Success factors for Public Private Partnerships in the water sector

The water and waste water industry leading the way for PPPs in Saudi Arabia
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The Privatization Program of Saudi Arabia’s Vision 2030 sets forth objectives for privatizing assets in economic infrastructure and social infrastructure. One of the key drivers for privatization at the national level is a targeted improvement in service quality and reduction in government spending while improving quality of life for citizens. The government is open to various forms of private sector investment such as full/partial assets sale, IPOs, management buyouts, public private partnerships (PPPs) and outsourcing.

As part of this vision, the development of the Kingdom’s water and wastewater sector through private sector participation builds on water policies, notably the National Water Strategy 2030 and the latest long-term supply demand forecast of the Ministry of Environment, Water and Agriculture (MEWA).

The private sector will play a key role in ensuring that the Kingdom can meet the increasing demand for potable water and wastewater infrastructure. Already, contracts worth millions of dollars have been awarded through various water and wastewater schemes, and more awards and tenders are expected to be released over the period of next five years (2025-2021).

The Saudi Water Partnership Company (SWPC), an entity fully owned by the Ministry of Finance and charged with overseeing the PPP development of desalination and wastewater projects, has emerged as one of the leaders among PPP grantors in the GCC region. SWPC’s privatization model is uniquely suited for infrastructure sectors as evidenced by its successful application in the Kingdom. The success in tendering independent water project (IWP) and independent sewages treatment plant (ISTP) assets demonstrates that the model attracted local and international investors interest with the necessary levers in place, including public sector capacity for tendering, risk mitigation mechanisms and the appropriate incentives.

The Vision 2030 privatization targets would require similar or larger investment volumes in other sectors including economic and social infrastructure sectors of the Kingdom. The lessons learnt from SWPC’s experience can provide important insights into incentivizing private investment in traditionally government-operated services. Effective procurement governance and contract frameworks appropriate for assets or asset bundles will deliver low-cost capital, affordability, efficiency, availability and service quality.

This report covers the key success factors and the role played by SWPC in the success of PPPs in Saudi Arabia’s water and waste water sector.
Objectives of the National Water Strategy
Saudi Arabia’s National Water Strategy (NWS) 2030, published in 2018, adopted a sustainable approach to the water sector, committing to safeguarding the natural resources and the environment of the Kingdom, and providing cost-effective supply and high-quality services. The five strategic objectives under NWS, as formulated by the Ministry of Environment, Water & Agriculture (MEWA) are:

- Ensuring continuous access to adequate quantities of safe water, under normal operations and during emergency situations.
- Enhancing water demand management across all uses.
- Delivering cost-effective and high-quality water and wastewater services, accounting for affordability.
- Safeguarding and optimizing the use of water resources, while preserving the local environment for the highest benefit of the Saudi society in this generation and the future.
- Ensuring water sector competitiveness and positive contribution to the national economy through promoting effective governance, private sector participation, localization of capabilities and innovation.

The strategic programs and initiatives, derived from the sector’s five strategic objectives and from analysis of the different components of framework, offer a clear policy direction for the sector. Private sector involvement and privatization remains the key focus of NWS to improve the water and wastewater sector.

Privatization among strategic programs and initiatives

Water Law and Resource Management Regulations
Water Resource Management
Sector Resilience
Innovation and Capability Building
Supply Chain Efficiency and Service Quality
Water Services Regulations
Saline Water Conversion Corporation Reconstructing
Private sector involvement in the production and treatment of wastewater
Distribution Restructuring and Privatization
Saudi Irrigation Organization Restructuring and Irrigation Improvement
Reform in water sector by encouraging the participation of the private sector

The privatization initiative in the water sector aligns with the wider Privatization Program, launched by the Council of Economic and Development Affairs (CEDA) to achieve the objectives of Vision 2030, the national framework for economic diversification and improved economic competitiveness.

MEWA set forth five privatization principles emphasizing the need to balance efficiency, service availability and quality and sustainability.

