

Under the Patronage of the Minister of Environment Water & Agriculture
Eng. Abdulrahman bin Abdulmohsen Al Fadhili

منتدى المياه السعودي
saudi water forum SWF



"Sustainable Water.. for Sustainable Development"

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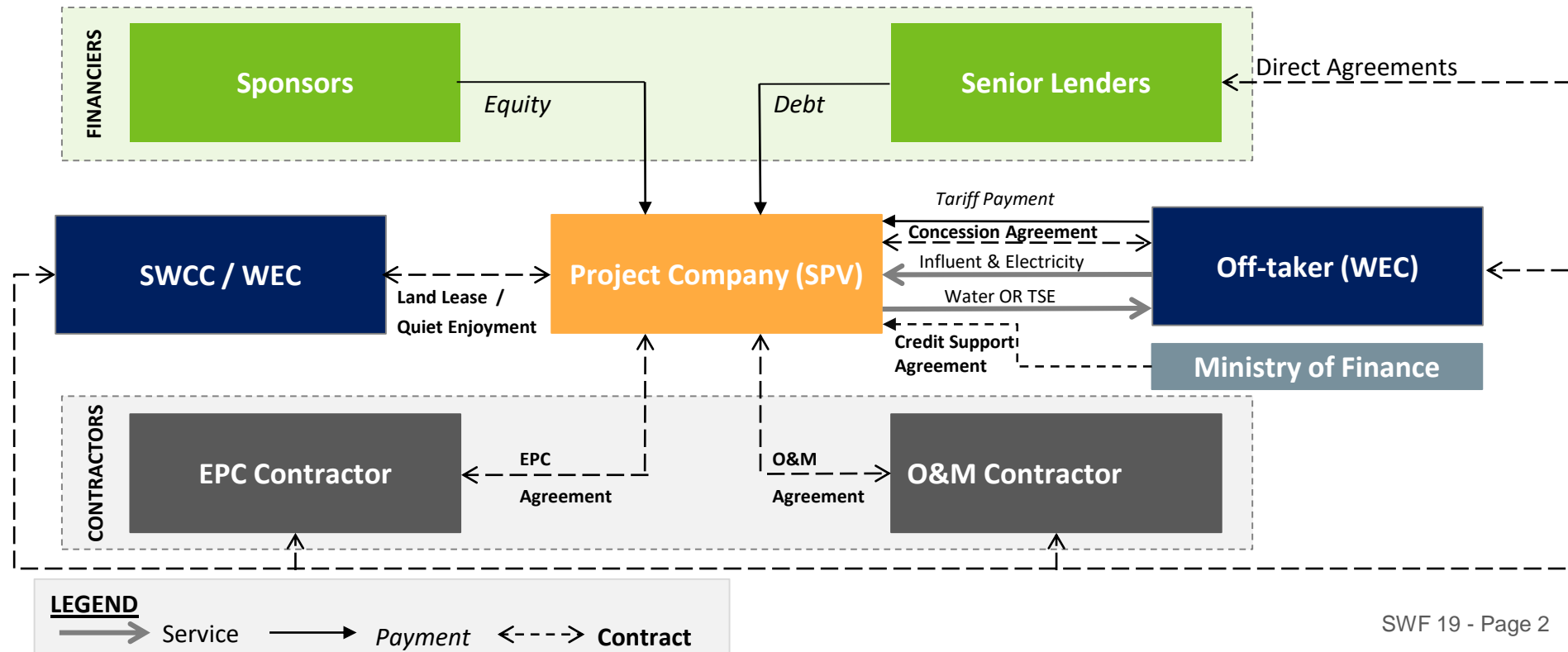
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Transaction PPP Model

Suliman Alkhliwi

WEC Off-Take Model

WEC follows a standard off-take model for its PPP projects:



Risk Allocation Framework for WEC PPPs

Aspects	Risk	WEC	Project Company
Construction Related	Design	-	✓
	Planning and other approvals	-	✓
	Commissioning	-	✓
	Construction	-	✓
	Timely completion and delivery of asset	-	✓
Operation Related	Availability and reliability of plant	-	✓
	Operations & maintenance	-	✓
	Availability of Utilities	✓	-
	Water/TSE quality and discharge point	-	✓
	Sludge quality and disposal	-	✓
	Permits and licenses	-	✓
Market (Demand) Related	Input seawater/wastewater quality	✓	-
	Potable Water/TSE off-take	✓	-
Macroeconomic Related	Inflation risk	✓	-
	Foreign exchange risk	✓	-
Termination Related	Change in law	✓	-
	Political force majeure ("PFM")	✓	-
	Natural force majeure* ("NFM")	-	-

