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BUSINESS

# **Water and Oil: The Impact of the Decline of Oil Prices on Water Management in the GCC**

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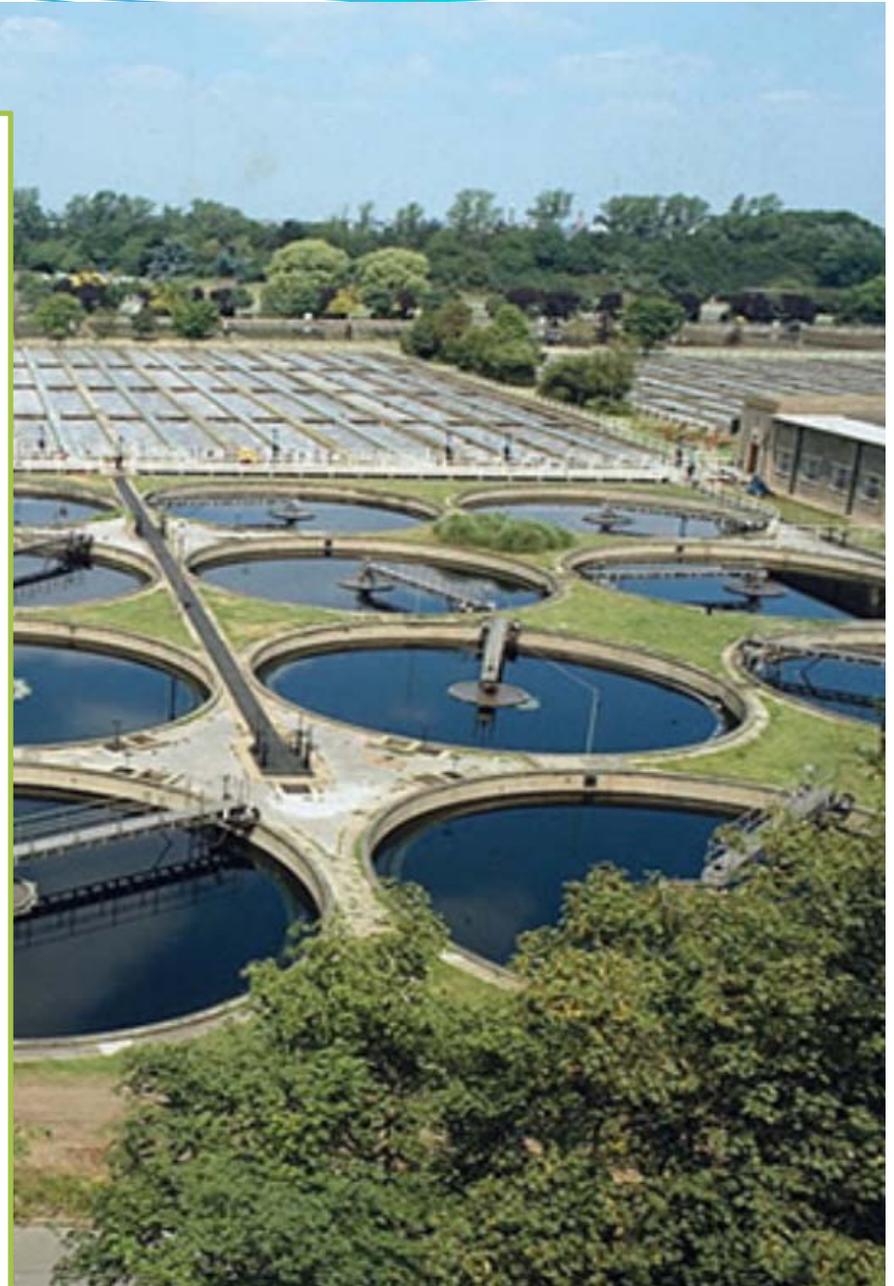
# Overview

- The drop in oil prices and the GCC's budget deficits
- Assessment of water subsidy and tariff policies
- Evaluation of the:
  - ❑ Impact of reduced water subsidies on consumption
  - ❑ Tariff structure reform
  - ❑ Shift of funding from the government to the private sector
  - ❑ Best ways to conserve water and meet growing water demand.



# Introduction

- The drop in world oil prices since June 2014 has created unique budgetary challenges for GCC countries
- An increase in the construction of water and sewerage facilities due to increased consumption
- The need to revise current tariffs
- More Public Private Partnerships (PPPs) are needed to help alleviate budget strains
- These reforms will help with demand, conservation initiatives, and private sector involvement within the industry.



