



هيئة تنظيم الكهرباء - عمان
AUTHORITY FOR ELECTRICITY REGULATION, OMAN

Electricity Subsidy in Oman

Hassan Taqi
Authority for Electricity Regulation, Oman

GCCIA Conference – Abu Dhabi, UAE
17 December, 2015

Presentation Outline

- **Overview**
 - Regulatory challenge
 - Market structure
 - Subsidy mechanism

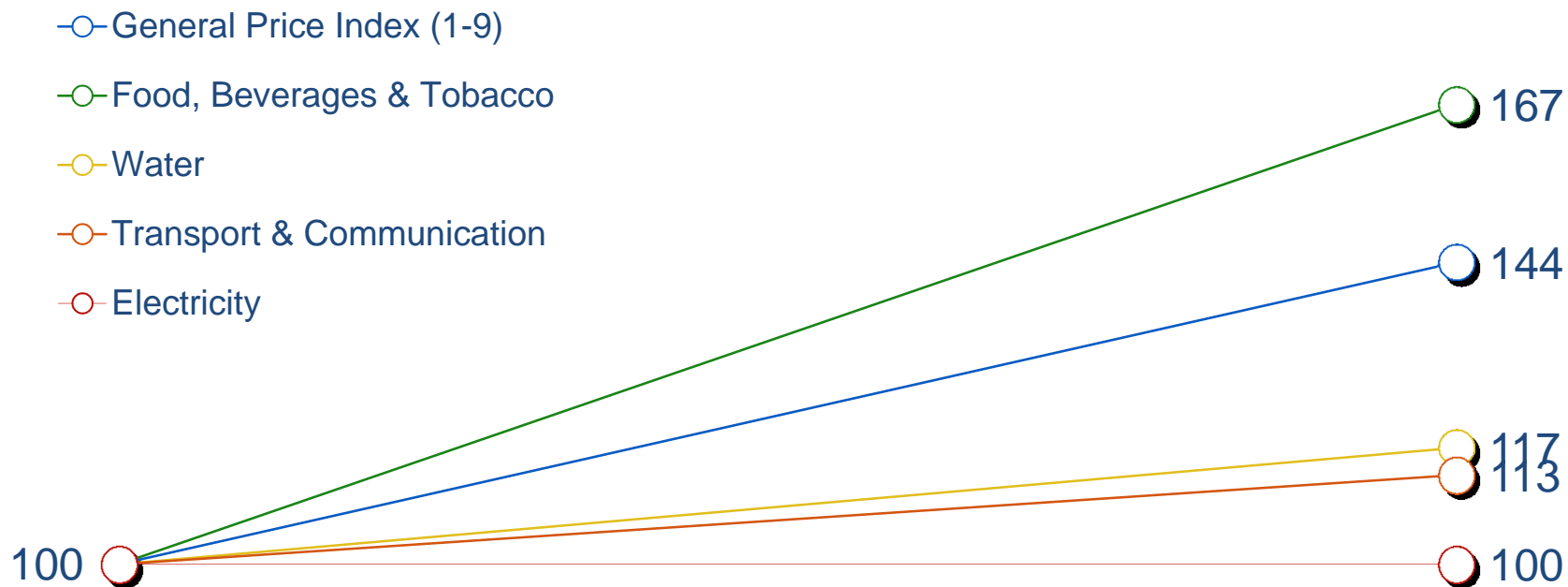
- **Analysis**
 - Movement in Subsidy
 - Customer Tariffs vs Cost-Reflective Tariffs
 - Subsidy Allocation by Customer Category
 - Residential Subsidy

- **Way Forward**
 - Actions

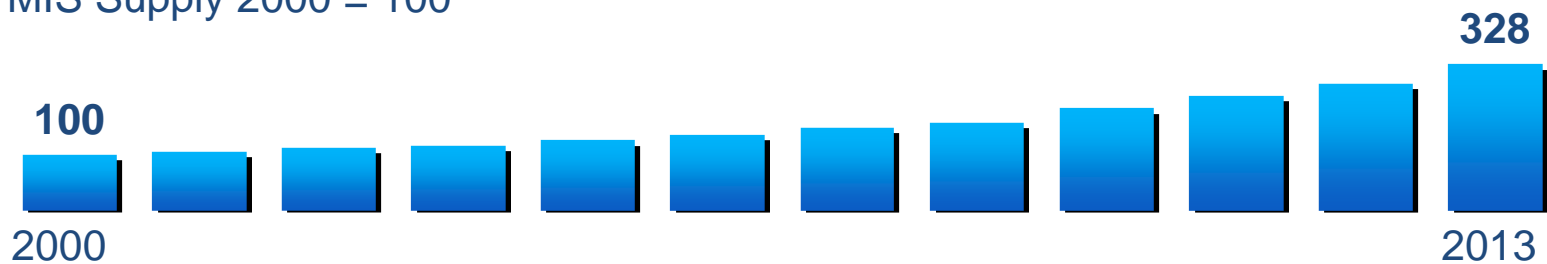


Movement in Prices...