Considering different commercial environments within the sector – desalination, transmission and distribution – MEWA delegated privatization responsibilities across four government-owned companies.
Key public players in water sector and their role in privatization

The Ministry of Environment, Water and Agriculture (MEWA) is responsible for management of water resources. Their objectives include:

- Preserving the environment and natural resources, and sustainably develop them
- Contributing to sustainable food security
- Achieving water security
- Activating the role of private sector, research centers and non-profit organizations

MEWA also defines the principles that define privatization of water treatment and wastewater treatment.

Established in 2003, The Saudi Water Partnership Company (SWPC) is the principal off-taker of water production, sewage treatment and strategic water storage in Saudi Arabia and is responsible for tendering all related Public-Private Partnerships (PPP) projects.

Objectives:
- Tendering of new plants and projects of desalination, water purification, and sewage water treatment for the private sector i.e., Integrated Water Plants (IWPs) and Independent Sewage Treatment Plants (ISTP).
- Tendering of water storage tanks projects
- Tendering of projects for the construction of dams for the purpose of providing drinking water
- Purchase and sale of water (desalinated, purification, treated and untreated) and electricity and the conclusion of the necessary agreements
- Purchase the fuel needed to achieve its purposes

SWPC is fully owned by the Ministry of Finance. Its Board of Directors is chaired by the Minister of Environment, Water and Agriculture, and includes representatives of each of the Ministry of Finance, the National Center for Privatization, the Ministry of Environment Water and Agriculture, as well as a representative from the private sector.

The National Water Company (NWC) is a Saudi joint stock company fully owned by the government through the Public Investment Fund and was established to provide water and wastewater treatment services. The NWC is tasked with tendering brownfield water distribution and treatment projects as a part of the privatization strategy.

The Saline Water Conversion Corporation (SWCC) is a Saudi government corporation and is responsible for the desalination of seawater producing electric power and supplying various regions in the Kingdom with desalinated water. SWCC is also responsible for tendering brownfield desalination assets.

The Water Transmission and Technologies Company (WTTCO) was established by MEWA in November 2020. WTTCO will initially be responsible for operating and maintaining over 8,000 km transmission, dispatch, distribution and storage systems and transmission of 7 million m3/day of desalinated water. Its additional responsibilities include achieving higher sector efficiency and driving innovation in technology and research.

The National Center for Privatization and PPP (NCP) is a public center of excellence that aids in developing regulations, creating privatization frameworks, and preparing government assets and services for privatization.

The NCP team is composed of experts in strategy, advisory, finance, project management, marketing, communication, legal and risk management to enable the economy to navigate the entire spectrum of private sector participation.

The NCP website serves as an important resource for information of the prevailing pipeline of privatization transactions, closed transactions, planned transactions, active tenders, applicable laws and regulations for investors, and case studies on closed privatization transactions. NCP is also represented on SWPC’s board, bringing in expert knowledge and guidance to complement the company’s privatization mandate.
The role of SWPC in meeting the objectives of the National Water Strategy

The National Water Strategy (NWS) 2030 provides the way forward for the water and waste-water sector, and guides government entity SWPC to achieve this mandate. For both saline water desalination and sewage treatment, SWPC plays a central role in partnering with the sector to provide high-quality, low-cost water services, in addition to increasing local content and using the latest modern water desalination and treatment technologies.

The company aims to enhance water availability in regular and emergency situations and maximize the benefit from treated water by establishing separate plants in partnership with the private sector. It also seeks to progressively increase the participation of the private sector to reach 100% in desalinated water production by 2030.

The company’s seven-year statement builds on several water policies notably the NWS 2030 and MEWA’s latest long-term supply demand forecast. The overarching intent of the plan is to bridge any gaps in the water production, strategic storage, and treatment capacities by analyzing supply and demand over the next seven years and planning for projects accordingly.
Saudi Arabia’s recent PPP achievements in the water sector - SWPC case

Pioneers in PPP procurement
SWPC has emerged as one of the leaders among PPP grantors in the GCC region. Over the last two years, the company has successfully achieved financial close of USD2.5 billion (SAR9.4 billion) of investment into three IWPs and three ISTPs under DBFOM concessions.