*Time relief available to Project Company; Insurance Coverage available for NFM events

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Recently Signed Project Agreements

Recently Signed IWP Projects

RABIGH 3 IWP

- **Capacity:** 600,000 m3/day
- **Operating Capacity:** At least 98%
- **Financial Close:** March 2019
- **PCOD:** December 31st, 2021
- **Lead Developer:** ACWA
- **Signing Date:** 25 December 2018

SHUQAIQ 3 IWP

- **Capacity:** 450,000 m3/day
- **Operating Capacity:** At least 96%
- **Financial Close:** April 2019
- **PCOD:** September 30th, 2021
- **Lead Developer:** Marubeni
- **Signing Date:** 29 January 2019

BID PRICE (SAR/M3)

- ACWA: 1.992
- Marubeni: 2.021
- Veolia: 2.117
- Valoriza: 2.288
- Aqualia: 2.616

BID PRICE (SAR/M3)

- Marubeni: 1.952
- ACWA: 1.963
- Engie: 1.967
- Veolia: 1.968
- Aqualia: 2.019
- Cobra: 2.070



Recently Signed ISTP Projects

DAMMAM ISTP

- **Capacity:** 350,000 m3/d
- **Availability:** 100%
- **Financial Close:** April 2019
- **PCOD:** February 24th, 2022
- **Lead Developer:** Metito
- **Signing Date:** 21 January 2019

JEDDAH 2 ISTP

- **Capacity:** 500,000 m3/d
- **Availability:** 100%
- **Financial Close:** May 2019
- **PCOD:** December 31st, 2021
- **Lead Developer:** Marafiq
- **Signing Date:** 25 February 2019

BID PRICE (SAR/M3)

- Metitio: 1.268
- Suez: 1.478
- Acciona: 1.540
- Mitsui: 1.703
- Veolia: 1.903
- Aqualia: 2.140
- Saur: 2.620

BID PRICE (SAR/M3)

- Maraiq: 0.89
- Mitsui: 0.91
- Aqualia: 1.01
- Acciona: 1.09
- Suez: 1.25
- Cobra: 1.39



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WEC 2019 Projects Activity

Projects Activity in 2019

Water Desalination Plants

Jubail 3A IWP

Capacity	600,000 m ³ /day
Status	Eol
Exp. Comm	2022

Jubail 3B IWP

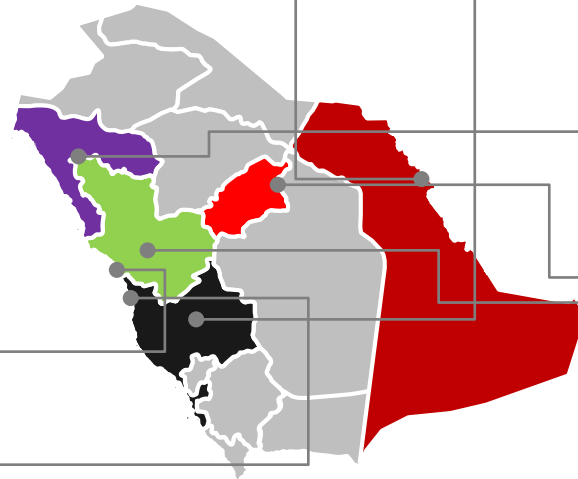
Capacity	600,000 m ³ /day
Status	Eol
Exp. Comm	2022

Yanbu 4 IWP

Capacity	450,000 m ³ /day
Status	Eol
Exp. Comm	2023

Rabigh 4 IWP

Capacity	600,000 m ³ /day
Status	Advisor Engagement
Exp Comm	2022



Sewage Treatment Plants

Taif ISTP

Capacity	200,000 m ³ /day
Status	RFQ
Exp Comm	2022

Tabuk ISTP

Capacity	90,000 m ³ /day
Status	Advisor Engagement
Exp Comm	2023

Buraidah 2 ISTP

Capacity	150,000 m ³ /day
Status	Advisor Engagement
Exp Comm	2022

Madinah 3 ISTP

Capacity	375,000 m ³ /day
Status	Advisor Engagement
Exp Comm	2023

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IWP Projects Planned to be Tendered in 2020