Index 2000 = 100



MIS Supply 2000 = 100

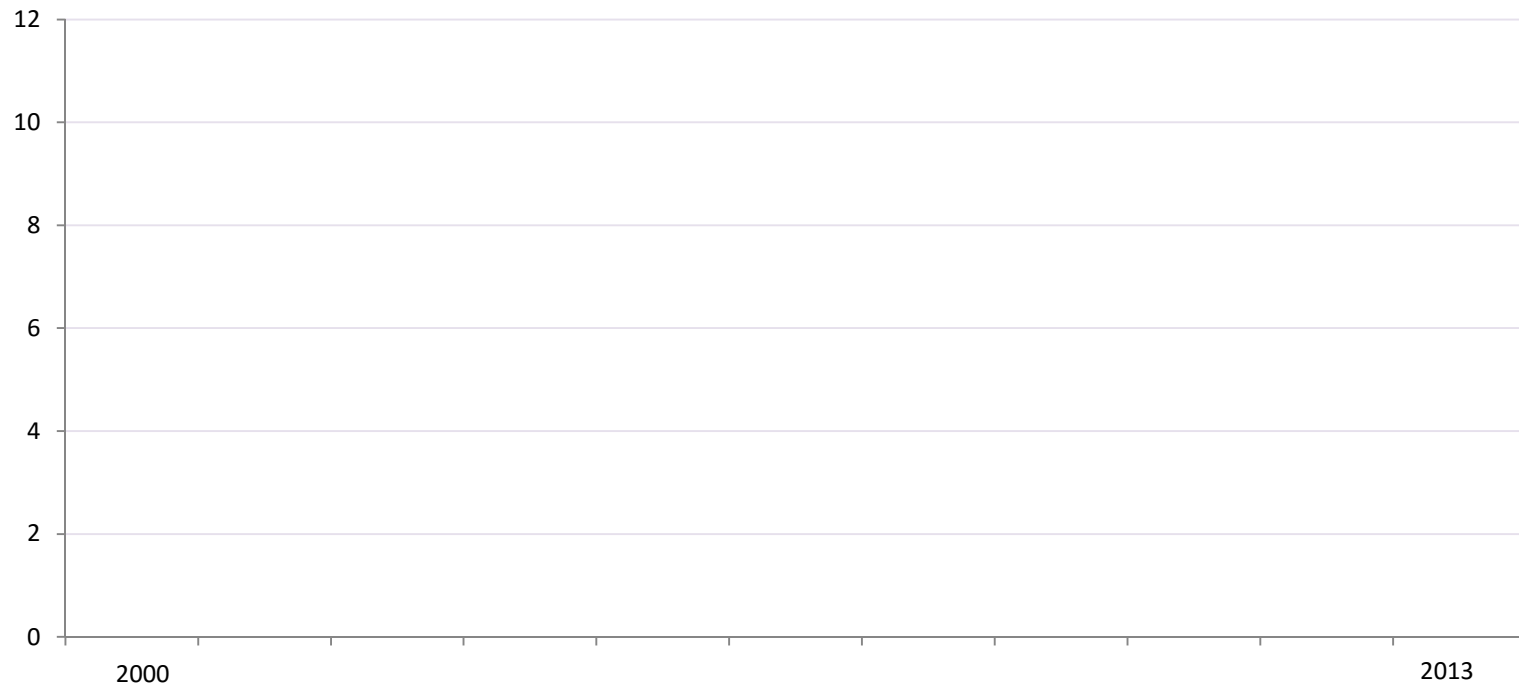




Nominal vs Real Tariff

lower band of Residential Tariff – 10 baiza/kWh

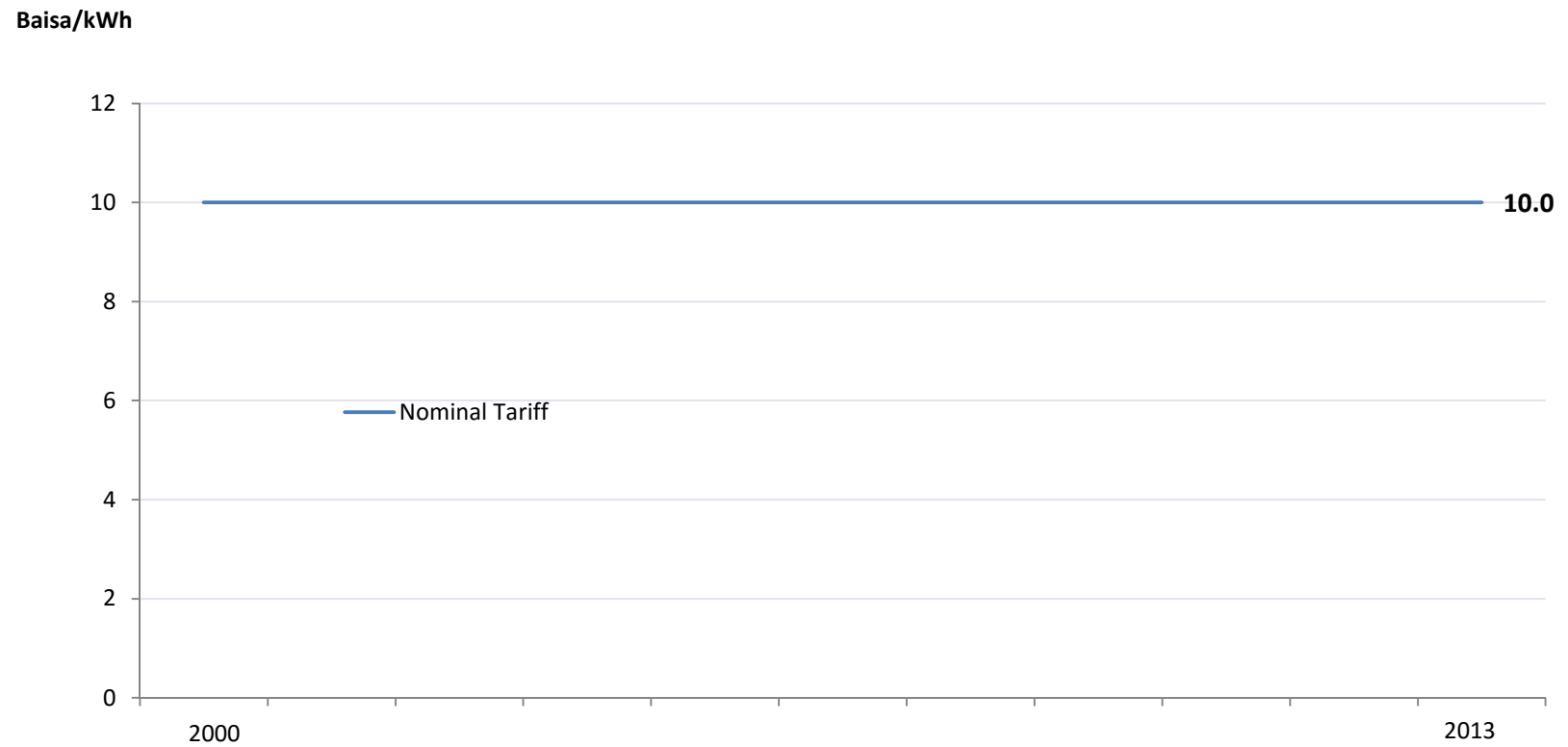
Baiza/kWh





Nominal vs Real Tariff

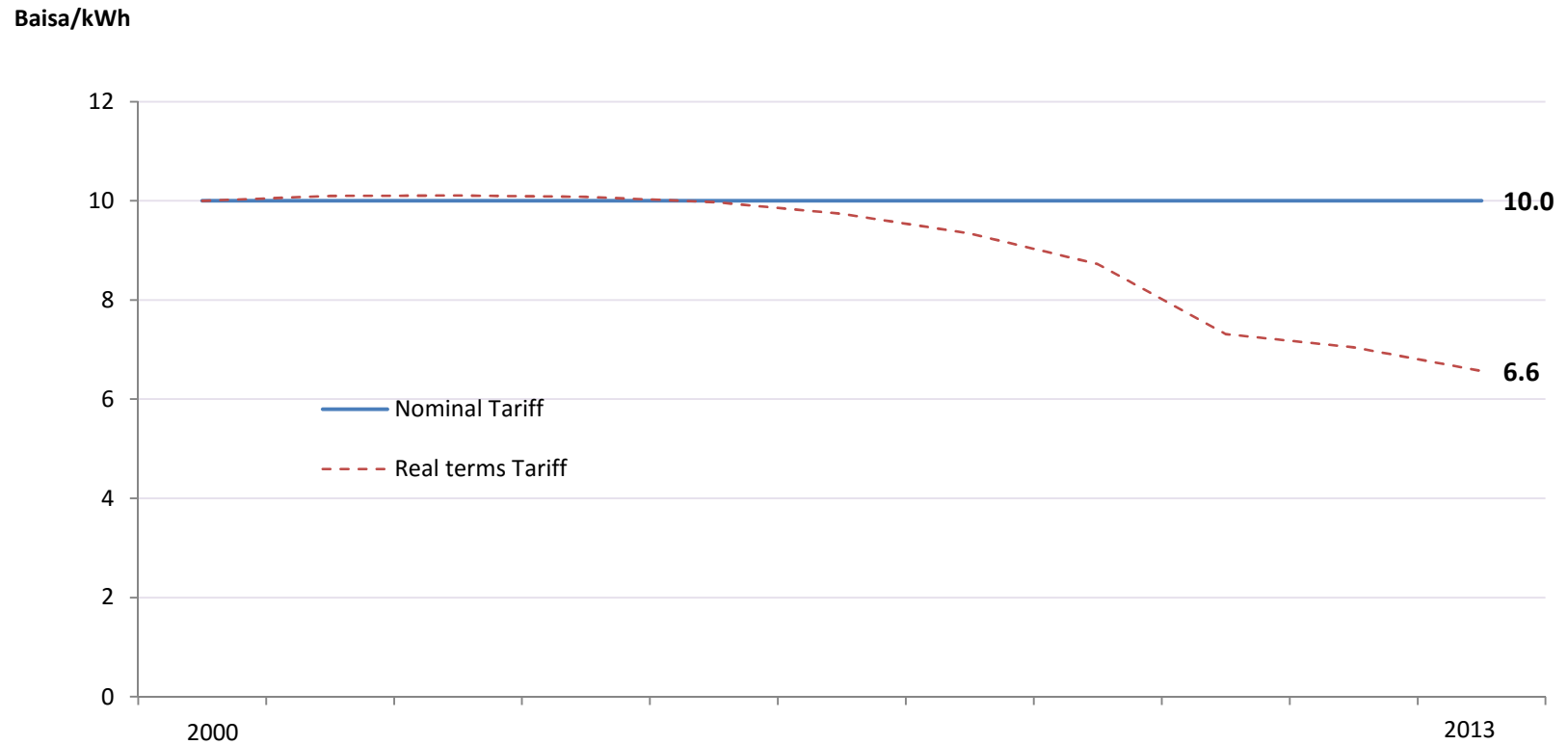
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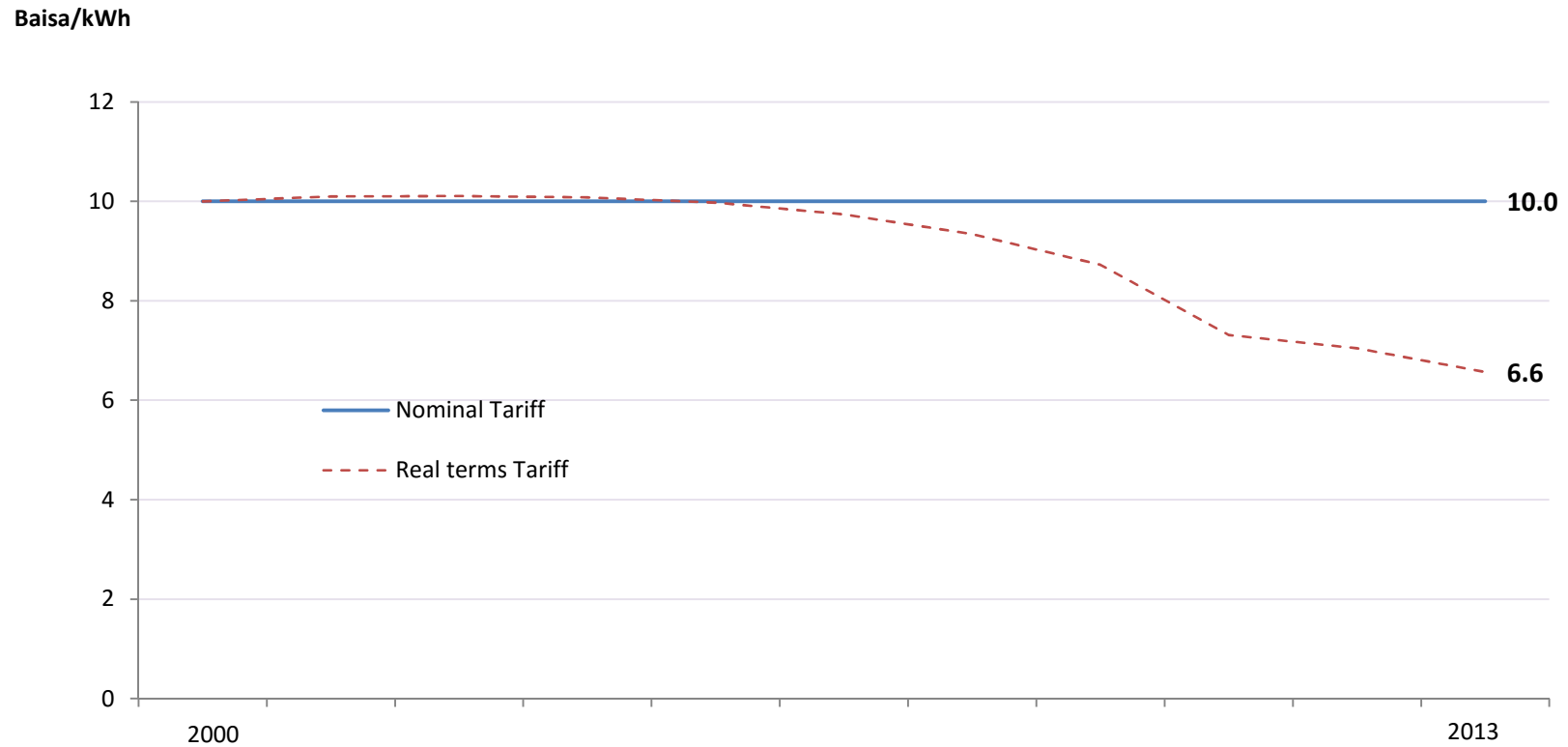
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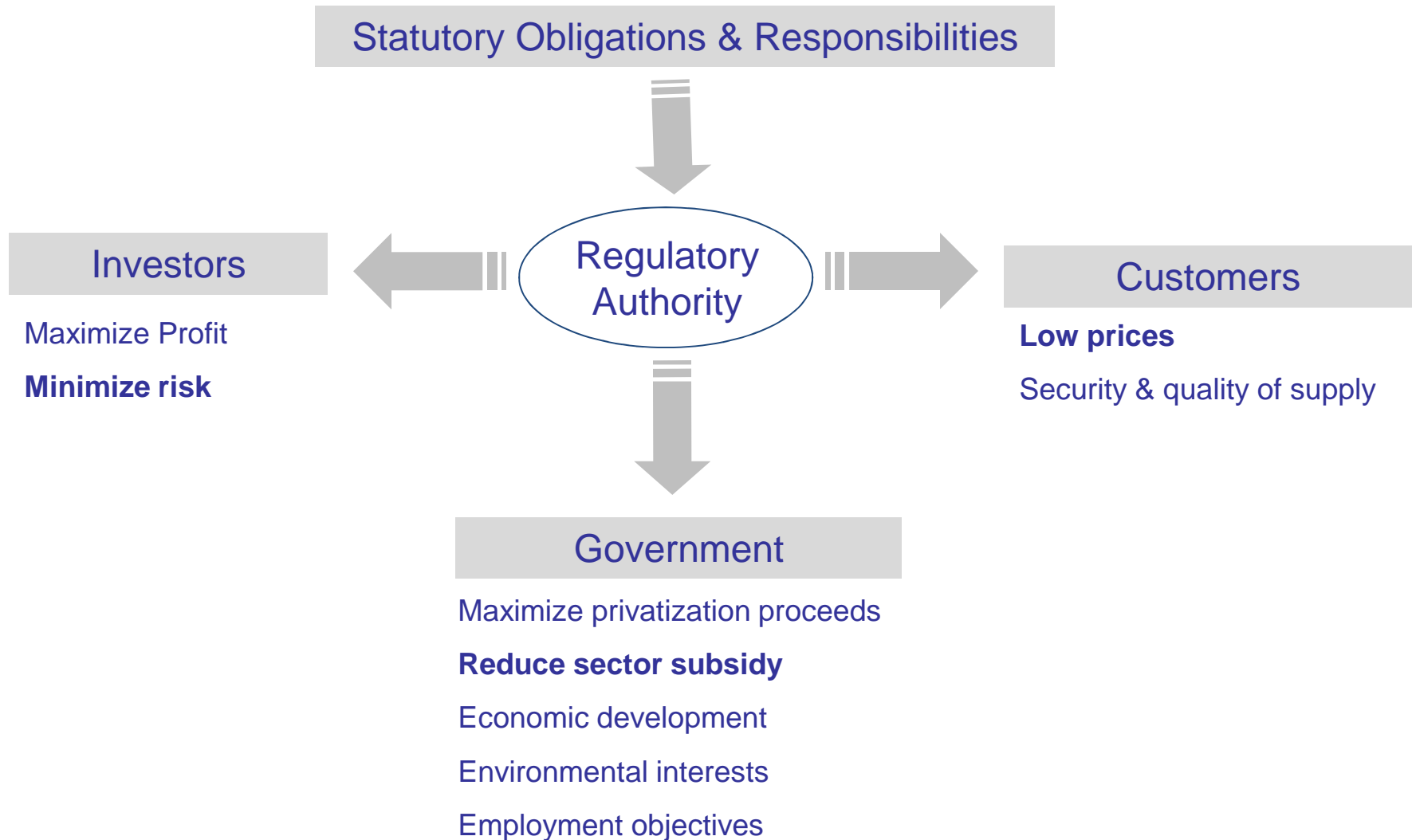
Nominal vs Real Tariff

lower band of Residential Tariff – 10 baiza/kWh



Reduction in real prices in the face of upward cost pressures

Problem: Competing Interests



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Electricity Market Structure



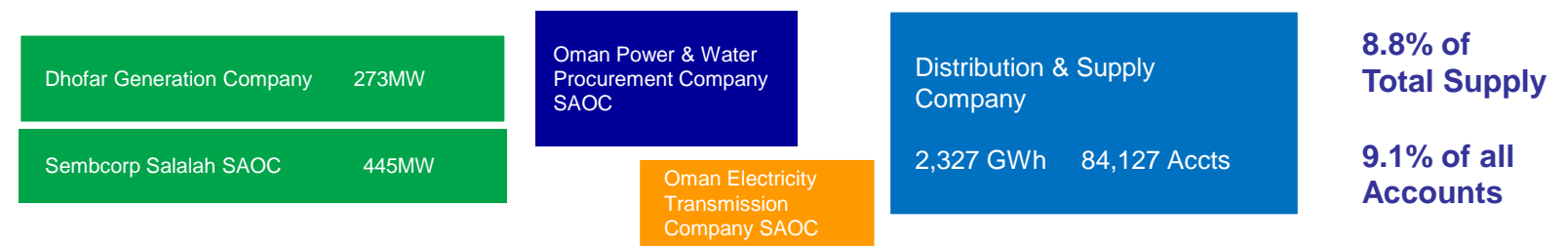
1. Main Interconnected System



2. Rural Systems



3. Dhofar Power System



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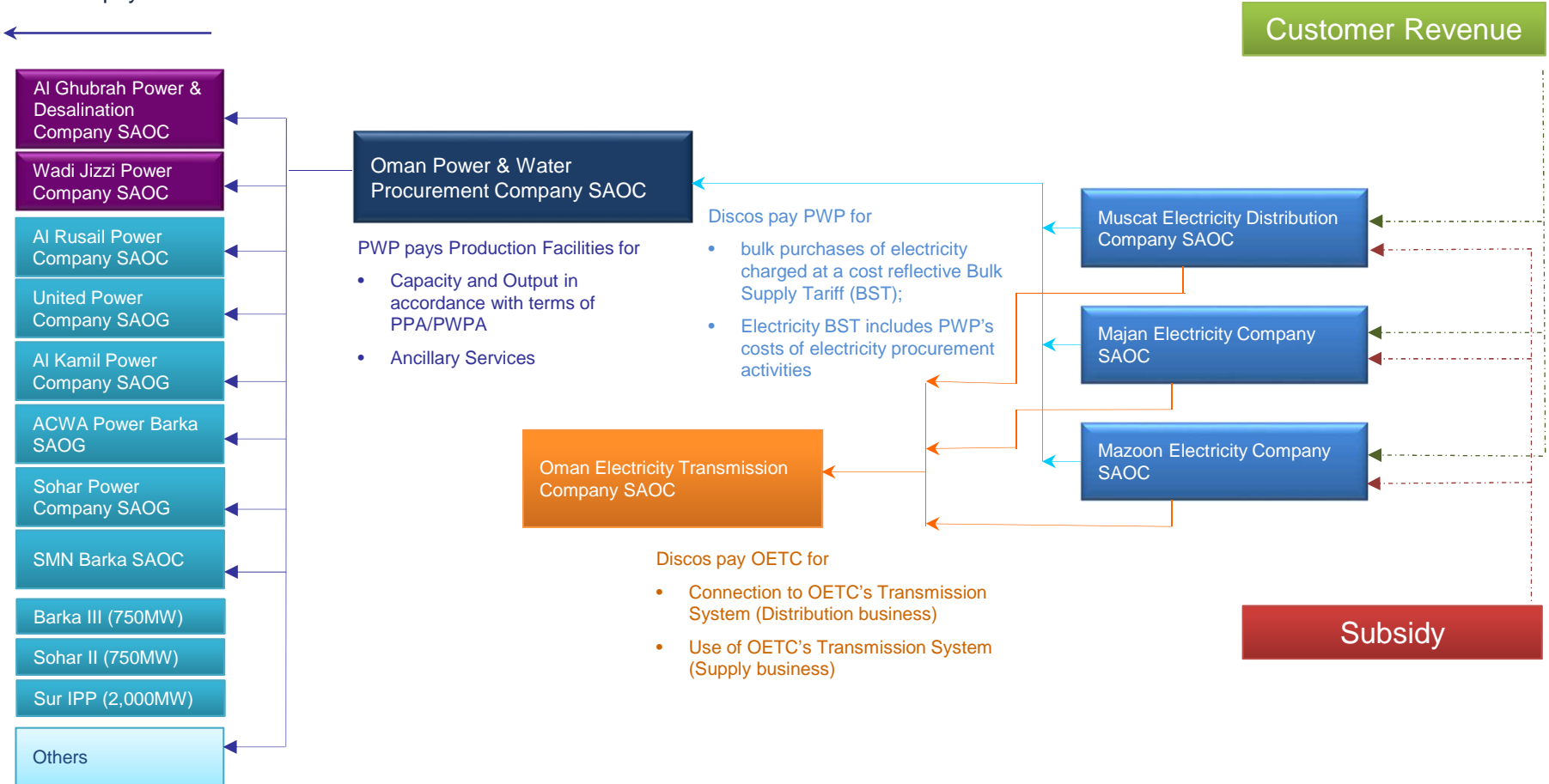
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Electricity Sector Transactions