The USD646 million (SAR2.4 billion) Shuqaiq 3 Expansion 2 IWP and the USD715 million (SAR2.6 billion) Rabigh 3 IWP projects, which reached financial close in 2019 are due for commercial operations in 2021. The two projects will collectively add 1.05M m³/day of reverse osmosis desalination capacity with the ability to serve an estimated 4.5 million people. The projects are a crucial success in view of the Kingdom looking to private finance as the path to achieve its water infrastructure goals.

Record low prices and driving affordability
SWPC continues to deliver some of the lowest prices in the region through competitive levelized water costs (LWC) achieved through the tenders. LWC is one of the key factors in driving affordability for consumers.

Tariffs for comparable IWP projects in the region

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Year</th>
<th>SAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taweelah IWP (UAE) (2019)</td>
<td></td>
<td>1.84</td>
</tr>
<tr>
<td>Um Al Quwain (UAE) (2020)</td>
<td></td>
<td>2.44</td>
</tr>
<tr>
<td>Shuaibah 3 Expansion II IWP (KSA) (2017)</td>
<td></td>
<td>2.45</td>
</tr>
<tr>
<td>Rabigh 3 IWP (KSA) (2019)</td>
<td></td>
<td>1.99</td>
</tr>
<tr>
<td>Shuqaiq 3 IWP (KSA) (2019)</td>
<td></td>
<td>1.95</td>
</tr>
<tr>
<td>Jubail 3A IWP (KSA) (2020)</td>
<td></td>
<td>1.55</td>
</tr>
<tr>
<td>Yanbu 4 IWP (KSA) (2020)</td>
<td></td>
<td>1.74</td>
</tr>
<tr>
<td>Jubail 3B IWP (KSA) (2020)</td>
<td></td>
<td>1.59</td>
</tr>
</tbody>
</table>

1 Jubail 3B IWP tariffs are announced for the preferred bidder but project is yet to reach financial close.
Among desalination projects, tariffs have seen a consistent decrease from USD0.65 per m³ (SAR2.45 per m³) for the USD323 million (SAR1.2 billion) Shuaibah 3 Expansion II to USD0.53 per m³ (SAR1.99 per m³) for the USD715 million (SAR2.7 billion) Rabigh 3 IWP marking one of the lowest tariffs globally.

The tariffs for the most recent projects to have reached financial close are:

<table>
<thead>
<tr>
<th>Project</th>
<th>Transaction Size</th>
<th>Financial Close</th>
<th>Capacity</th>
<th>Tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shuqaiq 3 IWP</td>
<td>USD646 million (SAR2.4 billion)</td>
<td>May 2019</td>
<td>450,000 m³</td>
<td>USD0.52 per m³ (SAR1.95 per m³)</td>
</tr>
<tr>
<td>Jubail 3A IWP</td>
<td>USD660 million (SAR2.5 billion)</td>
<td>Sep 2020</td>
<td>600,000 m³</td>
<td>USD0.41 per m³ (SAR1.55 per m³)</td>
</tr>
<tr>
<td>Yanbu 4 IWP</td>
<td>USD850 million (SAR3.2 billion)</td>
<td>March 2021</td>
<td>450,000 m³</td>
<td>USD0.46 per m³ (SAR1.74 per m³)</td>
</tr>
</tbody>
</table>

The Shuqaiq 3 IWP financing deal received the Distinction Award at Global Water Awards 2020 by Global Water Intelligence, recognizing the scale of the project, a highly competitive tariff, investor interest and an attractive project finance ecosystem.²

The region continues to match or produce lower tariffs than Singapore, traditionally considered as leader in technology and PPP procurement for desalination and wastewater treatment.

In 2020, SWPC awarded three ISTPs projects – Dammam, Jeddah Airport and Taif – which received tariffs well below STP projects of comparable size in the region.

Tariffs for comparable ISTP projects in the region

²https://globalwaterawards.com/2020-water-deal-of-the-year/
**Competitive procurement regime**

SWPC’s procurement process for IWPs and ISTPs has consistently elicited a strong interest from the international market and domestic contractors as evidenced by EOI and bid volumes received for recent projects. The strong investor interest stands as a testament to the vibrant investment environment and effective risk sharing mechanisms in SWPC’s contracting practices.

