

PPPs in the water and sanitation sector

New Cairo Wastewater Project

Oct 21st, 2014, Geneva

Creating opportunity where it's needed most

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The Project

- In 2007, the Government of Egypt (“GoE”) appointed IFC to structure a PPP transaction for the design, financing, construction, operation and maintenance of a Wastewater Treatment Plant (“WWTP”) in New Cairo under a long term agreement;

- GoE’s objectives included:
 - (i) Provision of adequate **water sanitation** to New Cairo to meet present and projected growth;

 - (ii) Implementation of a **model PPP transaction** which can be replicated in other parts of the water sector; and

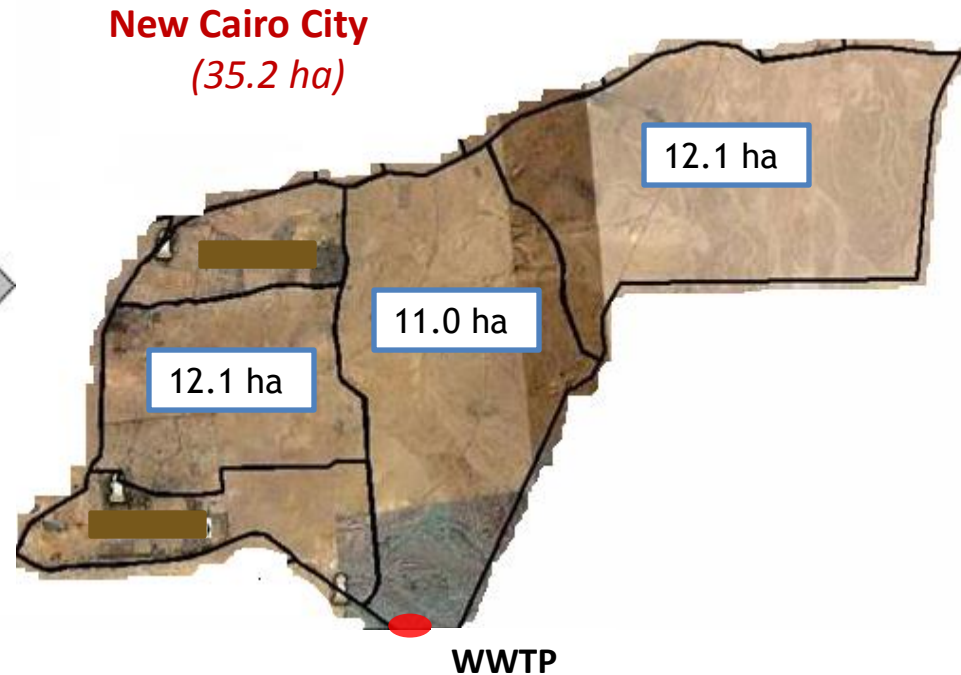
 - (iii) Mobilization of private sector** finance and know-how.

The Context

- GoE objective to **promote PPP program** to expand and improve Egypt's infrastructure
- **New PPP Unit** established at the Ministry of Finance (limited capacity and experience)
- **Investors appetite low** for deals with the Government (solid waste mgmt deals)
- No straightforward regulatory framework (**no PPP Law**)
- Many **competing authorities** with no clear responsibilities (Overstaffed & heavily subsidized)
- Only 1/3 population (11% in rural areas) connected to sewer system (200 plants – 11 mil m³/day)

