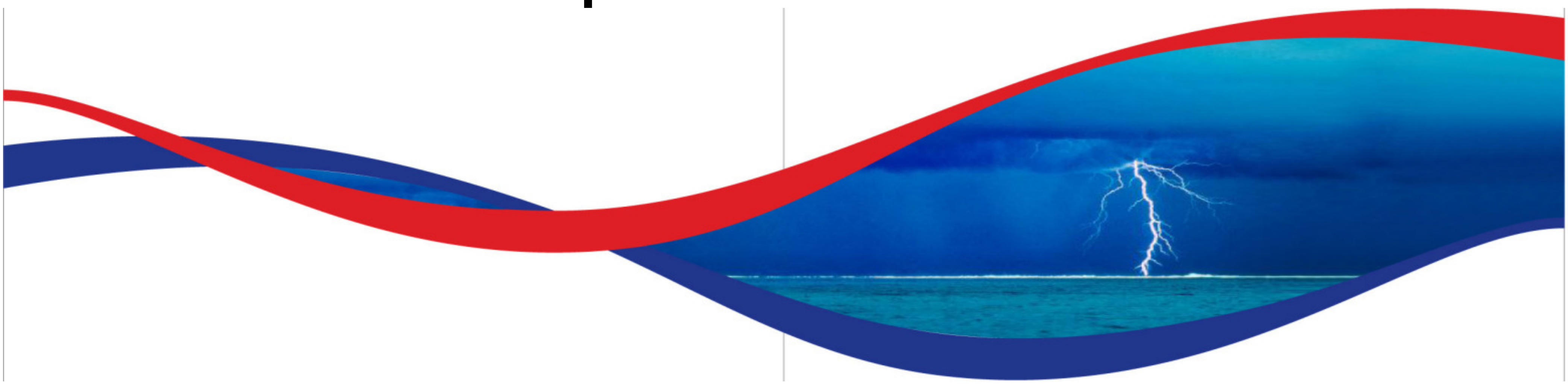
Business Opportunities In
the Water & Wastewater Industry
In Saudi Arabia
Private Sector Perspective



Middle East & North Africa Business Forum

Singapore International Water Week

1. Scope & Size of the market
2. Who is who in the sector?
3. Increased Role of the Private Sector
4. Specific Opportunities
5. Track Record has been Established
6. Our Own Creditionals

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• Saudi Arabia – Scope and size of the Market

- Total Area 2.15 Mil Sq.km; Population 25 Million; Pop. Growth Rate 3%;
- KSA in the category of "absolute water scarcity".
  Meaning: the country will not be able to meet its needs in 2025;
- A very high rate of usage – 286 lit/capita/day;
  (Japan 99; UK 136; France 151; Canada 431; USA 666)
- Water Supply – Domestic & Industrial
  - Demand - Domestic 6.3 mil cum/day: Industrial 1.25 mil cum/day.
  - Supply – 47% ground water + 53% Desalination.
- Wastewater Domestic and Industrial sectors
  - produce 4.1 mil cum/day but only 2.5 mil cum/day is collected.
  - Treatment (manly secondary) 1.3 mil cum/day and only 0.66 mil is reused
- Agriculture consumes 20 Billion cum per annum; 15
  Billion cum/annum from mining aquifers + 1 Billion cum/annum from Dams.

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2

• Who is who in the Sector?

- Marafiq – Responsible for providing and distributing water and handling wastewater at the Industrial Cities of Yanbu and Jubail.
- Aramco – Handles it's own water and wastewater management needs by itself.
- Saline Water Conversion Corporation (SWCC) - Responsible for producing and conveying desalinated water.
- Municipalities and urban centers - A multitude of local structures to distribute water at a local level and collect and handle wastewater (to the extent it is/was being done)

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- National Water Company (NWC) - 100% Government Owned, USD 5.9 Billion capital, established on 1st Jan 2008
  - It took over water distribution and wastewater management operations of Riyadh and Jeddah on 1st June 08.
  - It will take over operations of Damamam, Alkhobar, Madinah and Makkakh very shortly.
  - Within the next 3 years it will take over operations of 15 other cities.