**Competition in projects awarded in 2019 and 2020**

<table>
<thead>
<tr>
<th>Project</th>
<th>Number of Consortia</th>
<th>EOI</th>
<th>Qualified Bids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jubail 3B IWP</td>
<td>49</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Jeddah Airport 2 ISTP</td>
<td>61</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Jubail 3A IWP</td>
<td>49</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Dammam West ISTP</td>
<td>64</td>
<td>7</td>
<td>51</td>
</tr>
<tr>
<td>Yanbu 4 IWP</td>
<td>51</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Shuqaiq 3 IWP</td>
<td>50</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Rabigh 3 IWP</td>
<td>55</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

**International investor’s interest in recent awarded in 2019 and 2020**

<table>
<thead>
<tr>
<th>Project</th>
<th>Share of Foreign Firms Among the Winning Consortium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jubail 3B IWP</td>
<td>33%</td>
</tr>
<tr>
<td>Jeddah Airport 2 ISTP</td>
<td>43%</td>
</tr>
<tr>
<td>Jubail 3A IWP</td>
<td>40%</td>
</tr>
<tr>
<td>Dammam West ISTP</td>
<td>45%</td>
</tr>
<tr>
<td>Yanbu 4 IWP</td>
<td>36%</td>
</tr>
<tr>
<td>Shuqaiq 3 IWP</td>
<td>45%</td>
</tr>
<tr>
<td>Rabigh 3 IWP</td>
<td>38%</td>
</tr>
</tbody>
</table>
Employment creation

SWPC tendered projects continue to drive increased job opportunities in construction and operation of assets.

Domestic capacity

Local content requirements for projects have lead to increased local participation in the sector and enhanced domestic capacity for development and O&M.

International participants and FDI

Investment and participation by international investors such as Acciona, Veolia and Marubeni was an important factor in developing domestic capabilities.

Environmental benefits

Over subsequent rounds of project procurement, SWPC-tendered IWP's and ISTP's have consistently delivered lower electricity consumption per unit of treatment. SWPC is working towards incorporating alternative energy source requirements to improve the uptake of solar generation in upcoming projects, supporting the Kingdom’s mandate to increase the usage of renewable energy. On-site generation is expected to reduce the cost and further optimize the tariffs.

Electricity consumption per unit wastewater treated

Developers are encouraged to utilize sludge for energy in ISTPS. Environmental obligations for developers include zero sludge plants, stringent treated sewage effluent (TSE) requirements and advanced controls for odor and noise.

Socioeconomic benefits

PPPs in water and wastewater have driven employment creation, domestic capacity development and foreign direct investment (FDI) in the Kingdom.

Recent projects are also being assessed by SWPC based on indirect and induced value additions including public health benefits and economic development impacts.

Electricity consumption per unit water treated

Socio-economic benefits of water privatization

Employment creation

SWPC tendered projects continue to drive increased job opportunities in construction and operation of assets.

Domestic capacity

Local content requirements for projects have lead to increased local participation in the sector and enhanced domestic capacity for development and O&M.

International participants and FDI

Investment and participation by international investors such as Acciona, Veolia and Marubeni was an important factor in developing domestic capabilities.
Case study - SWPC’s key success factors

SWPC’s success in coordinating private investment and delivering affordable tariffs to consumers can be attributed to the following factors:

SWPC’s mandate, governance and knowledge

A clear mandate
The resolution of the Council of Ministers numbered 494 dated 1 May 2017 extended SWPC’s mandate to function as the principal offtaker of water. In addition to the SWPC objectives mentioned earlier, SWPC is committed to supporting Saudi Arabia in achieving the United Nations Sustainable Development Goal 6, “Clean Water and Sanitation.”

Governance structure
Through its corporate governance structure, SWPC considers the interests of all relevant government ministries and the private sector.