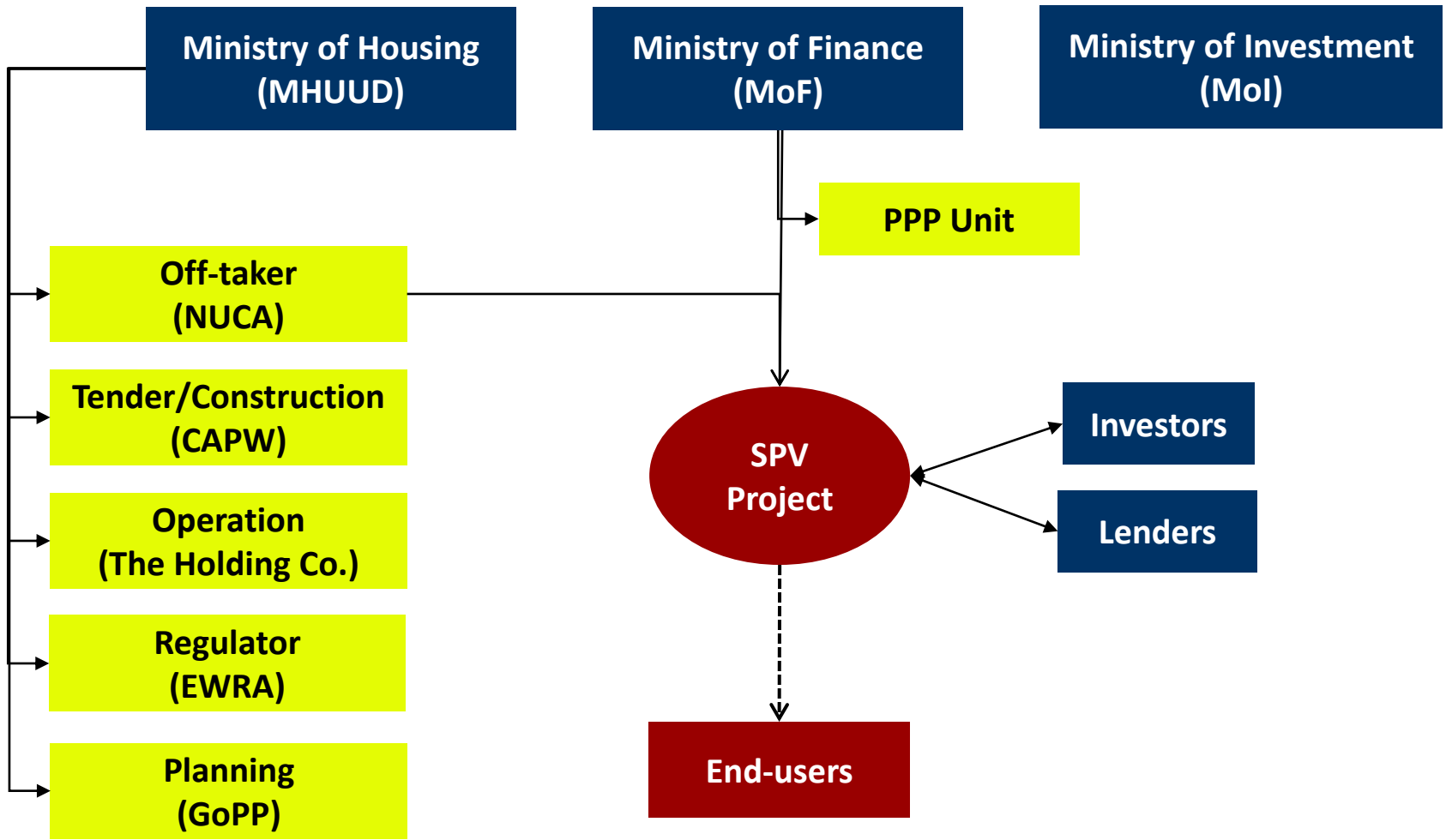
The Need

- New Cairo is a new urban center promoted to help alleviate population overcrowding in Greater Cairo;
- Water sanitation and supply were identified as priority sectors by the GoE as the existing infrastructure are insufficient and of poor quality.