Project
Ras Muhaisen
Location
Makkah
Technology
Reverse Osmosis
Capacity
300,000 m ³ /d
COD
2022



Project
Al Hassa
Location
Eastern Province
Technology
Reverse Osmosis
Capacity
300,000 m ³ /d
COD
2023



Project
Ras Al Khair 2
Location
Eastern Province
Technology
Reverse Osmosis
Capacity
600,000 m ³ /d
COD
2023



Project
Ras Al Khair 3
Location
Eastern Province
Technology
Reverse Osmosis
Capacity
400,000 m ³ /d
COD
2023



Project
Tabuk 1
Location
Tabuk
Technology
Reverse Osmosis
Capacity
400,000 m ³ /d
COD
2023

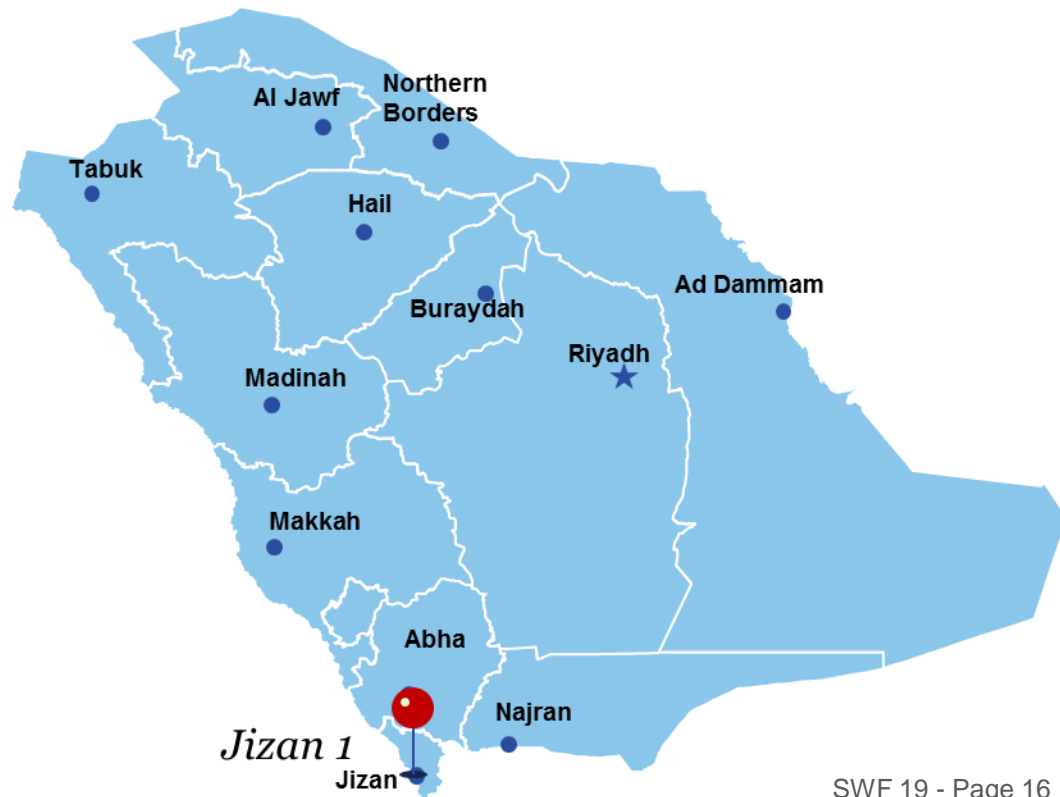
Tabuk 1



Project
Shuqaiq 4
Location
Jizan
Technology
Reverse Osmosis
Capacity
400,000 m ³ /d
COD
2023



Project
Jizan1
Location
Jizan
Technology
Reverse Osmosis
Capacity
300,000 m ³ /d
COD
2023



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ISTP Projects Planned to be Tendered in 2020

Project
Khamis Mushait 2
Location
Khamis Mushait, Abha
Type
Sewage Treatment Plant
Capacity
25,000 m ³ /d expanding to 50,000 m ³ /d
COD (Initial Sewage Flow)
2023



Project
Al Haer 2
Location
Riyadh
Type
Sewage Treatment Plant
Capacity
100,000 m ³ /d expanding to 200,000 m ³ /d
COD (Initial Sewage Flow)
2023



