benefit the better-off*

- The leakages are more pronounced for low prices for gasoline and diesel .
- In Egypt, the poorest 40 percent of the population received only 3 percent of benefits from low gasoline prices, 7 and 10 percent in case of natural gas and diesel respectively.

## Share of Energy Subsidies Benefiting the Bottom 40 Percent of the Population<sup>1</sup>

(Direct Effect)



Sources: World Bank/United Nations Development Program Energy Sector Management Assistance Program (2005); IMF and World Bank reports; Salchi-Isfahani and others (2013); and IMF staff calculations.

Note: LPG = liquefied petroleum gas.

<sup>1</sup> Based on household surveys conducted between 2003 and 2009.

# *In Saudi Arabia, energy price reforms would likely impact richer households (HHs)*

- Richer HHs spend a higher share on transport related expenses than other HHs
- Richer HHs spend lower share on utilities than other HHs

Percent share of average monthly expenditure of households

	Utilities	Transport	Description
<b>Total -weighted avg.</b>	<b>2.2%</b>	<b>9.1%</b>	
greater than 25000	1.2%	13.0%	Above average spending households
15000-24999	2.2%	9.6%	
9000-14999	2.7%	6.7%	Low to medium spending households
3000-8999	3.1%	5.1%	
2000-2999	4.1%	3.1%	
1500-1999	4.6%	2.1%	
1000-1499	4.5%	1.5%	
less than 1000	4.0%	1.2%	

Source: CDSI, Household survey, 2013.

# *Current planned reforms include supply and demand side measures*

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## **Supply side measures:**

**Increase refining capacity**

**Increase electricity generation capacity**

**Develop the Public transport system**

## **Demand side measures:**

**Energy Efficiency**

**Low energy price would skew the cost-benefit calculation and create barriers**

# Key Strategies

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- **Comprehensive energy sector reform plan**
- **Well-planned and comprehensive communication strategy**
  
- **Appropriately phased and sequenced price increases**
- **Depoliticized price setting and adopting an automatic price mechanism**

**Example of success: Jordan (2012), Morocco (2014)**

# Key Strategies

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- **Targeted Mitigating measures**

*Improving Targeting*

*Cash Transfers*

**Households & Productive sector**

# Impact

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- **Impact on domestic inflation**
  - **Country experiences differ**
  - **Limited impact if reform is well planned and gradual**
  - **First round effects**
  - **Second round effects**
- **Impact on the productive sector**
  - **Increase production costs for industries**
  - **Shift in production mix away from energy intensive goods**
  - **Introduce mitigating measures**
  - **Improving the business climate**

# Key takeaways for Saudi Arabia

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- **Cost of low energy prices are substantial**
- **Need for a comprehensive Energy Price Reform Plan**
- **Availability of detailed household and industrial level data for incidence analysis.**

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**Thank you!**