Main Interconnected System



Direction of payments



All intra sector transactions are: (i) regulated & (ii) fully cost reflective

Single point of Subsidy injection

Electricity Subsidy

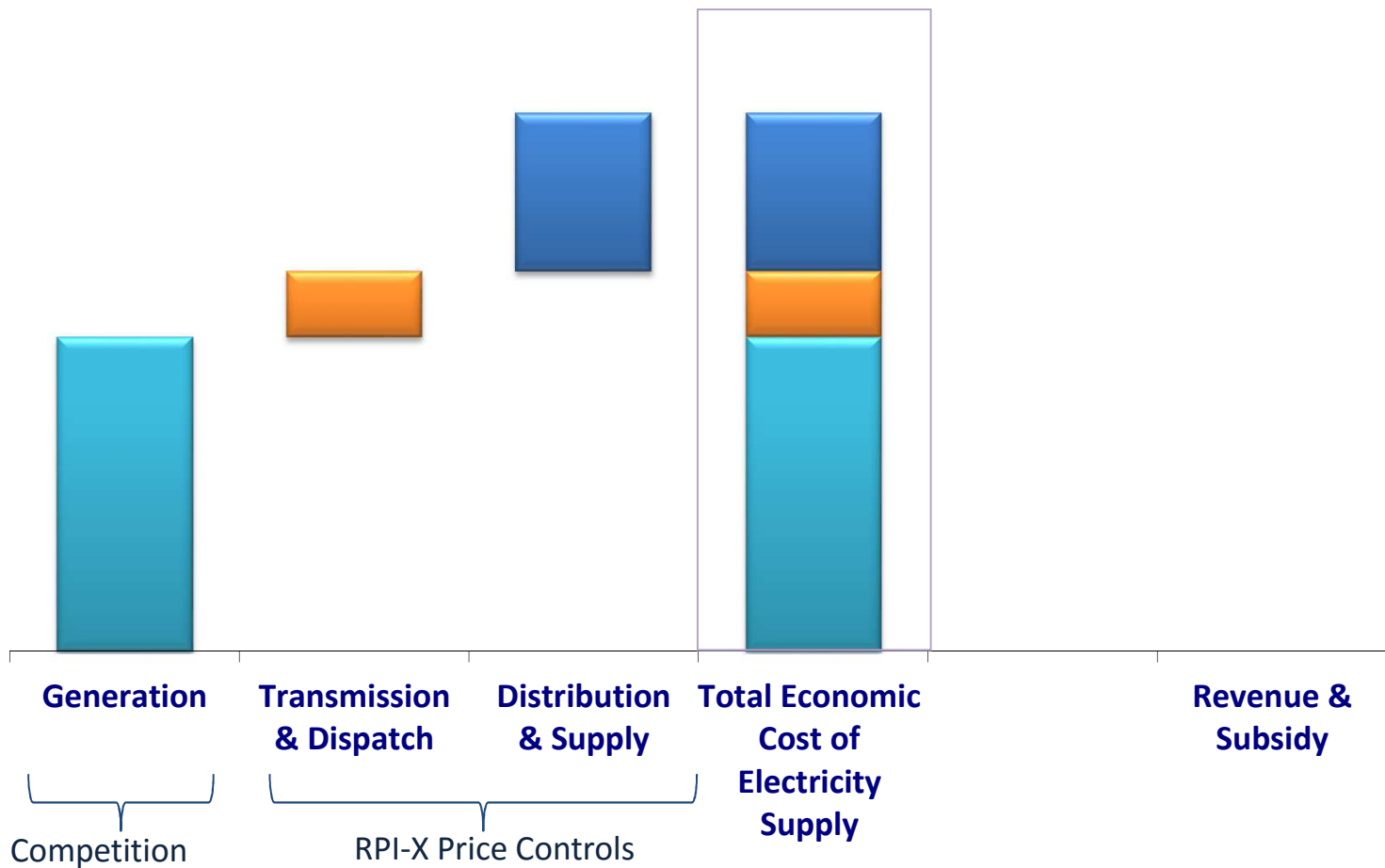


Subsidy = Economic cost of supply – Customer revenue

- **Customer revenue insufficient** to recover the full economic cost of electricity supply, therefore Subsidy required.
- Article (18): Ministry of Finance **shall pay** electricity subsidy calculated by the Authority to Licensed Suppliers.
- **Five Licensed Suppliers:** Muscat, Majan and Mazoon, RAEC and DPC
- Published in Authority Annual Reports: **transparency and accountability.**

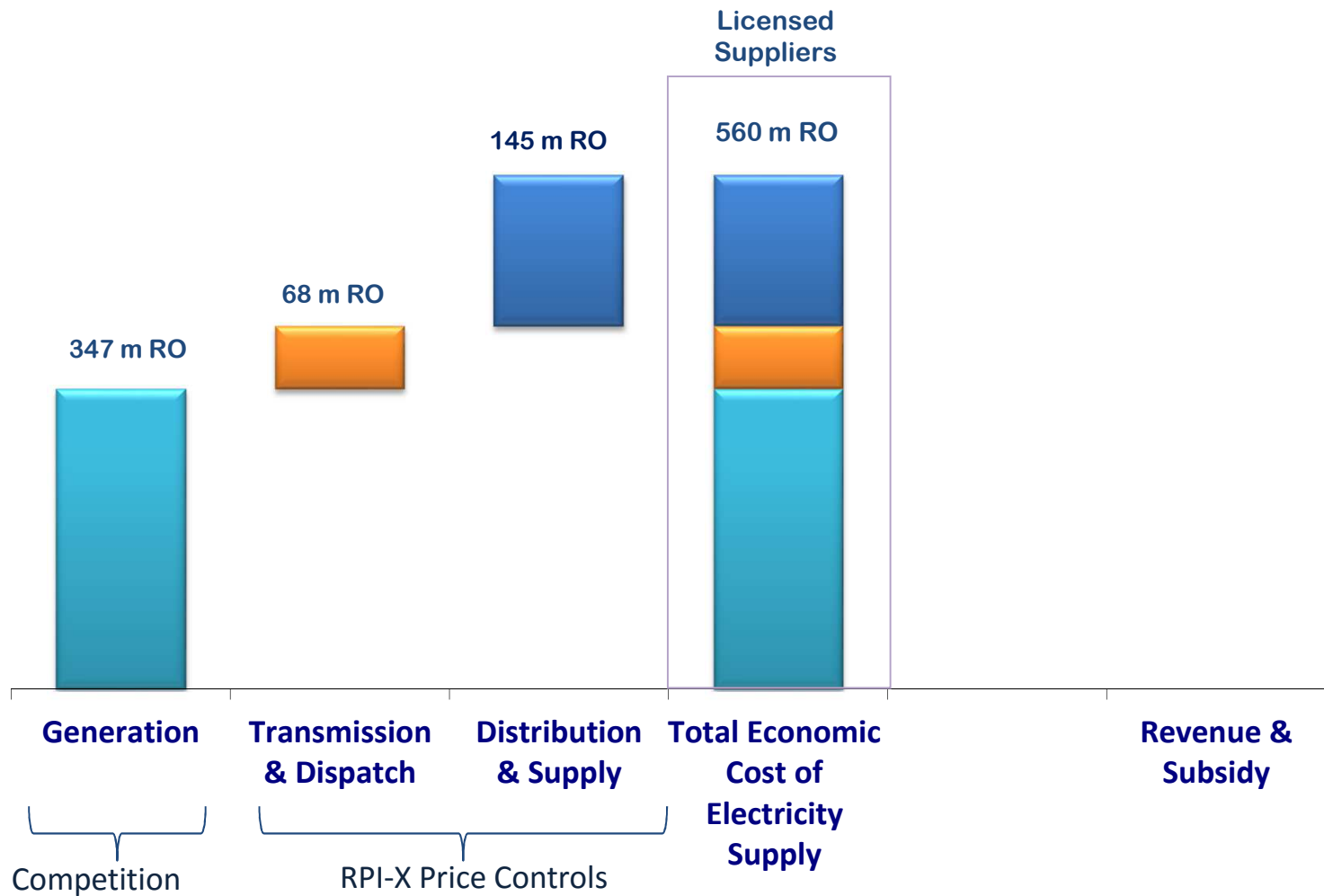
Economic Costs and Subsidy

MIS 2014



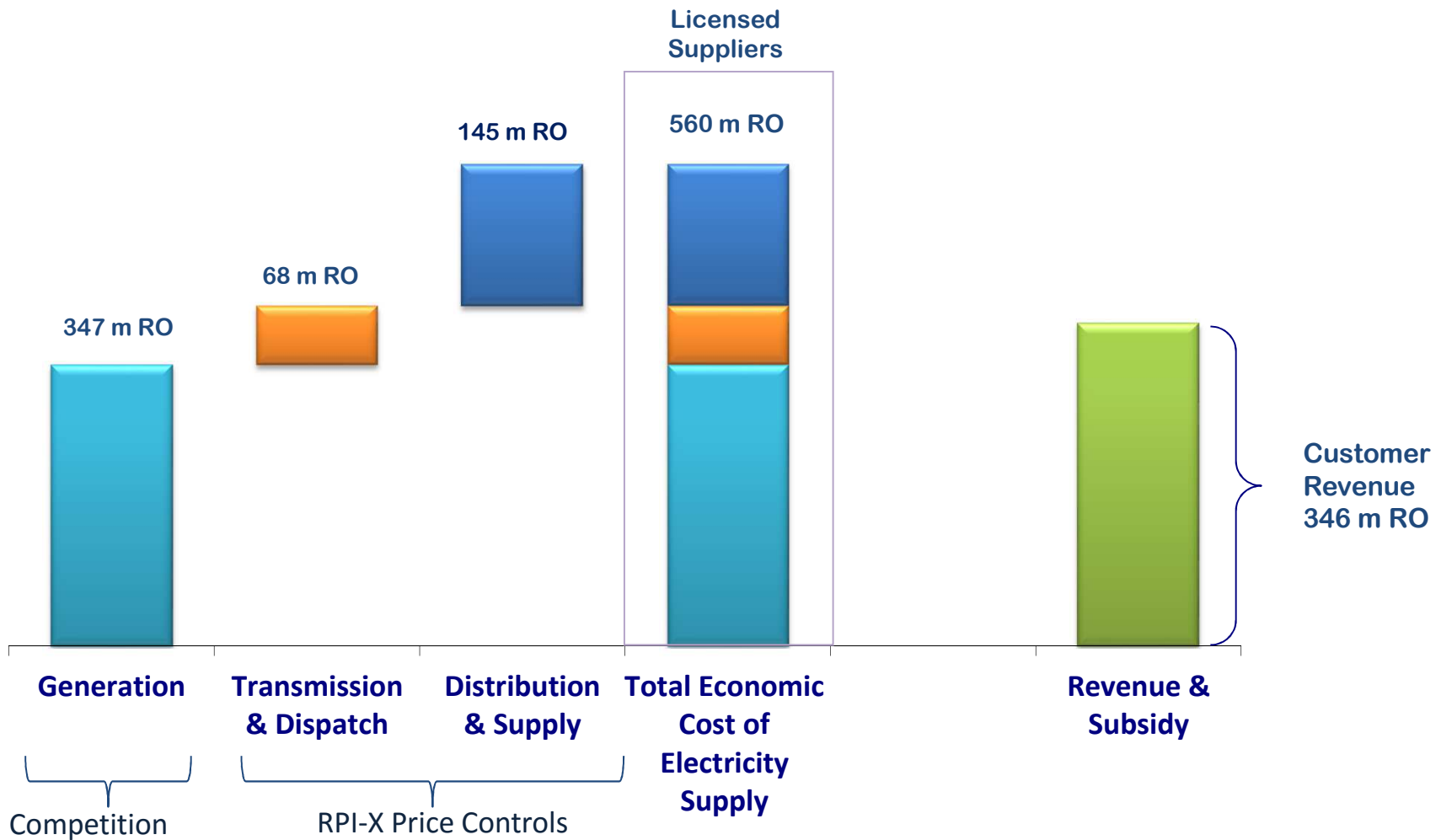
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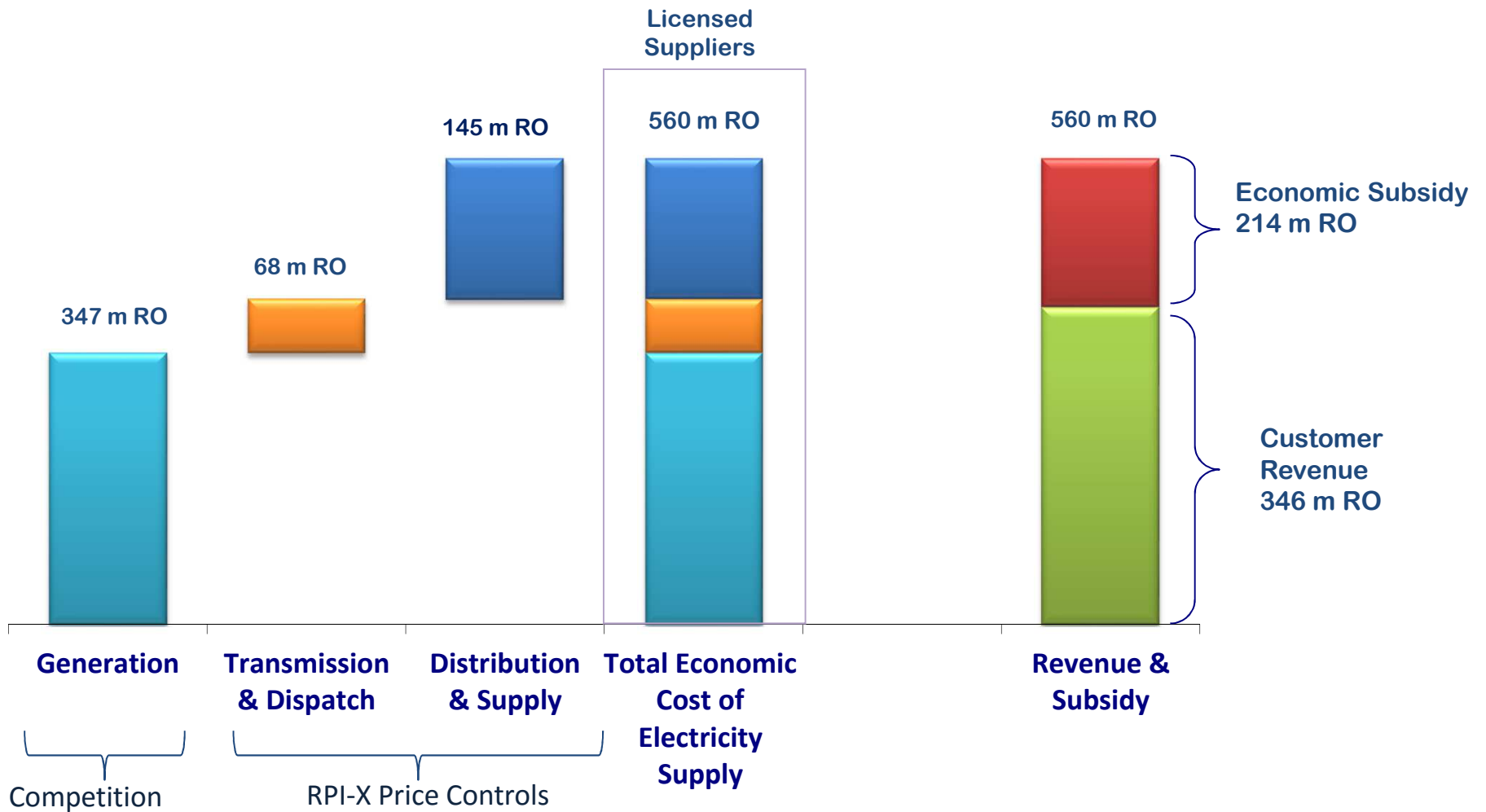
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Economic Costs and Subsidy