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3

• Increased Role of Private Sector

- Private Sector has traditionally participated as consultants and contractors to the public or parastatal (govern owned companies like Aramco and Marafiq) to deliver engineer and construct infrastructure assets
- Marafiq and Aramco is now turning to the private sector to OWN, PROVIDE FINANCE, design, build & OPERATE assets to deliver services using a utility outsourcing model of contract (either on a BOOT or BOO basis)
- The Government has also turned to the private sector utilizing the IWPP or IWP model of contract to deliver desalinated water in large quantities on long term off take contracts.

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- 5 Independent Water (and Power in the case of co-gen) Projects have already been contracted.
  - Together to deliver 2.23 million cum per day of desalinated water
  - Representing in excess of US$ 3 million of investment.
  - One for ARAMCO (in JV with Sumitomo Chemicals); one for Marafiq (at Jubail) and three for Water & Electricity Company (a newly created Government owned single buyer)

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• Specific Opportunities for the Private Sector

- NWC is tasked with maximizing the involvement of private sector in distribution of water and in collection, management and treatment of waste water and to promote reuse.
- NWC - Management of water & wastewater network
  - Riyadh & Jeddah has already been let on a 7 year management contractor to private sector operators (JV of ACWA & Suez Environment + Veolia)
  - Management of Dammam, Alkhober, Madinah and Makkah will all be transferred to the private sector on similar O&M arrangements.
  - Over the next 3 years 15 other cities will also be adopted and transferred.
  - These are all precursors to fully conceesioning each city system for a longer term.

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• Specific Opportunities for the Private Sector

- NWC - Wastewater Treatment Plants
  - Riyadh Al Khraji Road
    - 2 X 100 000 cum/day Brownfield +
    - 1 X 100 000 cum/day Greenfield
  - Riyadh Al Hayer
    - 1 X 400 000 cum/day Brownfield +
    - 1 X 400 000 cum/day Greenfield
  - Jeddah Al Khumrah 4 plants totaling 490 000 cum/day
  - Jeddah Airport
    - 1 X 250 000 cum/day Brownfield +
    - 1 X 250 000 cum/day Greenfield
  - Within the next three years similar projects will be launched in Makkah, Madinah and Greater Dammam

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• Specific Opportunities for the Private Sector

- NWC – Treated Sewerage Effluent (TSE) Reuse
  - A pioneering initiative to use TSE for non potable purposes in major cities like Riyadh, Jeddah, Madiniah & Makkah
  - Opportunities exist for reuse in industries, district cooling, public parks, landscaping and agriculture.
  - NWC is seeking partnership with private sector to develop this opportunity by creating jointly owned business enterprises which will off take the treated effluent at a price and invest in the infrastructure necessary to distribute it and sell TSU to the end user to finance itself.
  - MoUs have already been signed with a few entities. More partnerships are sought.

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• Specific Opportunities for the Private Sector

- For the provision of desalinated water both for commercial and industrial purposes, Government and the Private Sector will turn to more IWPPs and where necessary to keep pace with delivery requirements will also use EPC procurement using Government's own financial resources.

- Two very large EPC Projects are currently in the document preparation stage.
  - Raz Azzour 1 to 1.2 million cum/day desalinated water plant (together with a power plant)
  - Yanbu 500 000 to 650 000 cum/day desalinated water plant together with a power plant.

- ARAMCO/Dow Chemicals Ras Tanura Development – 150 000 cum/day desalinated water (together with power and steam) on an IWSPP basis.

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• Specific Opportunities for the Private Sector

- SWCC will continue to build new desalination plants particularly to provide water to costal communities through the satellite desal programme it is already implementing.
- Under the Governments Privatization initiative the 30 plants already operating under the ownership of SWCC (together producing 2.9 mil cum/day) will be sold to the private sector in 7 packages starting early 2010
  - Each will come with a requirement for expansion or refurbishment or possibly renewal.
- SWCC also operates a network of long distance water transfer pipelines. SWCC will continue to expand this network to transfer water produced by the IWPPs
- Ministry of Agriculture is due to expand storage capacity (Dams) by 1 Billion cum per annum.