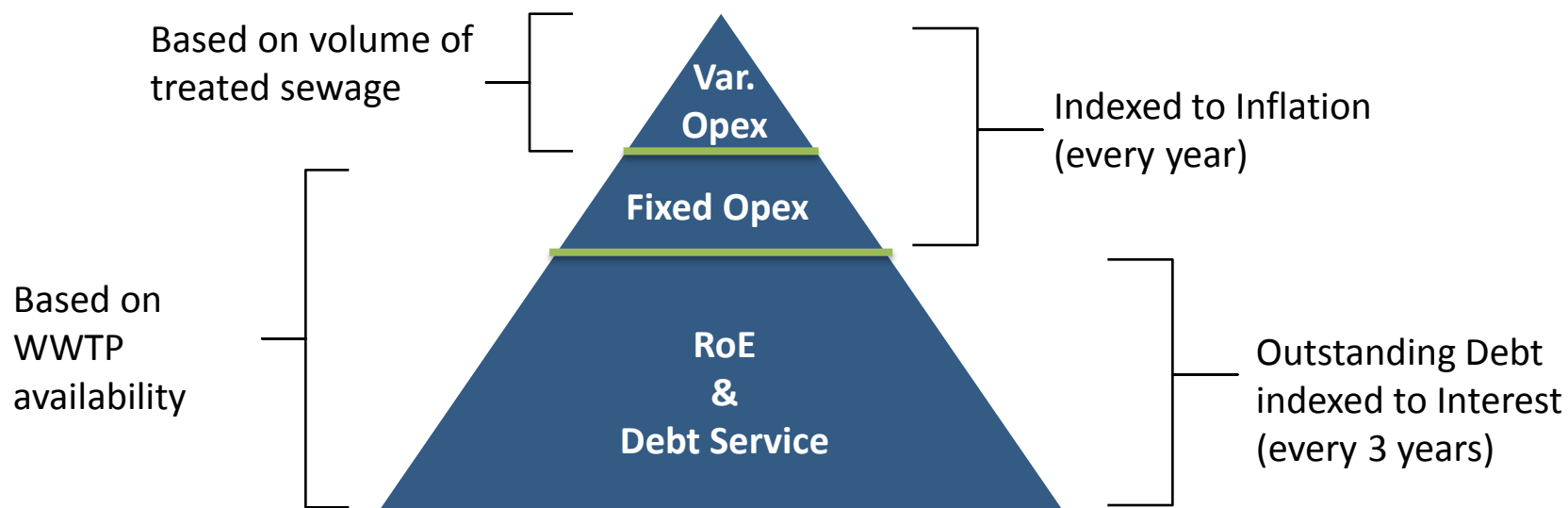
Population	2010	2020	2030
(moderate growth)	690,000	2.0 M	3.2 M

Key Stakeholders



Transaction Structure

- 20-year Build, Own & Operate (“BOT”) agreement;
- Private partner to design, finance, construct, operate, and maintain the new 250,000 m³/day WWTP;
- In return, GoE pays quarterly Sewage Treatment Charge (“STC”):
 - (i) a **fixed portion** (fixed opex, debt service and RoE); and
 - (ii) a **variable portion** (variable opex).



Risk Allocation

Key Risks	How to mitigate?
Inflation	Operating portion (fixed & variable) of the STC indexed to PPI on an annual basis
Interest rates	Senior & Subordinated debt indexed to 3-year CDs of 4 “reference” banks every 3 years
Credit worthiness	Direct Agreement stipulated that MoF is to pay STC if NUCA cannot pay within 30 days post invoice date
Demand risk	<ul style="list-style-type: none"> - Take or pay agreement: Only portion at stake is variable STC which is based on treatment levels - Project plant prioritized for incoming influent flows
Supply of utilities	GoE responsibility to ensure water and electricity connections
ForEx	Not mitigated as GoE had adverse experience on IPP tariffs on EGP devaluation

Bidding Process

- **Prequalification** based on technical and financial criteria:
 - BOT, operating, design & construction experience
 - Net Worth \geq US\$ 75M at end of recent 3 financial years (US\$ 150M consortium)
- Local and international investors applied with 7 prequalified bidders of which 5 submitted bids in April 2009;
- **Two-envelope bid procedure:**
 - Technical offer evaluated on a “pass/fail” basis
 - Bidders who “passed” were invited to the commercial bid opening
- Winning bidder selected based on **lowest NPV** of STC + Electricity cost
- **Electricity cost is a pass-through so**
 - Bidders to quote projected electrical consumption
 - Thus building an “indirect” energy conservation incentive
- **Orasqualia** won the bid with a tariff of **1.74 EGP/m³ (0.31 US\$/m³)**.

Current Status

- Financial close was reached on *February 4th, 2010* with 4 local banks financing the deal;
- The construction of the treatment plant was completed in June 2012 despite the revolution that hit Egypt;
- Commercial operations started in September 2013 following lengthy discussions between Orasqualia and GoE.



Orasqualia – Consortium Structure

ORASqualia
SEWAGE WATER TREATMENT PLANT

50%

50%

ORASCOM
CONSTRUCTION INDUSTRIES

FCC Aqualia

Orasqualia – Main challenges faced

- **Force majeure event** in Feb 2011 due to Egyptian revolution. Construction works stopped during 2 months
- Social and **political instability** from 2011 to 2014
- Relationship with 5 different Ministers Cabinets since contract signature
- It was the **first PPP project** in Egypt, so stakeholders were not familiar with such kind of transactions
- Financial closure reached just in 9 months
- **Delay** of more than 1 year to start the operations phase due to **non readiness of ancillary facilities**
- **PPP Law** was not in force at the moment of contract signature