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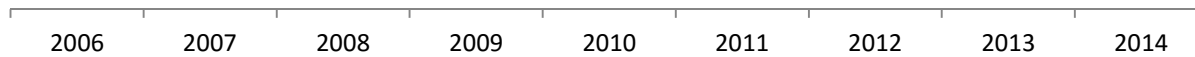
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Movement in MIS Subsidy

2006-14

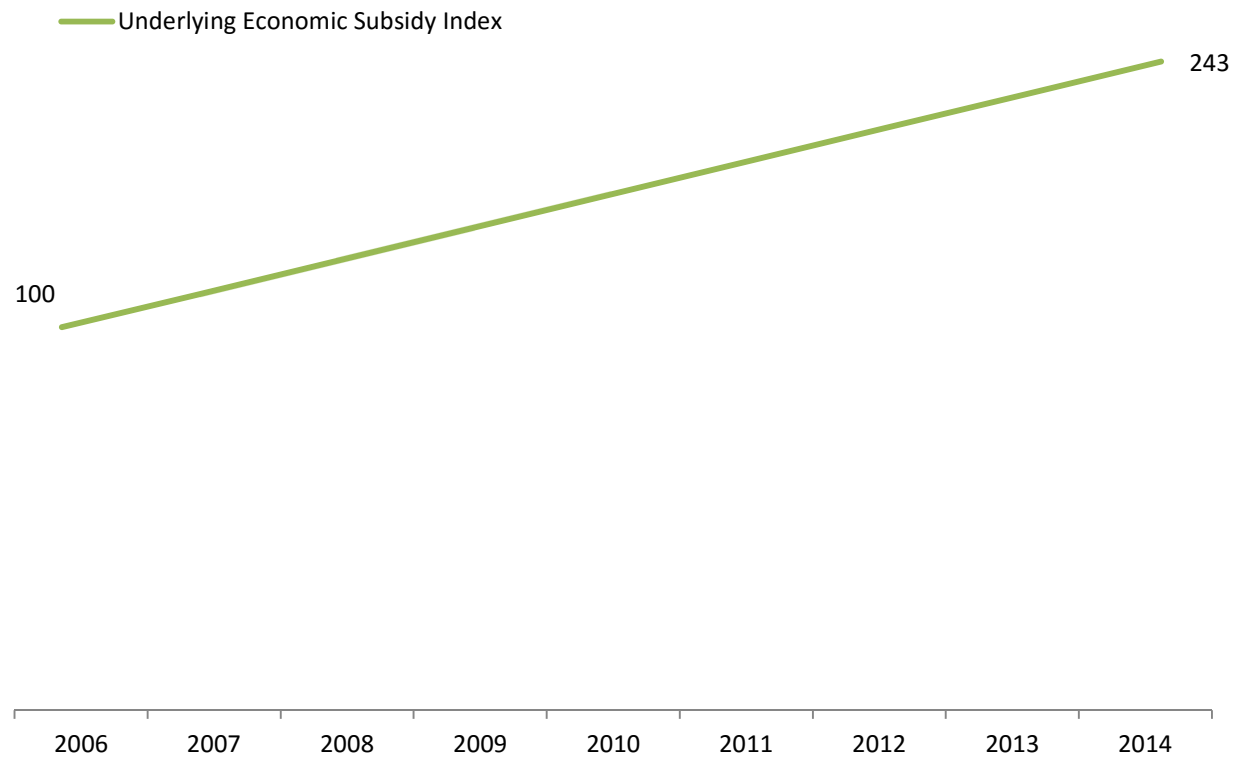


Underlying Economic Subsidy Index



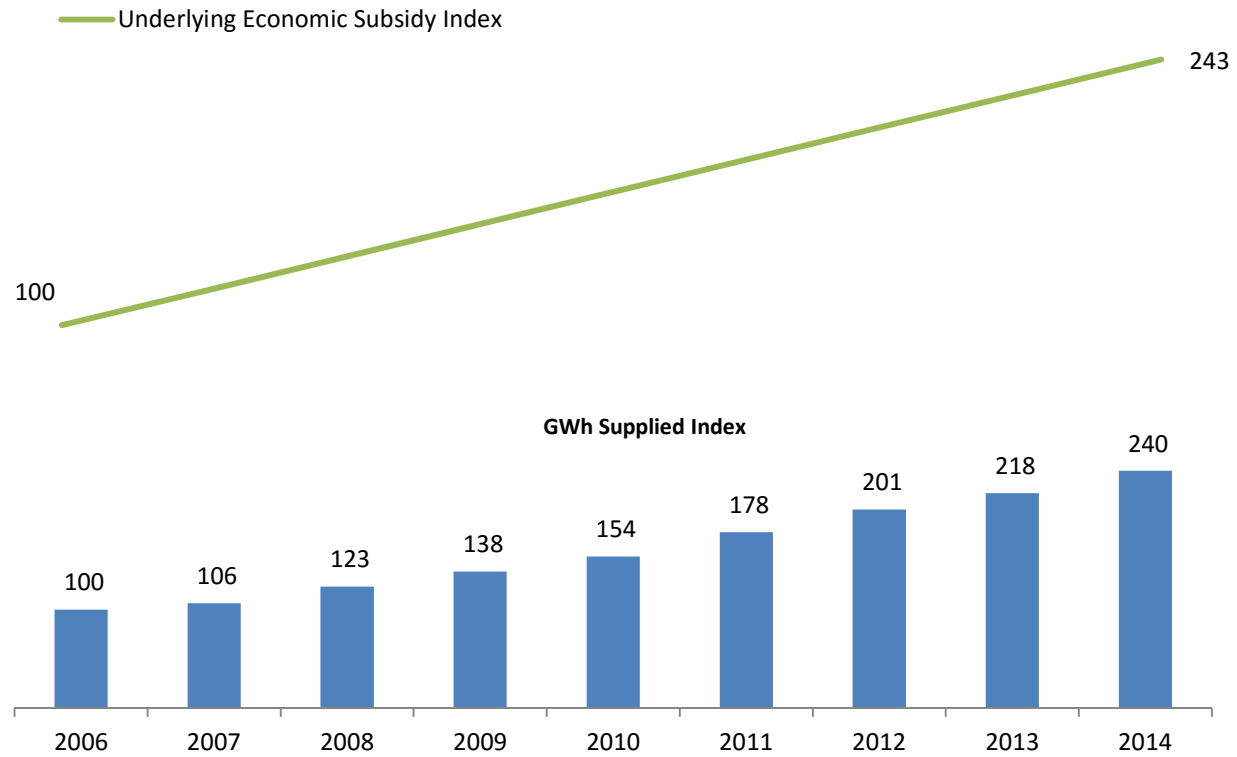
Movement in MIS Subsidy

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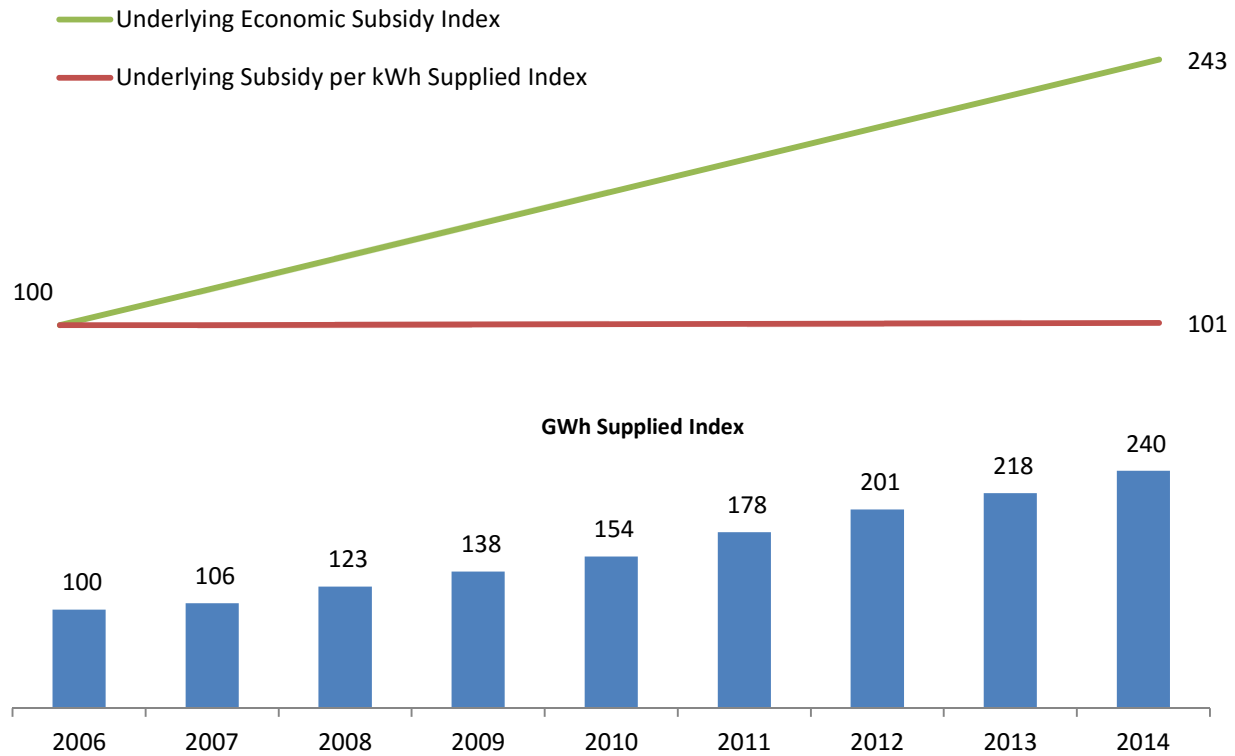
Movement in MIS Subsidy