4

• Specific Opportunities for the Private Sector

	Capex $ Billion	Opex $Billion
▪ Water Distribution	14	7
▪ Sewerage Collection &Treatment	23	10
▪ TSE Reuse	6	3
▪ Desalination Plants	14	8
▪ Water transfer pipelines & Dams etc	10	6

Over US$ 100 Billion worth of opportunities in the next 20 years, much of it is front ended.

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• Track Record has been Established

- Over US$ 3 Billion of Private Sector Capital has already been invested in IWPPs and IWP by the private sector
- Projects are being delivered on time
- Even in this tough financial market Saudi Arabia is able to attract Project Finance.
- Significant financial resources have been allocated to this sector by the Government.
- Clearly the sector is attractive to the private sector as it continues to be a magnet for new entrants
- Major International contractors like Doosan, MHI, Fisia, GE, Sidem, Cadagua … all actively participate.
- Owners/Operators like Veolia and Suez Environment and Singapore Water International are already engaged on contracts.

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• Who are we? Our credentials

- ACWA Power Development & ACWA Power International are two sister companies. 100% private Saudi ownership.
- Co-Developer/co-Owner/co-Operator of all the 4 IWPPs and 1 IWP contracted in the kingdom so far(2.23 mil cum/day capacity)
- Own & Operate the first privatized industrial wastewater treatment & reuse concession (in Jeddah); now operating for 5 years.
- Currently developing similar concessions in Riyadh and Dammam.
- 50% JV partner with Suez Environment currently operating the water & wastewater system of Jeddah.
- Have entered into an MoU with NWS and Veolia to develop a TSE reuse business in Riyadh.
- Preparing to bid the wastewater BOTs in Riyadh and Jeddah.

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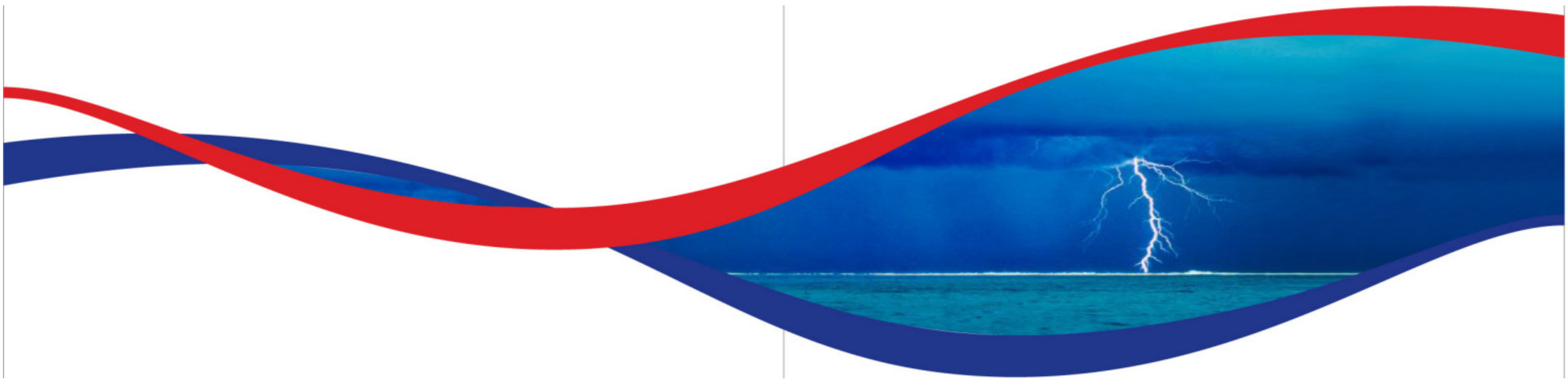

Thank You for Your Attention

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