Board membership

100% ownership
The company has on its board a representative from the NCP, a center of excellence that participates in creating the privatization frameworks and deciding the project pipeline bringing together specialists and multidisciplinary experts. Water is one of the focus sectors for NCP and they monitor and report on execution progress of the privatization program enhancing transparency in the procurement process.

Six important enablers to institute a successful privatization process for a government entity in the water sector.

1. **Transparency**
   A clear procurement procedure for engaging the private sector under clear contracting structures which are acceptable to developers and lenders. Following global best practice, procurement progress for every project at every stage to be disclosed through the entity official website.

2. **A qualified team**
   A need for a well-qualified internal team that has commercial and technical knowledge of the water and sewage sector, and project finance for infrastructure development. Moreover, the organization’s capabilities should extend to cover planning and prioritizing projects by identifying the asset requirements across the Kingdom’s regions and the appropriate procurement approaches.

3. **Independent advisors**
   Qualified international advisors to be involved, to bring in the perspective of project developments in the GCC region and the wider world.

4. **Strong monitoring**
   Entity internal team to work with the advisors in a hands-on manner to ensure that project outcomes are in alignment with the ministry’s objectives and NCP’s privatization process as outlined in their PPP manual.

5. **Organizational capacity**
   The ability to manage multiple PPP transactions in a parallel manner, a capability that becomes more important as the pace of development increases with new projects.

6. **Experience and knowledge management**
   To manage successful delivery of few projects. The successful projects will not only establish the Kingdom’s water sector as an attractive investment destination, but also contributed towards the entity’s internal development by providing past knowledge that can be leverage for future procurement.
Correct and effective risk mitigation to ensure bankability of deals

The clear procurement mechanisms followed by SWPC are complemented by a set of risk mitigation mechanisms:

- Guaranteed sale of water through off-take agreements
- Providing a clear set of rights and obligations for the project stakeholders
- Offering logistics and infrastructure support for acquiring land, fuel, electricity, feedstock, interconnections and other infrastructure
- Facilitating dialogues with regulatory authorities for securing approvals, licenses and permits

The bankable contractual framework has been tested on precedent projects and the government guarantees for offtake agreements make the Kingdom’s water sector attractive to investors.

SWPC also follows a robust mechanism for mitigating risk to the public sector by deploying a pre-qualification mechanism for the RFQ stage. The RFQ will evaluate the bidder’s technical capabilities including development, operations & maintenance experience and financial capabilities such as net worth and experience in raising non-recourse senior debt. Ultimately, the contract structures ensure that risks are shared between the public sector and the private sector in a fair manner based on their respective competencies.

Risk-sharing between SWPC and the concessionaires

**Volume and price risks**
SWPC assumes volume and price risks through an availability-based payment structure. The company is also exploring annuity-based payments for the construction of collection networks. A take-or-pay requirement insulates the project companies from exposure to volume or price risk ensuring that the project receives revenues to cover fixed costs even while no flows are processed by the plant while the plant is available.

**Inflation and currency exchange risks**
The tariffs are adjusted in alignment with inflation and currency risk is passed on by the project company to the procurer (SWPC).

**Default and force majeure**
A termination regime structured by offtaker (SWPC) could be exercised during an early default or termination events such as company event of default, SWPC event of default and termination for SWPC’s convenience and prolonged force majeure events due to increased costs.

**Underperformance risk**
The contract terms also have provisions for underperformance penalties, an important hedge against potential service quality decreases and service disruptions.

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3Seven-year plan
**Appropriate project finance terms, deal structures and incentives**

Saudi Arabia has a vibrant investment environment and a set of public incentives that allow investors to fully realize benefits from standardized procurement processes and risk mitigation mechanisms:

*Domestic debt and foreign debt:*
The Kingdom’s water sector offers some of the most competitive equity internal rates of return (IRRs), enabled partly by providing competitive financing terms from domestic banks in the Kingdom such as the Saudi National Bank (SNB), Riyad Bank, and Al Rajhi Bank, and international banks such as Crédit Agricole, Mitsubishi UFG (MUFJ), Norinchukin and Sumitomo Mitsui Banking Corporation (SMBC), adopting mini perm structures and, new initiatives in capital and financial markets. For most projects in the sector, domestic lenders and international banks have come together in lenders’ consortia.