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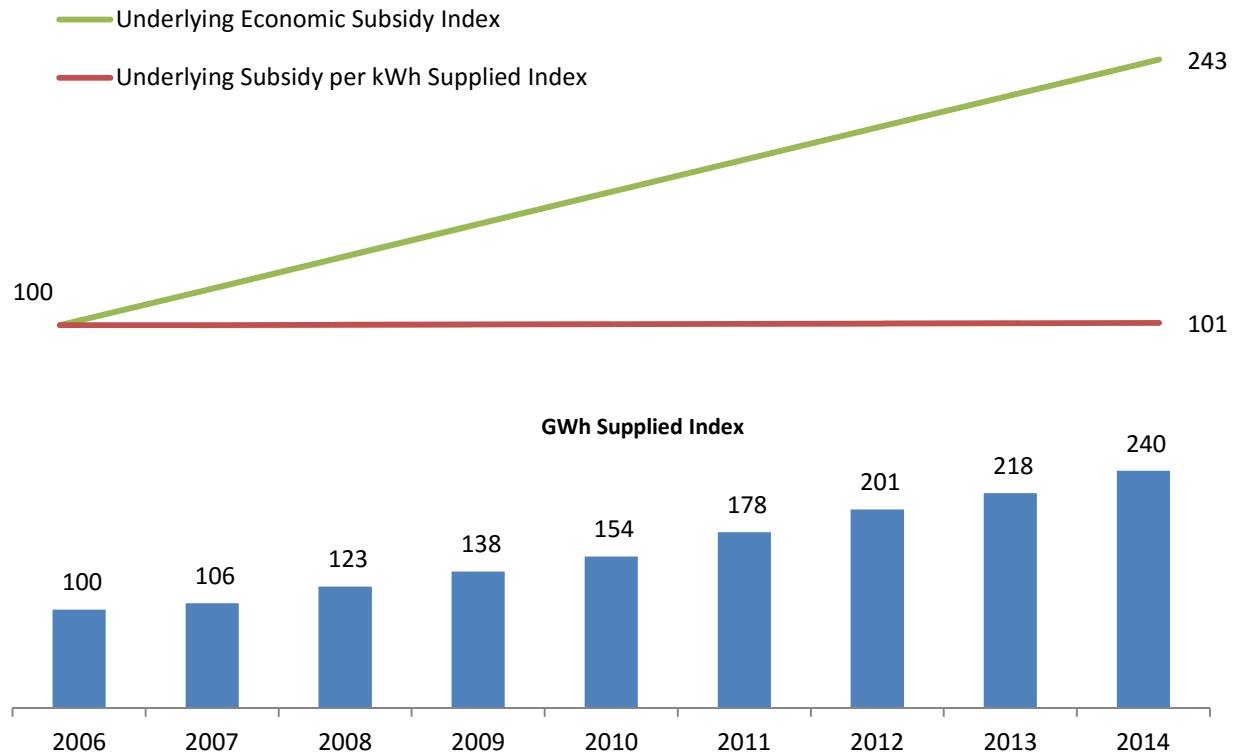


Movement in MIS Subsidy

2006-14



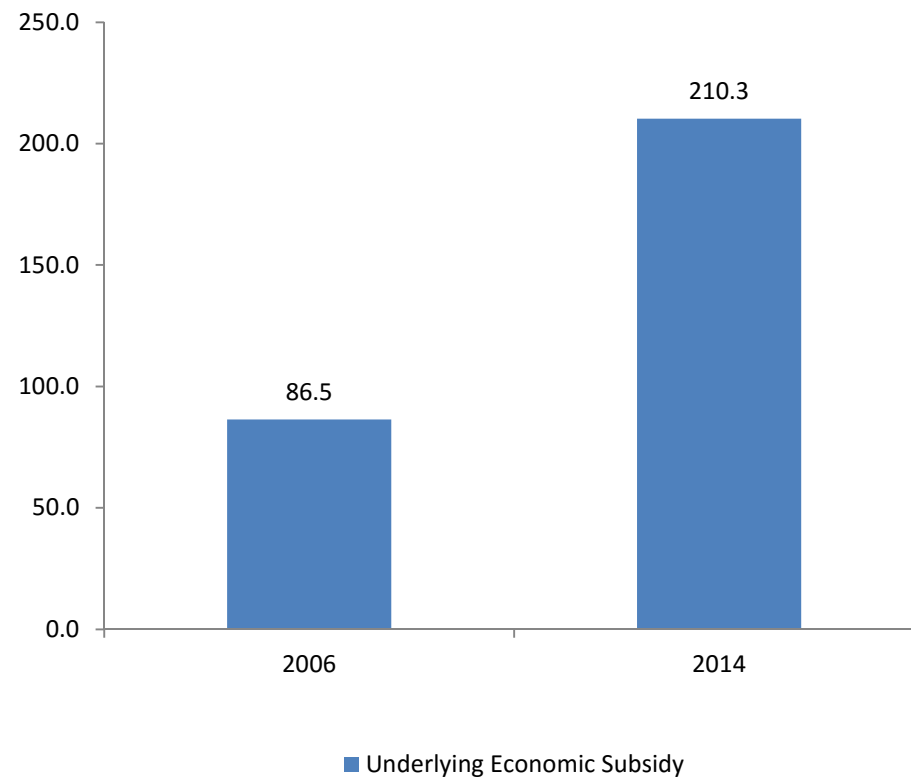
Movement in MIS Subsidy 2006-14



Growth in subsidy in line with supply growth

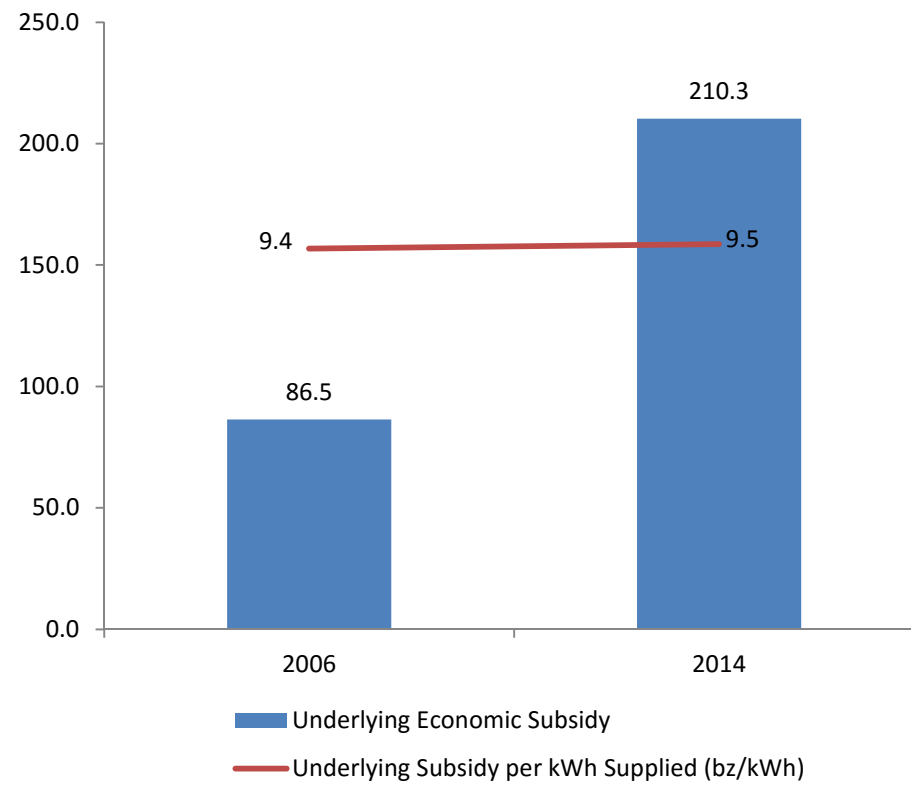
Underlying Subsidy

2006 and 2014 comparison



Underlying Subsidy

2006 and 2014 comparison



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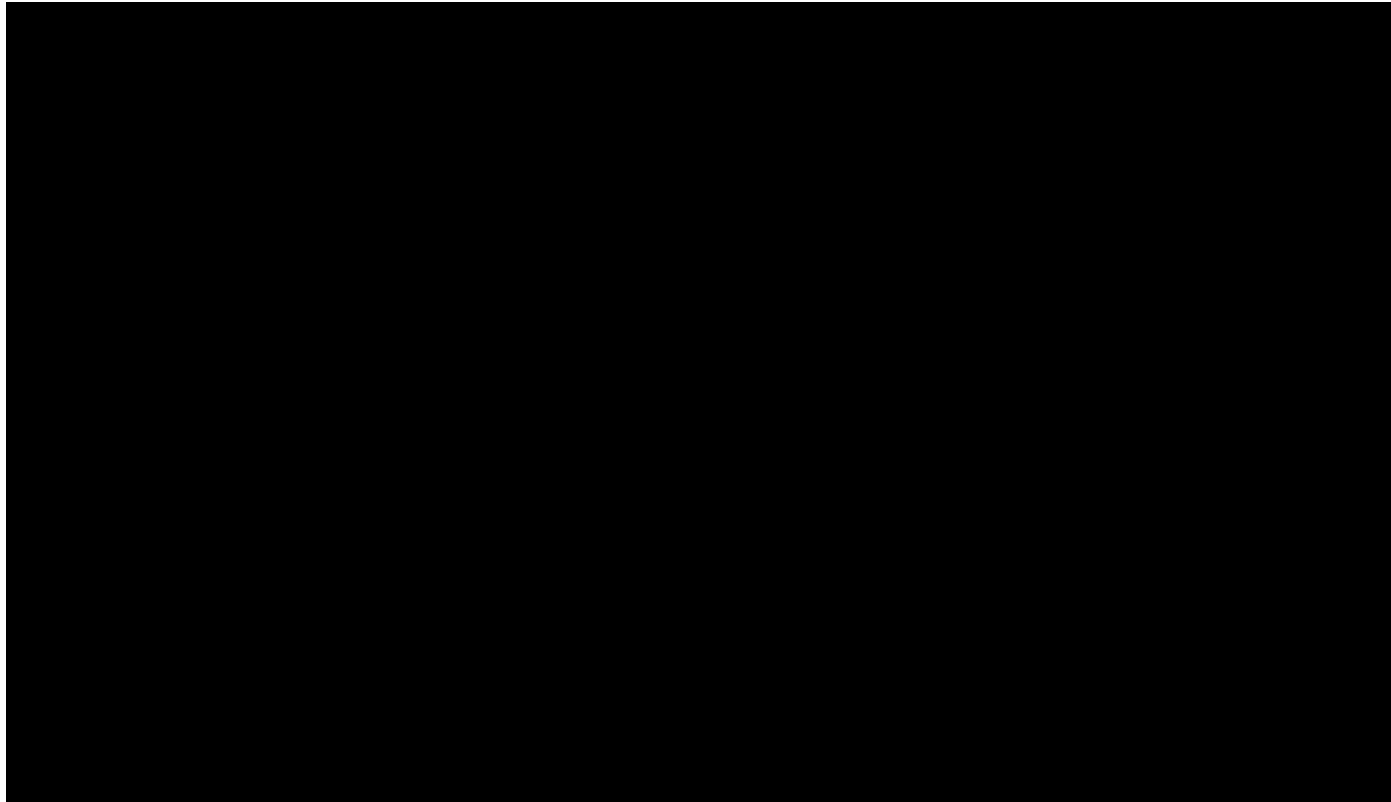
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Permitted Tariffs