Project
Riyadh M STP
Location
East Riyadh
Type
Sewage Treatment Plant
Capacity
50,000 m ³ /d expanding to 100,000 m ³ /d
COD (Initial Sewage Flow)
2023



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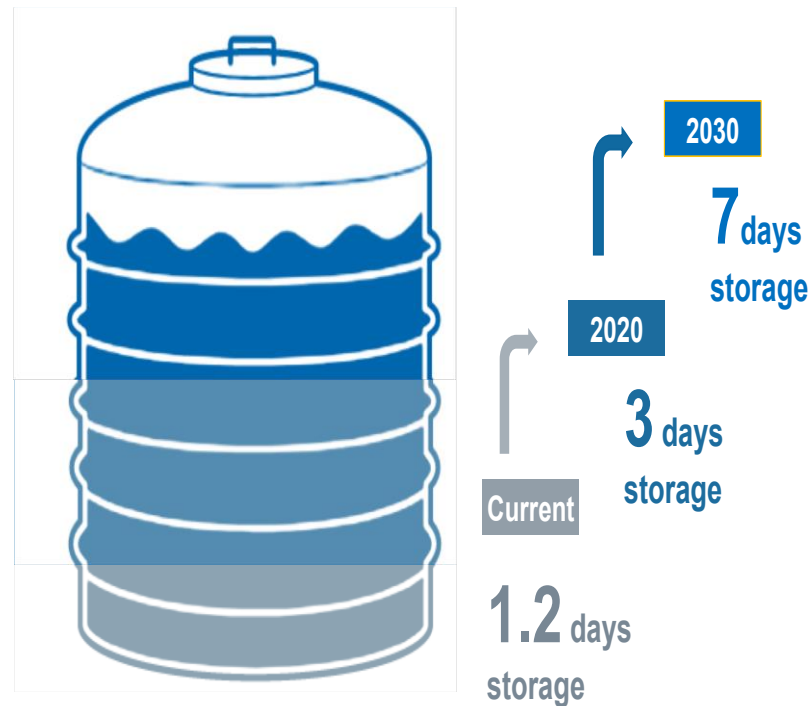
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ISR Projects Planned to be Tendered in 2020

Strategic Reservoir (ISR) Projects

Location	Capacity required by 2022 (M m3/d)
Makkah	13
Madinah	2.2
Eastern Province Cities	3.6
Riyadh	2.7
Najran	0.7
Hail	0.67
Asir	0.16
Qassim Cities	1.6
Tabuk	1
Jazan Cities	1.8
Al-Baha	0.3
Al- jouf	0.6
Northern borders	0.27



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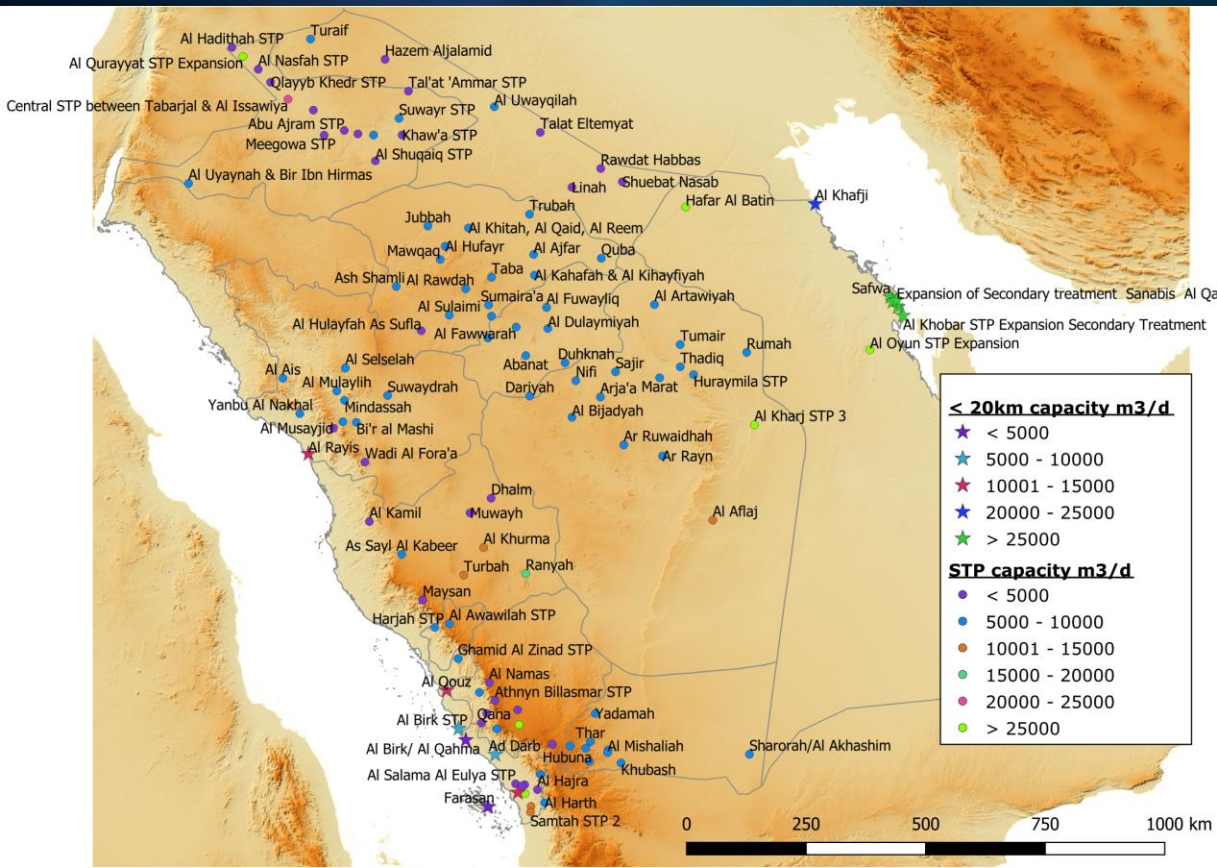
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Small ISTPs – Potential Bundling