*FDI and local content requirements:*
100% FDI is allowed in the sector and there are no restrictions on repatriation of returns on capital. However, local content requirements in SWPC’s procurement terms have ensured development of technical competence, experience and investment appetite as evidenced by the participation of companies such as ACWA Power, TAWZEA and MOWAH. The requirements are designed to enable local players to increase the percentage of Saudi local resources progressively and eventually compete as lead investors when they can comply with technical and financial requirements of project. The requirements for local content ranges from 40% to 50% during construction, 50% during first five years of operation and 70% during subsequent years. These requirements were part of precedent transactions like Tabuk 2 and Madinah ISTP.

*Government incentives:*
Other incentives include concessional land leases, and customs duty exemptions for primary raw materials, manufacturing equipment and spare parts not available in the Kingdom.

SWPC considers feedback from the private sector on the progression of the privatization process through formal consultation and through the sector’s representation in the Board.
The Vision 2030 Privatization Program sets forth objectives for privatizing assets in economic infrastructure and social infrastructure. The sectors targeted for PPPs include primary healthcare and extended healthcare, renewable energy generation and public transport. Ports are planned to be corporatized for subsequent privatization.

One of the key drivers for privatization at the national level is a targeted improvement in service quality and reduction in government spending while improving quality of life for citizens. The government is open to various forms of private sector investment such as full/partial assets sale, IPOs, management buyouts, PPPs and outsourcing.

SWPC’s privatization model is uniquely suited for infrastructure sectors as evidenced by its successful application in the Kingdom and other countries. The success in tendering IWP and ISTP assets demonstrates that the model will attract investor interest with the necessary levers in place – public sector capacity for tendering, risk mitigation mechanisms and the appropriate incentives.

Lender participation by origin in some recent projects

<table>
<thead>
<tr>
<th>Source</th>
<th>2018 urban water mix</th>
<th>MEWA directive for 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desalinated water</td>
<td>90%</td>
<td>35%</td>
</tr>
<tr>
<td>Surface water</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Ground and surface</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Non-renewable ground</td>
<td>35%</td>
<td>90%</td>
</tr>
<tr>
<td>Renewable ground</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

Targeted change in water supply mix
Way forward and future projects

Population and GDP growth continue to be the key drivers for increase in water demand in the Kingdom. The Saudi population is expected to grow at a yearly average growth rate of 2% between 2021 and 2025, while GDP is projected to grow at an average of 2.6% per year over the same period. By 2030, the Kingdom’s population is expected to reach 40.1 million. The population growth rate is projected to have an impact on wastewater generation as well, leading to a 50% increase in wastewater generation from a 2018 baseline volume of 7.2 million m³/day.

Through their seven-year plan, SWPC has articulated a vision for achieving desalination capacities and treatment capacities required to sustain the growth.

The Kingdom’s future water supply
In 2018, desalinated water accounted for 59% of the Kingdom’s water supply while non-renewable ground water accounted for 35%. Owing to high groundwater withdrawal rates and water stress, MEWA set a directive of meeting 90% of the demand using desalinated water and 10% using ground and surface water by 2030. Based on existing urban water demand and committed water supply, new urban desalination plants would be required to overcome a water shortage of 4.5 million m³/day.

Wastewater treatment targets
The current and forecasted sewage network covers about 50% of total wastewater generated. 95-100% coverage would be required under 2030. The Kingdom has around 5.6 million m³/day of wastewater treatment capacity as of 2018 with 3.2 million m³/day under construction with 0.4 million m³/day planned for decommissioning. A total of 8.4 million m³/day of capacity addition is required by 2023 to achieve the treatment targets.

Planned project build-out and investment
SWPC plans to have 20 desalination plants amounting to a cumulative capacity of 8.5 million m³/day by 2025. 14 sewage treatment facilities with 11 expansions are planned to deliver a cumulative treatment capacity of 2.4 million m³/day by 2031. Based on transaction values of projects tendered by 2020, the company is expected to facilitate around USD 7 billion (SAR 26 billion) of planned investment into projects that are planned for tendering.