Orasqualia – Current situation

- Orasqualia and Gov. settled the obstacles to start the operations in June 2013
- Facilities fully received. Operation & Maintenance phase started 27th September 2013
- Contract termination scheduled for 2030
- Plant operating at **partial capacity** due to low influent availability
- Plant performing perfectly in full compliance with contractual quality parameters
- Invoicing and payment performing on regular basis

Orasqualia – Plant overview



Orasqualia – Plant overview



Orasqualia – Plant overview



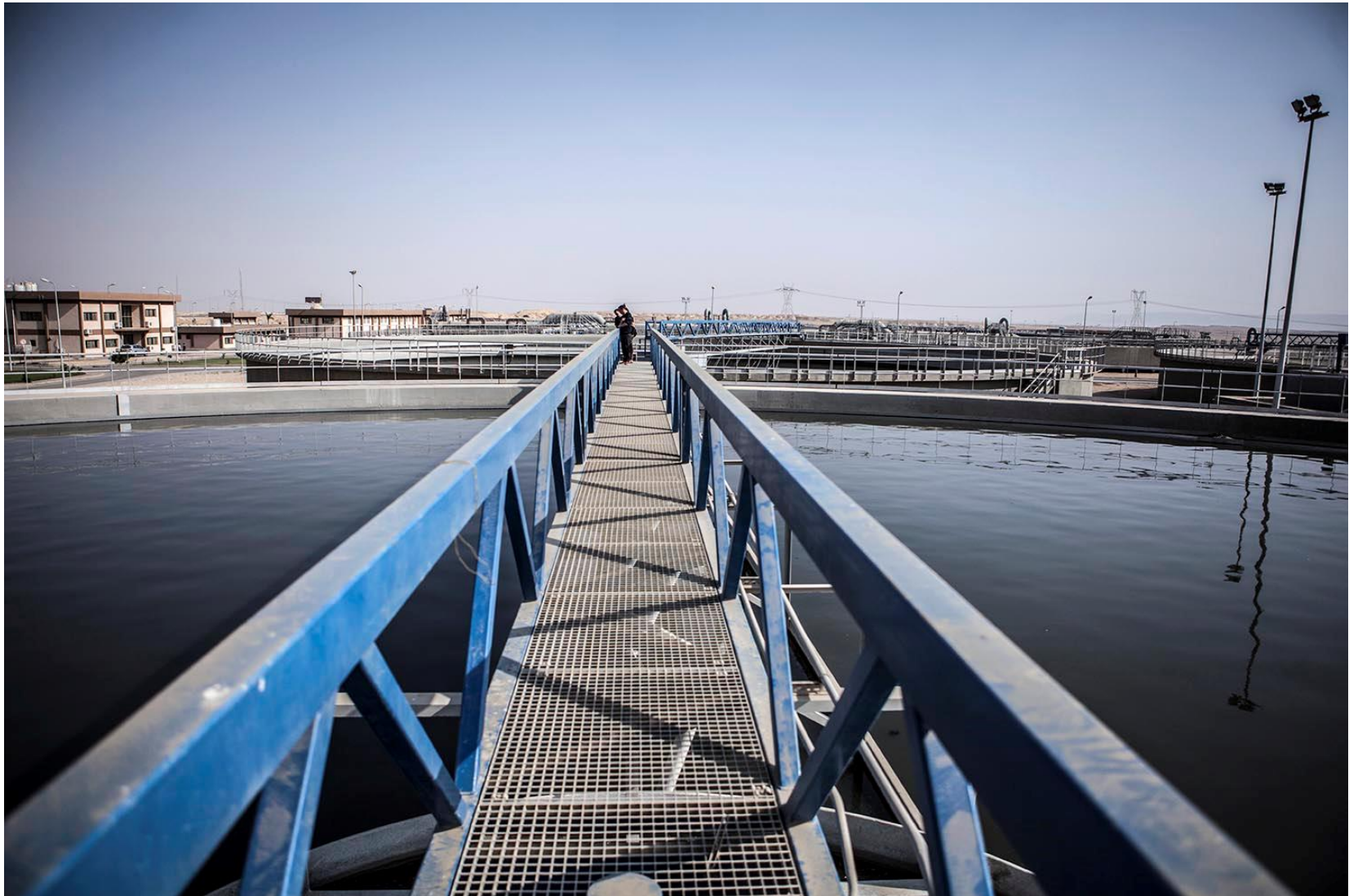
Orasqualia – Plant overview