Permitted Tariffs approved by the Council of Ministers



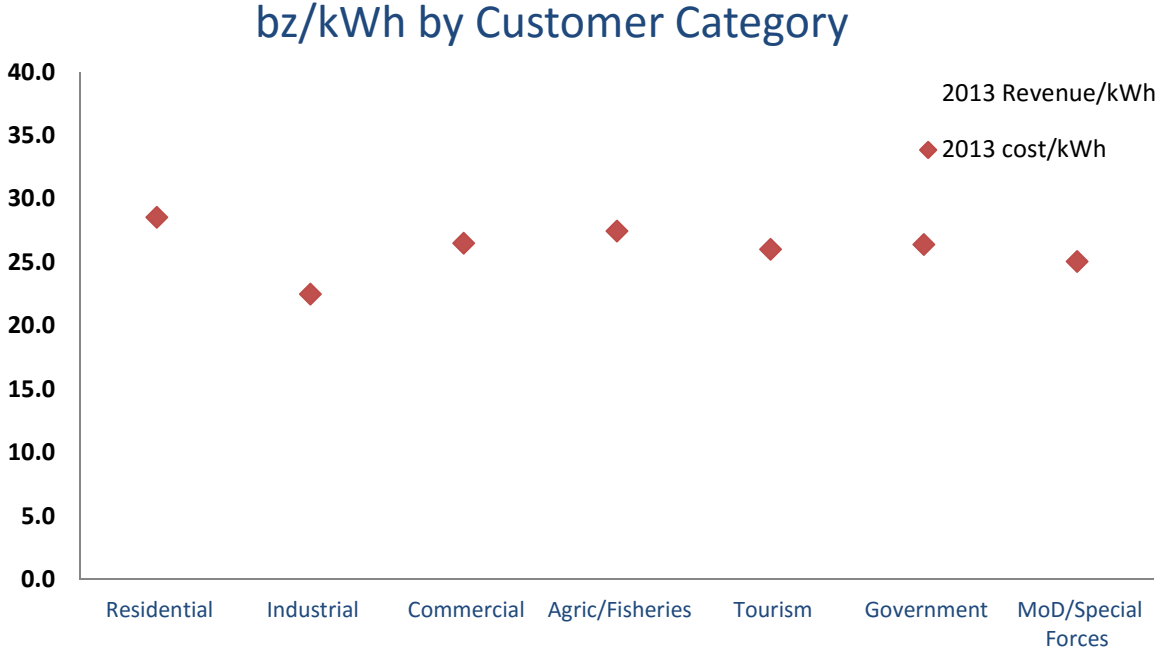
Subsidy per Customer Category



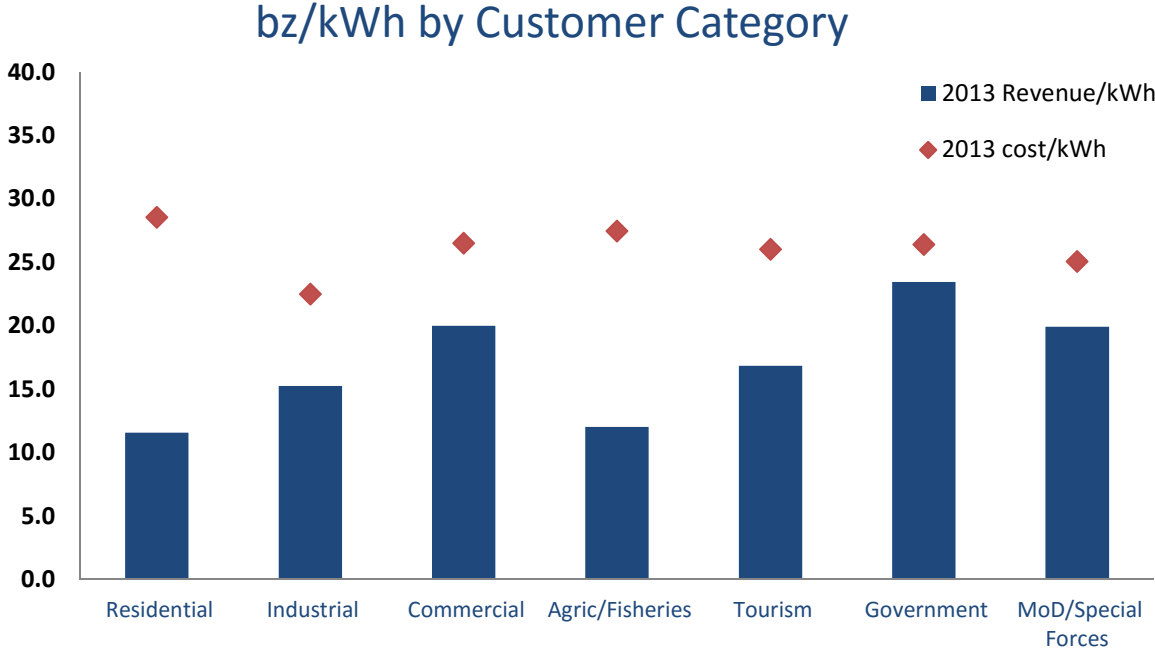
Customer Categories as per current Permitted Tariffs Schedule:

1. Residential
2. Industrial
3. Commercial
4. Agriculture & Fisheries
5. Tourism
6. Government
7. Ministry of Defence

Revenue vs Cost per kWh by Customer category

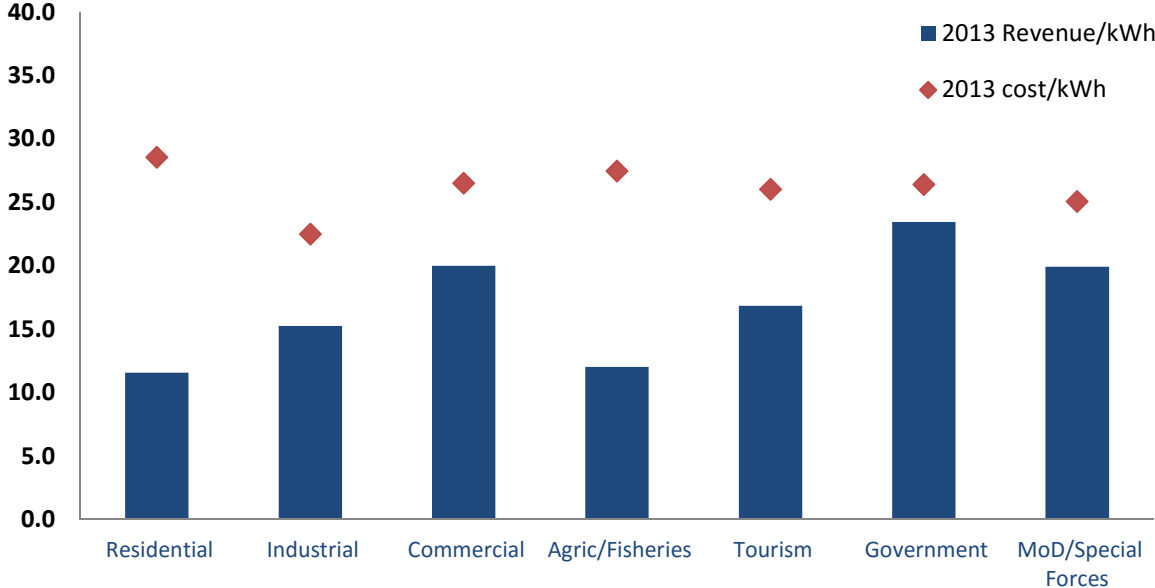


Revenue vs Cost per kWh by Customer category

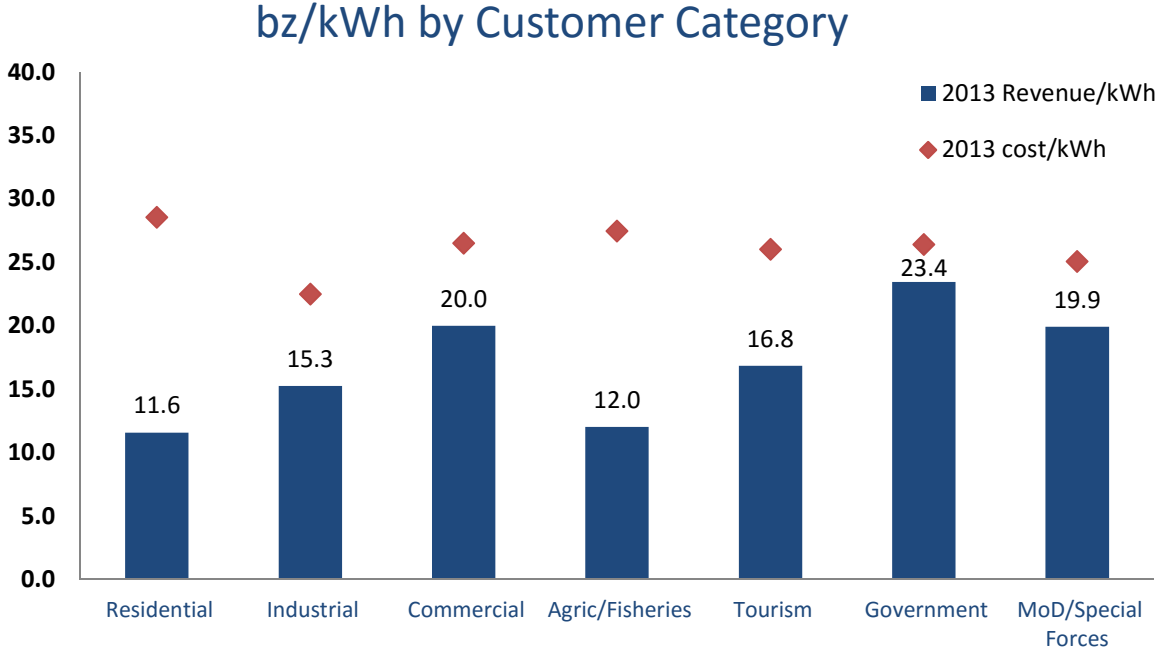


Revenue vs Cost per kWh by Customer category

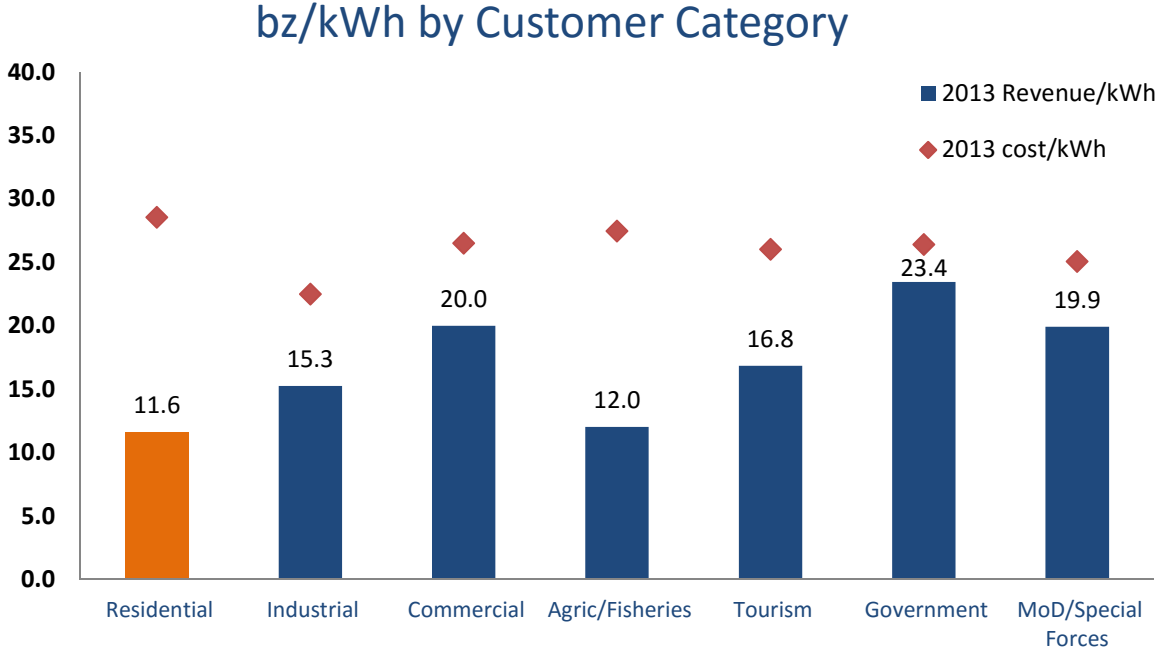
bz/kWh by Customer Category



Revenue vs Cost per kWh by Customer category



Revenue vs Cost per kWh by Customer category



Revenue from Residential customers is the lowest on average per kWh (11.6 bz/kWh) and imply the highest Subsidy per kWh

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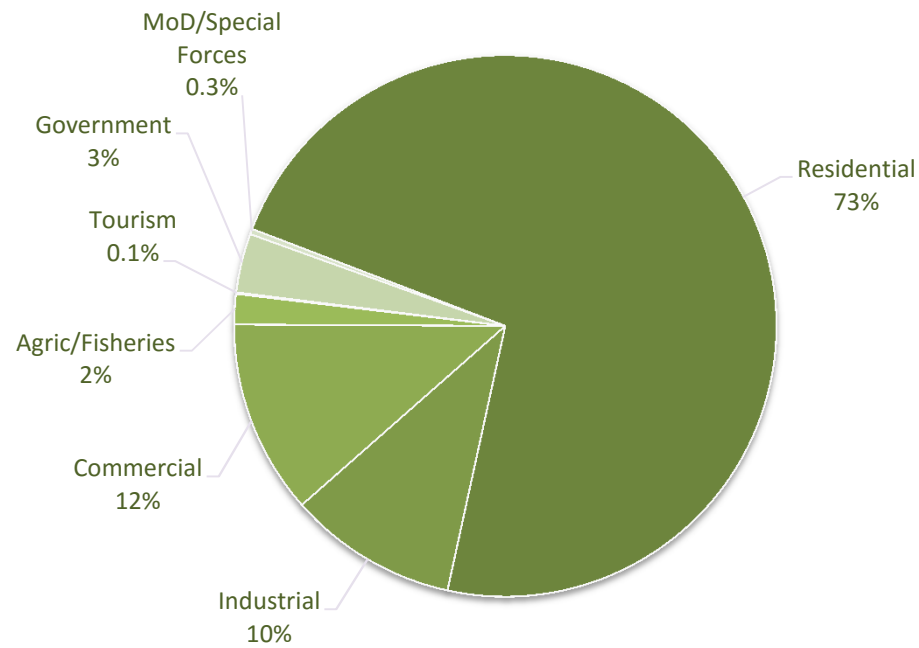
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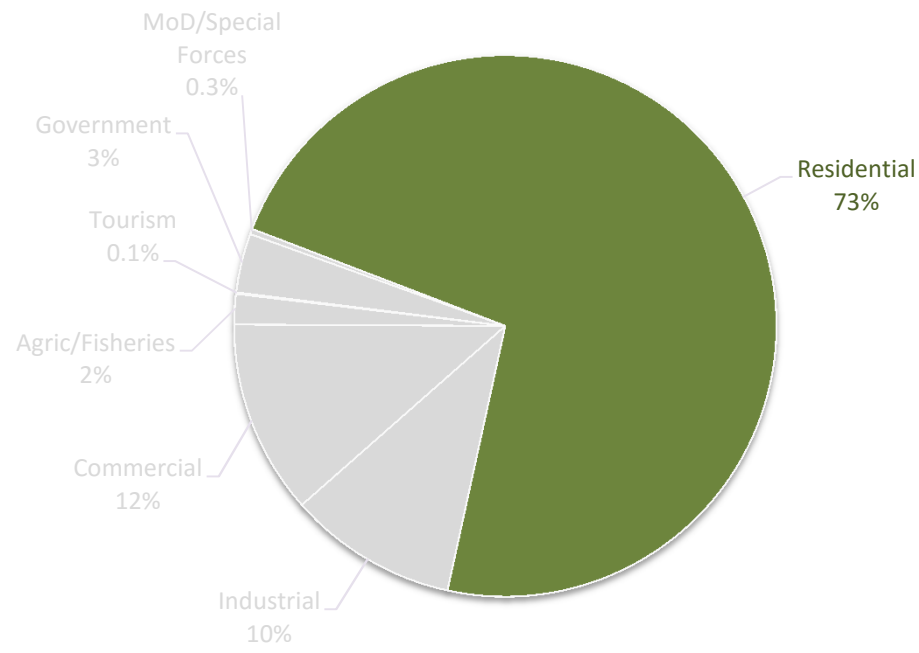
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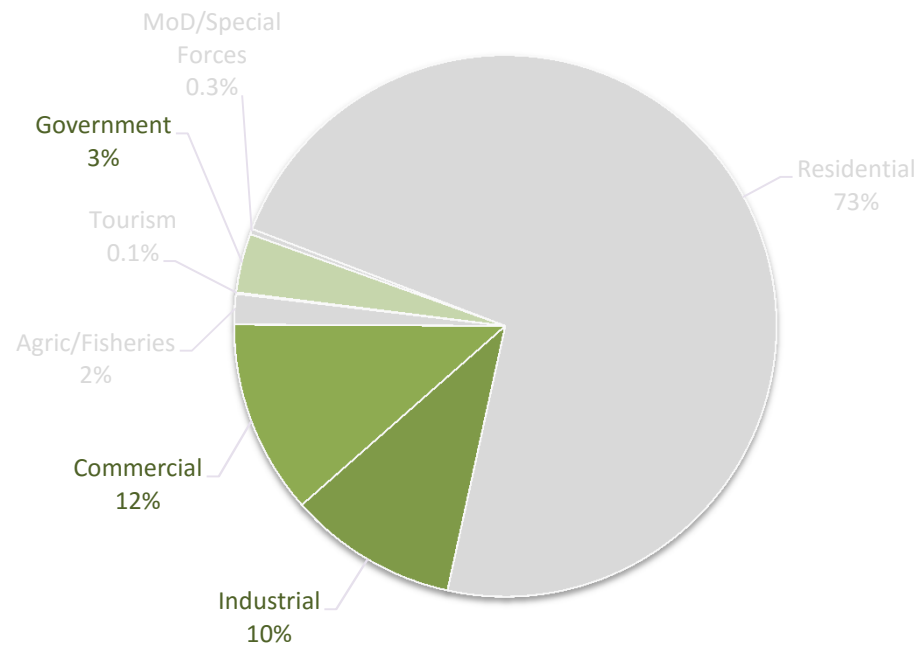
Subsidy per Customer Category