Identifying the appropriate procurement approach and concession structure based on project economics will be an important factor in de-risking project delivery, investor returns and the overall progress of the privatization program. While SWPC’s privatization program delivers the capacities needed, MEWA has been implementing a set of demand reduction policies such as leakage reduction, building codes, public awareness measures on water use efficiency and tariff reforms bringing a holistic approach to water sector reform.
Conclusion and key takeaways

SWPC’s privatization success has been received very positively by regional and international investors, including both strategic players and large institutional investors with interest in infrastructure asset acquisition and investment in the Kingdom. This is primarily attributed to SWPC’s focus on the critical ingredients of privatization namely unbundling, regulating traditionally monopolistic elements with correct regulation, focusing on transparency and stakeholder management. Previous reviews of water privatization across the world have identified improper contract design, pricing and tariff review uncertainty, opposition to PPPs, construction cost and time overruns, non-payment of bills, inadequate experience in managing PPPs, inaccurate demand forecasts, and conflicts among project stakeholders as the most common failure factors for water sector privatization. SWPC’s clear mandate, project governance, contract structures, risk mitigation mechanisms and long-term sector planning address these risk factors, while functioning as investment drivers.

The Vision 2030 privatization targets would require similar or larger investment volumes in other sectors including economic and social infrastructure sectors of the Kingdom. The lessons learnt from SWPC’s experience can provide important insights into incentivizing private investment in traditionally government-operated services. Effective procurement governance and contract frameworks appropriate for assets or asset bundles will deliver low-cost capital, affordability, efficiency, availability and service quality.
Sources

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16. Desalination plant PPP
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22. Cover story discussing privatization in the kingdom of Saudi Arabia
**Glossary**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOO</td>
<td>Build, Own and Operate</td>
</tr>
<tr>
<td>BOT</td>
<td>Build Operate and Transfer</td>
</tr>
<tr>
<td>CEDA</td>
<td>Council of Economic and Development Affairs</td>
</tr>
<tr>
<td>CN</td>
<td>Collection Network</td>
</tr>
<tr>
<td>DBF</td>
<td>Design, Build and Finance</td>
</tr>
<tr>
<td>DBFOM</td>
<td>Design, Build, Finance, Operate and Maintain</td>
</tr>
<tr>
<td>EOI</td>
<td>Expression of Interest</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>GCC</td>
<td>Gulf Cooperation Council</td>
</tr>
<tr>
<td>IPO</td>
<td>Initial Public Offering</td>
</tr>
<tr>
<td>ISTP</td>
<td>Independent Sewage Treatment Plant</td>
</tr>
<tr>
<td>IWP</td>
<td>Independent Water Plant</td>
</tr>
<tr>
<td>IWPP</td>
<td>Independent Water and Power Plant</td>
</tr>
<tr>
<td>KSA</td>
<td>Kingdom of Saudi Arabia</td>
</tr>
<tr>
<td>LWC</td>
<td>Levelized Water Cost</td>
</tr>
<tr>
<td>MEWA</td>
<td>Ministry of Environment, Water and Agriculture</td>
</tr>
<tr>
<td>NCP</td>
<td>National Center for Privatization and PPP</td>
</tr>
<tr>
<td>NWC</td>
<td>National Water Company</td>
</tr>
<tr>
<td>NWS</td>
<td>National Water Strategy</td>
</tr>
<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>SAR</td>
<td>Saudi Riyal</td>
</tr>
<tr>
<td>SSTP</td>
<td>Small Sewage Treatment Plant</td>
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<tr>
<td>STP</td>
<td>Sewage Treatment Plant</td>
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<tr>
<td>SWCC</td>
<td>Saline Water Conversion Corporation</td>
</tr>
<tr>
<td>SWPC</td>
<td>Saudi Water Partnership Company</td>
</tr>
<tr>
<td>TSE</td>
<td>Treated Sewage Effluent</td>
</tr>
<tr>
<td>UAE</td>
<td>United Arab Emirates</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
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