# Methodology



- The research relied on available data from i) water agencies in the GCC and ii) available financial and budget data
- It explores the budget deficits and how water subsidies have effected expenditures
- Finally, it explores resources, and how the GCC currently involves the private sector in water projects

# Results – Statistical Highlights

- The total size of the GCC is 2.4 million square kilometers, while the total population is 50.4 million
  - ❑ 24.2 million people in the GCC are Non-nationals
  - ❑ A strain on water facilities are Non-nationals who comprise a large percent of the total GCC population (88.5% in the UAE)
- Major sources of income include hydrocarbon, oil and gas
- Total GCC GDP is ~\$3.2 trillion



# Results – Deficits and Water Subsidies

- Growth in GCC countries has slowed (IMF)
- 2016 GDP growth is expected to be 2.1% compared to 3.6% in 2015.
- As a result, the GCC adjusted energy prices.
- **This, however, has proven not to be enough.**

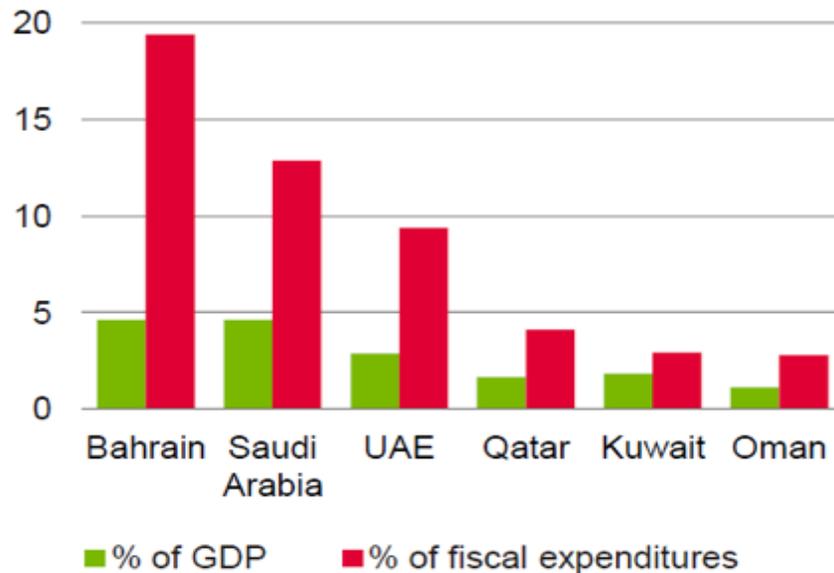


# Results – Deficits and Water Subsidies

Subsidies weigh on fiscal balances

1

2015F



Within the GCC, subsidies make up a large percentage of the GDP and fiscal expenditures

Source: IMF

# Results – Energy Prices in GCC & USA

**Prices for Energy Products: GCC and the United States**  
Average January–July 2016 or latest available

	<b>Gasoline</b> <i>(U.S. dollars per liter)</i>	<b>Diesel</b>	<b>Natural Gas</b> <i>(U.S. dollars per MMBtu)</i>	<b>Electricity</b> <i>(U.S. dollars per KWh)</i>
Bahrain	0.38	0.32	2.75	0.04
Kuwait	0.19 1/	0.39	1.50	0.01
Oman	0.42	0.43	3.00	0.04
Qatar	0.35	0.37	0.75	0.05
Saudi Arabia	0.22	0.10	1.50	0.10
UAE	0.41	0.43	0.75	0.12
GCC Average	0.36	0.34	1.71	0.06
GCC Maximum	0.42	0.43	3.00	0.12
U.S. Prices	0.51	0.45	2.18	0.10

Sources: Prices for GCC countries come from country authorities and are averages for 90 and 95 octane gasoline. U.S. gasoline (average for mid and high grade) and diesel prices come from U.S. Department of Energy (EIA) and are adjusted for taxes. Natural gas price for the U.S. is the Henry Hub spot price. Electricity tariffs for the United States include taxes and come from EIA.

1/ Kuwait increased gasoline prices to \$0.29 per liter, effective September 1st.