Subsidy per Customer Category



Subsidy per Customer Category



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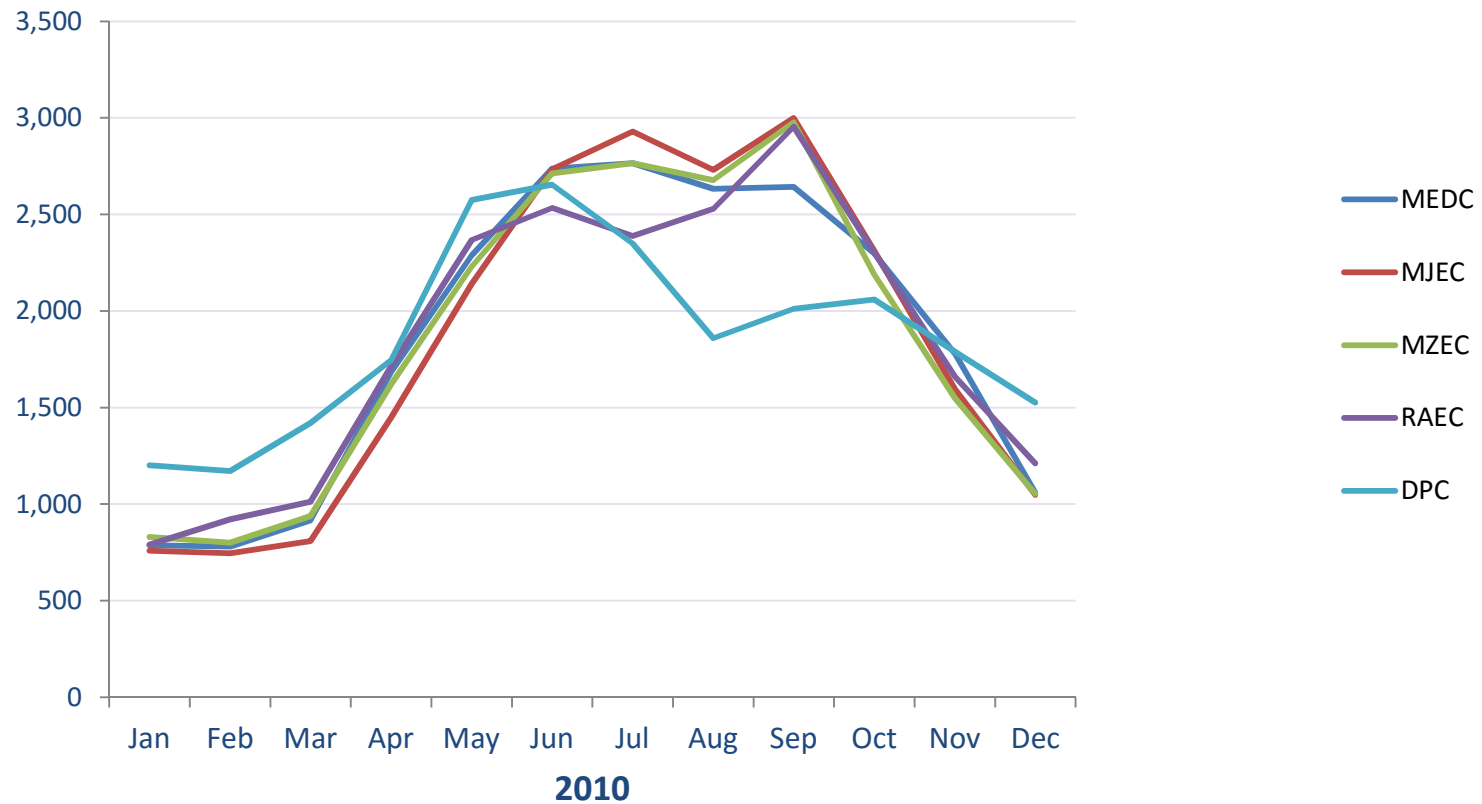
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Domestic Customer Demand Profiles & Subsidy

2010 Consumption between 20,000 & 25,000 kWh

kWh per Month

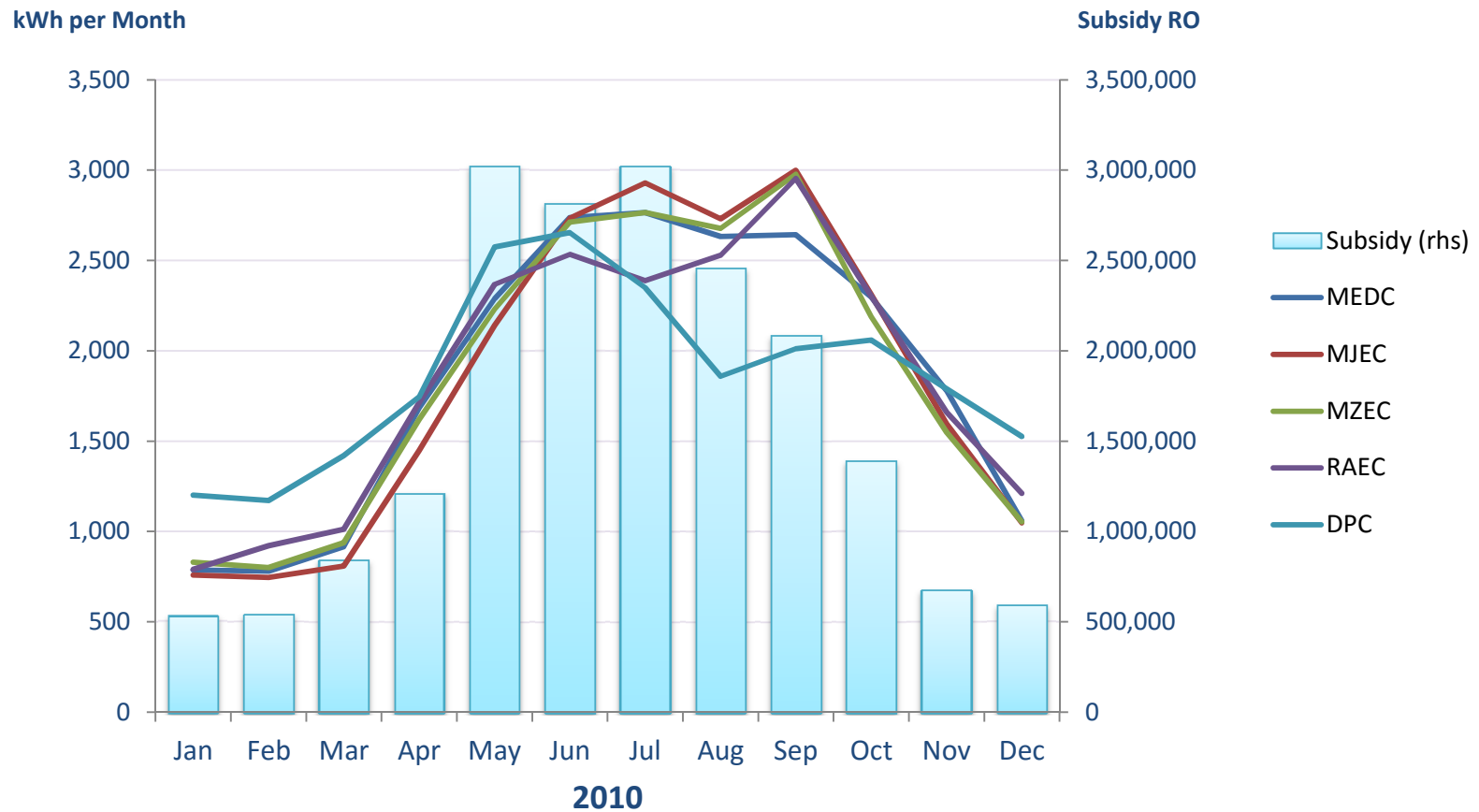


Source: Authority



Domestic Customer Demand Profiles & Subsidy

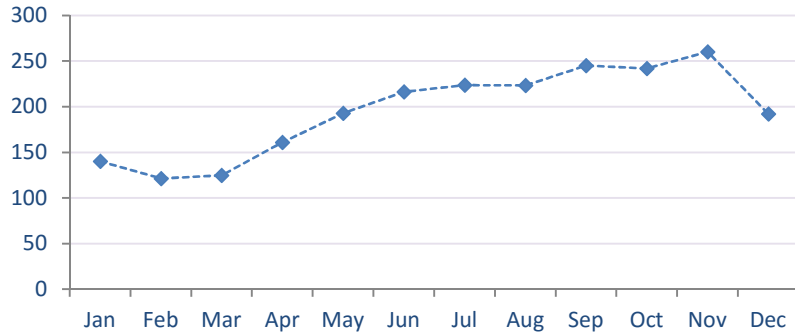
2010 Consumption between 20,000 & 25,000 kWh