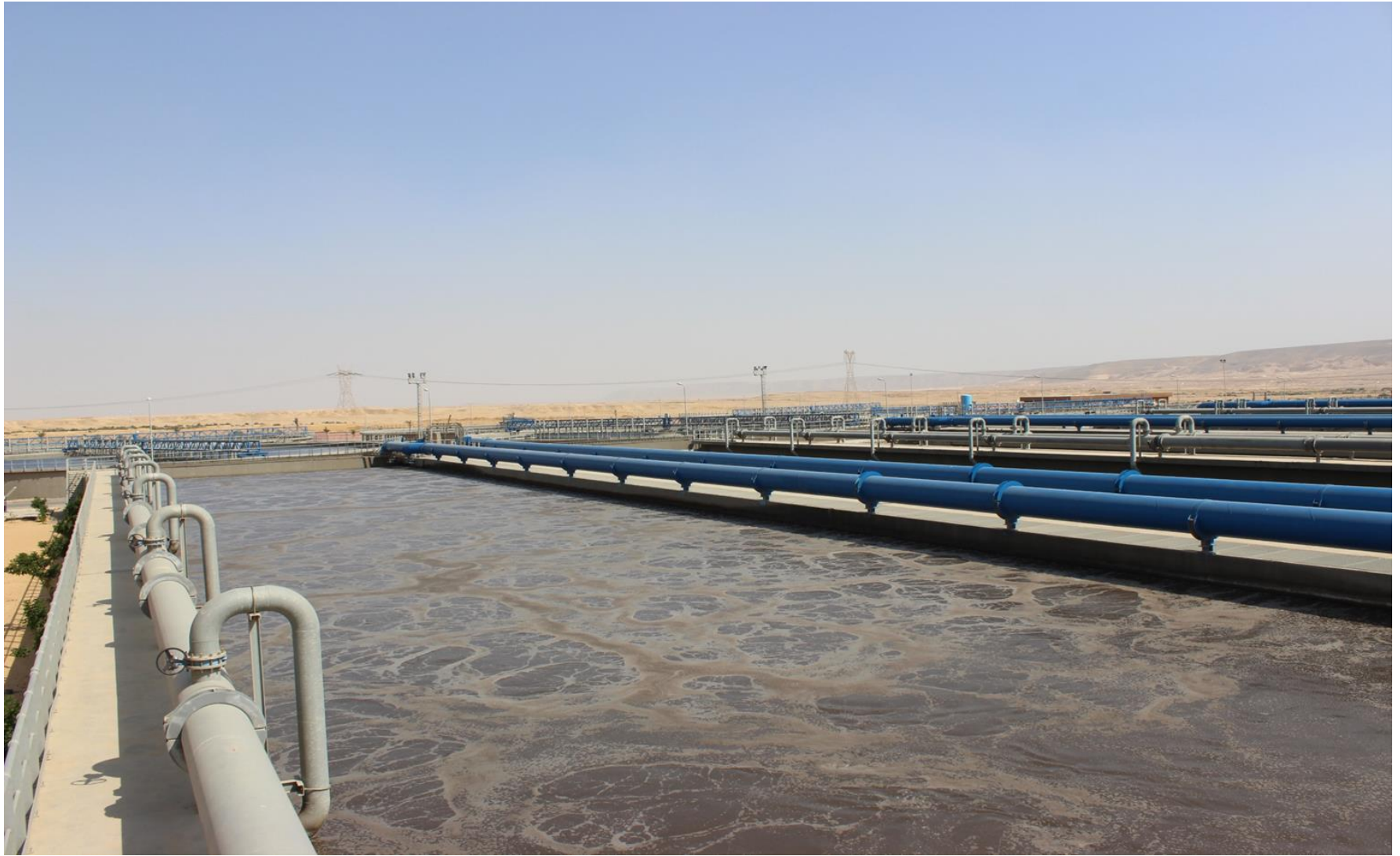
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Orasqualia – Expectations for Egyptian market

- **Political and social stability**, after presidential elections in June 2014
- New Ministers Cabinet stimulating new projects
- **Abu Rawash WWTP** tender resumed. Contract award expected by January 2015
- The investment climate perception for the foreign investor is improving
- **PPP Law in full force**, it will help the development of PPP program
- Several water & wastewater PPP projects in the pipeline
 - Wastewater treatment and reclamation
 - Seawater desalination