# Results – Fiscal Gains and Prices

Fiscal Gains of Gasoline Price Increases			
	New gasoline prices per liter	Percent change	Subsidy Savings, as Percent of GDP, 2016 Estimate
<b>Bahrain</b>	0.42	55.6	0.9
<b>Kuwait</b>	0.21	0	0
<b>Oman</b>	0.41	36.7	1.1
<b>Qatar</b>	0.35	34.6	0.1
<b>Saudi Arabia</b>	0.24	50	0.8
<b>UAE</b>	0.49	5.1	0.1

. Moody's Investor Services, Global petrol prices. com as of January 2016, IEA Energy Atlas

# Results – Water Resources & Subsidies



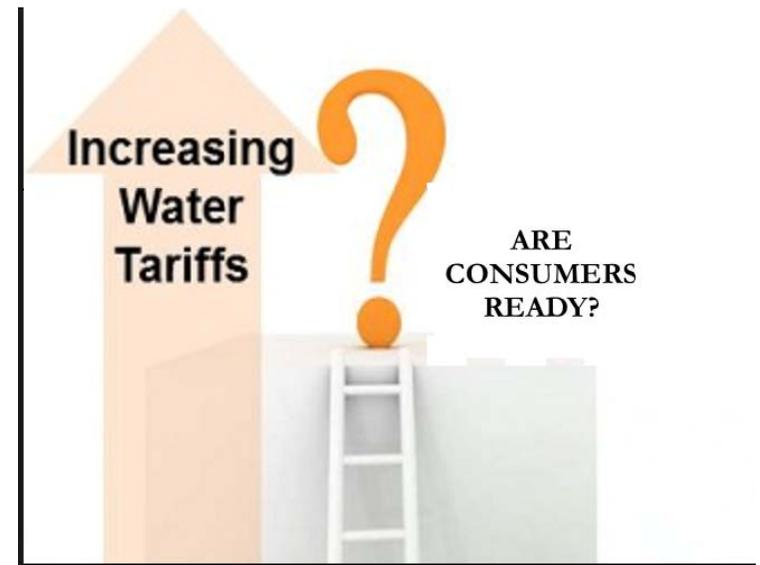
- In 2010, GCC water shortage was 12,781 mcm/year, expected to grow to 25,885 mcm/year in 2050.
- PPPs have been encouraging for infrastructure development.
  - \$50 billion privatization of water assets in Saudi Arabia.
  - Vision 2030 proposals expect 40% of all water utility funding to come from private sector.
  - GCC governments, including UAE and Kuwait have laid legal infrastructure for PPP projects.
- With changes in financing, GCC will have to reform water tariffs.

# Results – Recent UAE Tariff Changes

## New water tariffs

### Residential customers

Customer	Property	Current tariff AED/1,000 litres	New tariff AED/1,000 litres	Average Daily consumption litres/day
National	Flat	0	1.70	up to 700
			1.89	over 700
	Villa		1.70	up to 7,000
			1.89	over 7,000
Expat	Flat	2.2	5.95	up to 700
			10.55*	over 700
	Villa		5.95	up to 5,000
			10.55*	over 5,000



Regulation and Supervision Bureau (RSB). (2016). New Water Tariffs. United Arab Emirates Government, Retrieved from <http://rsb.gov.ae/en/sector/new-water-and-electricity-tariffs-structure>

# Results – Recent UAE Tariff Changes

## Social card holders and national beneficiaries of monthly allowances or social assistance

Customer	Property	Current tariff AED/1,000 litres	New tariff AED/1,000 litres	Average Daily consumption litres/day
National	All	0	0**	up to 9,804
			1.70	over 9,804
Expat	All	2.2	0**	up to 2,801
			5.95	over 2,801

## Other customers

Customer	Property	Current tariff AED/1,000 litres	New tariff AED/1,000 litres
Government	All	2.2	10.55*
Commercial	All	2.2	4
Agriculture including Ranches	All	2.2	2.20
Industry	All	2.2	4

Regulation and Supervision Bureau (RSB). (2016). New Water Tariffs. United Arab Emirates Government, Retrieved from <http://rsb.gov.ae/en/sector/new-water-and-electricity-tariffs-structure>

# Conclusion & Recommendations

- The drop in oil prices created major budget gaps
- These deficits can be closed by reducing subsidies, and rationalizing the management of utilities
- By engaging the private sector, the GCC can reduce government utility costs
- A more equitable tariff structure would also help deficits, promote conservation, and lead to more sustainable management of water in the future



Many thanks to the Organizing Committee of the Conference for  
their kind invitation

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