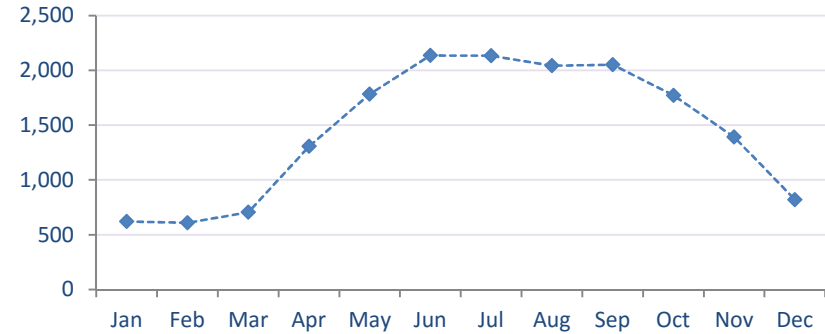


Average monthly Consumption: Muscat

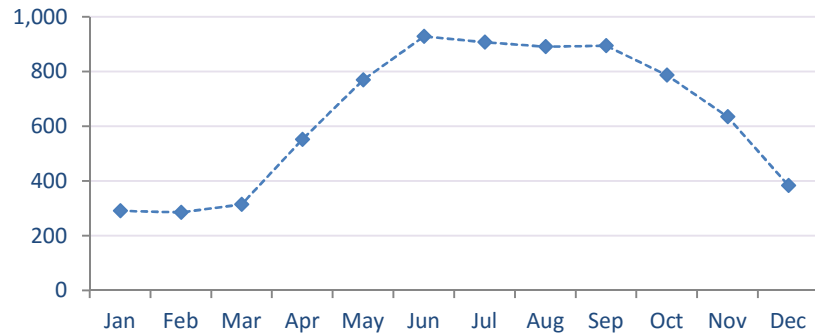
Between 0 & 5k



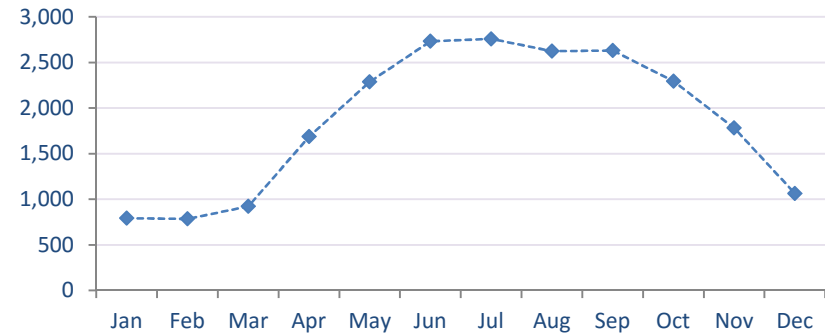
Between 15k & 20k



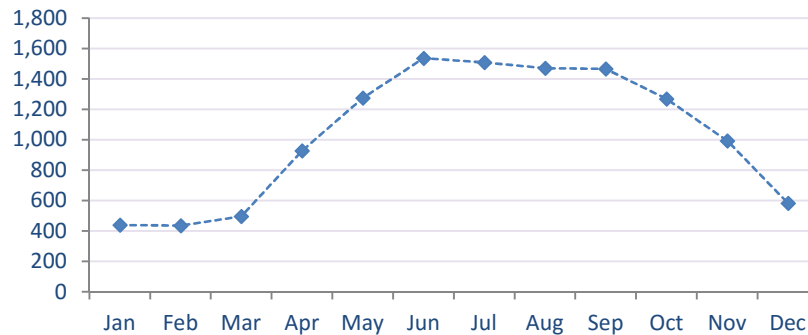
Between 5k & 10k



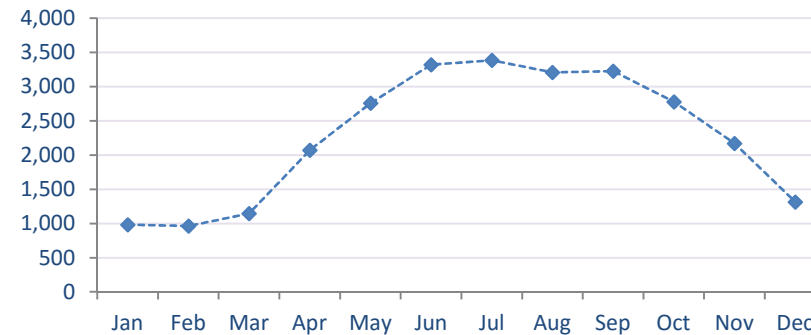
Between 20k & 25k



Between 10k & 15k



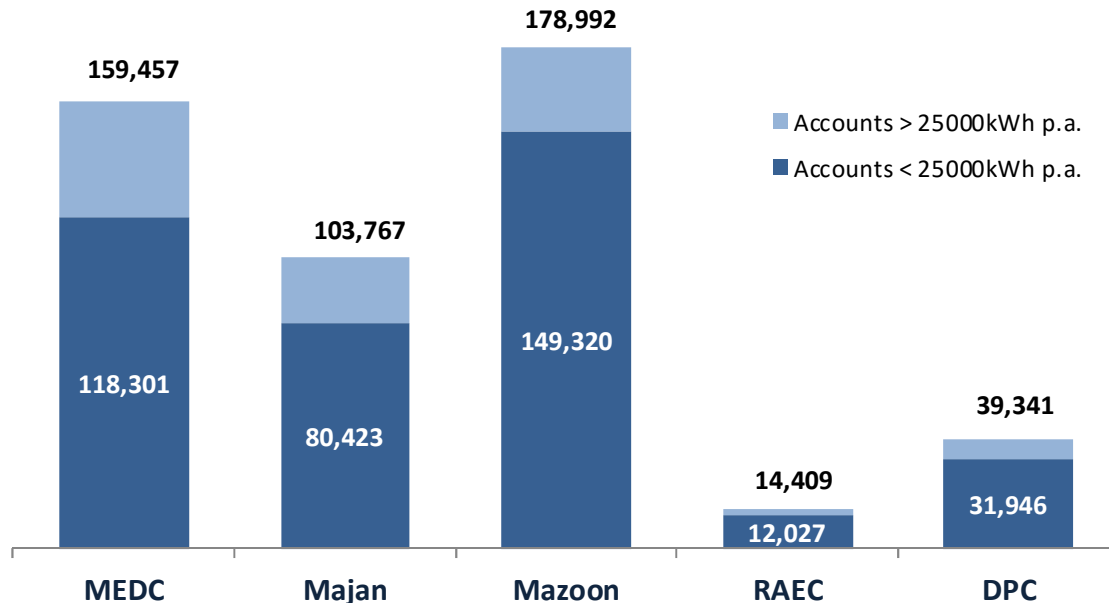
Between 25k & 30k



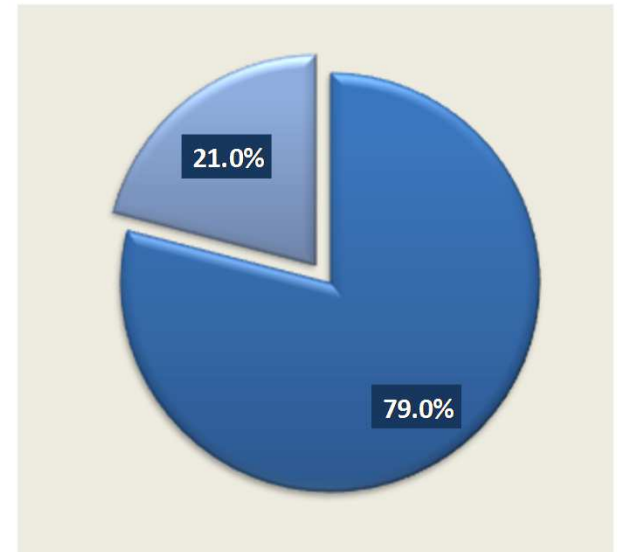
Customer Consumption



Customer Accounts below 25,000 kWh p.a. Consumption

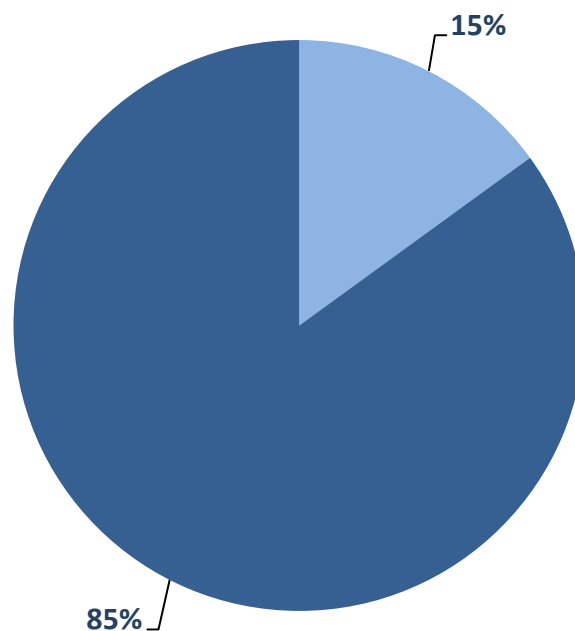


Oman % Above and Below 25,000 kWh p.a. Consumption



Source: Authority, 2010

Analysis of Residential Consumption (2013 kWh Annual Consumption at 10 bz/kWh)



85% of total 2013 Residential consumption was within the first block (0-3000 kWh) and therefore charged at 10 bz/kWh

Residential Tariff Analysis



	Block 1	Block 2	Block 3	Block 4	Block 5
kWh	0-3000	3001-5000	5001-7000	7001-10000	>10,000
Baisa/kWh	10	15	20	25	30

Residential Tariff Analysis



	Block 1	Block 2	Block 3	Block 4	Block 5
kWh	0-3000	3001-5000	5001-7000	7001-10000	>10,000
Baisa/kWh	10	15	20	25	30

11.5 bz/kW
Average

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Actions

1. Introduction of Cost-Reflective Tariffs for Large Consumers: Industrial, Commercial & Government

Large Customers



Large Customers account for:

- Less than **1%** of total accounts;
- But, more than **30%** of total electricity supply;
- Cost-reflective tariffs expected to reduce Subsidy by about **6-8%**;
- Important step in tariff reform process

Actions

1. Introduction of Cost-Reflective Tariffs for Large Consumers:
Industrial, Commercial & Government

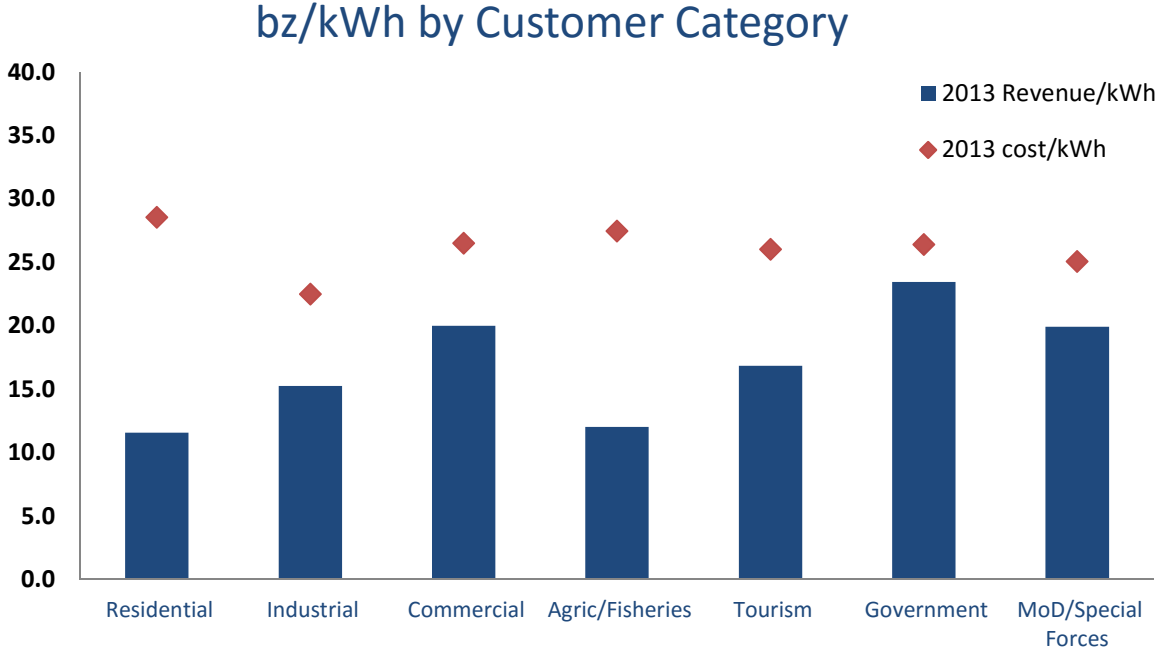
Actions

1. Introduction of Cost-Reflective Tariffs for Large Consumers: Industrial, Commercial & Government
2. Undertake a socio-economic impact study to assess the impact of utility tariff rises on Residential consumers

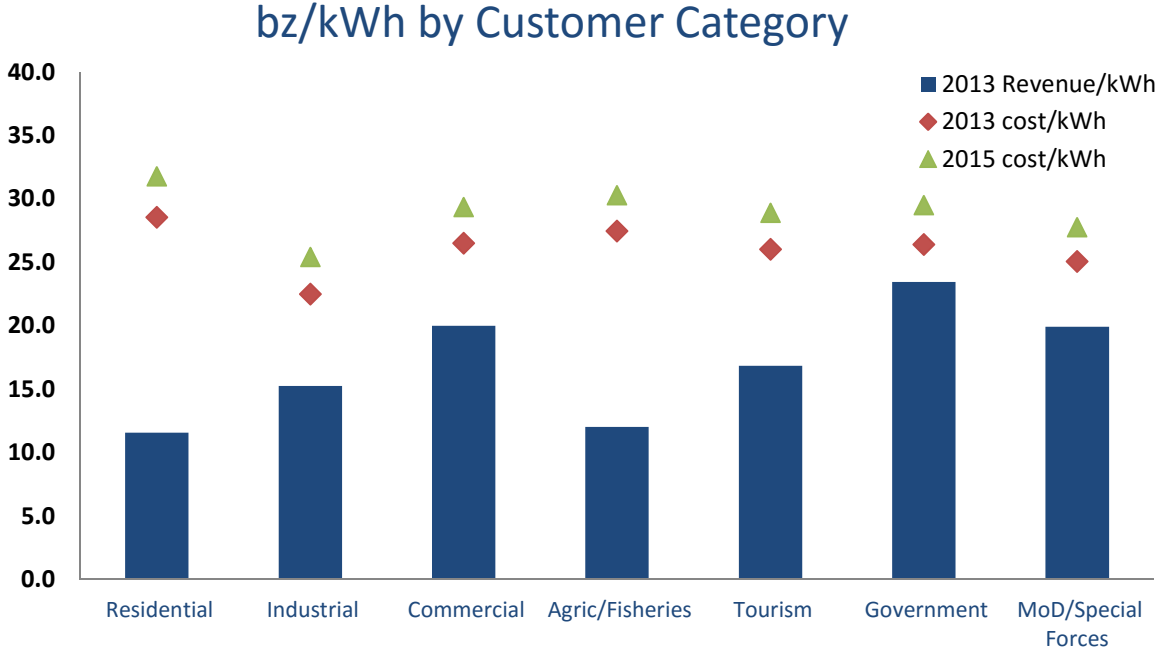
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3. Revise the price of gas sold to electricity generation plants

Revenue vs Cost per kWh by Customer category



Revenue vs Cost per kWh by Customer category



Actions

1. Introduction of Cost-Reflective Tariffs for Large Consumers: Industrial, Commercial & Government
2. Undertake a socio-economic impact study to assess the impact of utility tariff rises on Residential consumers
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Actions

1. Introduction of Cost-Reflective Tariffs for Large Consumers: Industrial, Commercial & Government
2. Undertake a socio-economic impact study to assess the impact of utility tariff rises on Residential consumers
3. Revise the price of gas sold to electricity generation plants
4. Show actual cost of supply and subsidy on customer bills



Thank you for your kind attention