- WEC plans to launch pilot program in 2019 followed by complete plan for privatization of small capacity ISTPs
- Number of Plants, Locations and Capacities are currently under study (advisors are engaged) and are indicatively shown on the map

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WEC Procurement Process

WEC Procurement Process

WEC procurement process based on years of successful numerous procurements, is based on the following key principles:



WEC Procurement Process

WEC procurement process is regarded by our advisors as better or equal to international best practice.

White & Case

The approach adopted for the procurement has been in line with international best practice.

Alderbrook-BSF

WEC process is equal to or better than international best practice.

ILF

ILF believe that WEC processes are fair and aligned to the best practice of current international market

Fichtner

WEC process is equal to or better than international best practice.

Mizuho

Advisors view that WEC process complies with international best practice.

DLA Piper

WEC process is equal to or better than international best practice.

SMBC

Processes being followed by WEC are standard in the region and are fully recognized as following international best practice

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WEC achievements in Recent Projects

Achievements of WEC in recent Projects

Competitive Procurement

Eol Responses:

- Rabigh 3 IWP : 55 Companies
- Shuqaiq 3 IWP : 51 Companies
- Dammam ISTP : 64 Companies
- Jeddah 2 ISTP : 65 Companies

Number of Bids Received:

- Rabigh 3 IWP : 5 bids
- Shuqaiq 3 IWP : 6 bids
- Dammam ISTP : 7 bids
- Jeddah 2 ISTP : 6 bids

Reduced Tariffs

IWPs	SAR/m3
Qurayat IWP (Oman)	: 3.38
Shuaibah Expansion IWP:	3.29
Shuaibah 3 Exp 2	: 2.45
Umm al Quwayn (UAE)	: 2.44
Rabigh 3 IWP	: 1.99
Shuqaiq 3 IWP	: 1.95

ISTPs	SAR/m3
Sulaibiyah ISTP (Kuwait)	: 1.76
Wathba 1 ISTP (UAE)	: 1.58
Wathba 2 ISTP (UAE)	: 1.80
KSA Benchmark	: 1.47-1.73
Dammam ISTP	: 1.26
Jeddah 2 ISTP	: 0.89

Optimized Electricity Consumption

IWPs	kWh/m3
Shuqaiq 2 IWP	: 6.10
Shuaibah Expansion IWP	: 4.60
Shuaibah 3 Exp 2	: 3.96
Rabigh 3 IWP	: <3.5
Shuqaiq 3 IWP	: <3.5

- WEC encouraged developers to use sludge to energy generation

ISTPs	kWh/m3
KSA recent EPC STP	: 0.795
Dammam ISTP	: <0.5
Jeddah 2 ISTP	: <0.5

- WEC obligated developers for:

- Zero Sludge (non-beneficial) Plant
- Stringent TSE requirements
- Advance Odour and Noise Control