

Riyadh Performance Contract 2008 – 2014 (6 years)



Large array of innovative delivery models

| Options → Considerations ↓ | PPS | Alliance | Delegated Management | O&M | DBO | Concession |
|---|-----|----------|-------------------------|-----|-----|------------|
| Ease of Procurement | ●●● | ●●● | ●●● | ●● | ●● | ● |
| Savings and Efficiencies Achieved | ●●● | ●●● | ●●● | ●●● | ●● | ●● |
| Agreeable to Employees | ●●● | ●●● | ●●● | ● | ● | ● |
| Ease of Cancellation | ●●● | ●●● | ●●● | ●● | ●● | ● |
| Rate Mitigation Potential | ●●● | ●●● | ●●● | ●● | ●● | ● |
| Speed of Implementation | ●● | ●●● | ●● | ●●● | ●●● | ●●● |
| Allocation of Risk to the Private Sector | ● | ●● | ●● | ●● | ●●● | ●●● |
| Injection of Cash Available to City | ●● | ● | ● | ● | ● | ●●● |



RCBU at a glance

- **Type of contract:** Performance contract based on KPI
- **Duration:** 6 years from July 2008
- **O&M company:** Veolia
- **Activity:** Water & wastewater services
- **Water services:** 5.2 million people served, 1,900 water pipes laid, 25% increase of production, 530,000 new water connections, customer satisfaction of 91%
- **Wastewater services:**
3 million people served, >230,000 subscribers



Key steps of the contract



Step 1 - Veolia has conducted together with NWC a detailed operations efficiency evaluation, examining every aspect of the water supply and treatment systems (including plants, underground piping, operational processes, management and staffing) to identify savings and improvement opportunities.



Step 2 - In partnership with the NWC, our team of experts developed a comprehensive plan and approach that can be implemented to achieve long-term savings and improvements for the day-to-day operations.

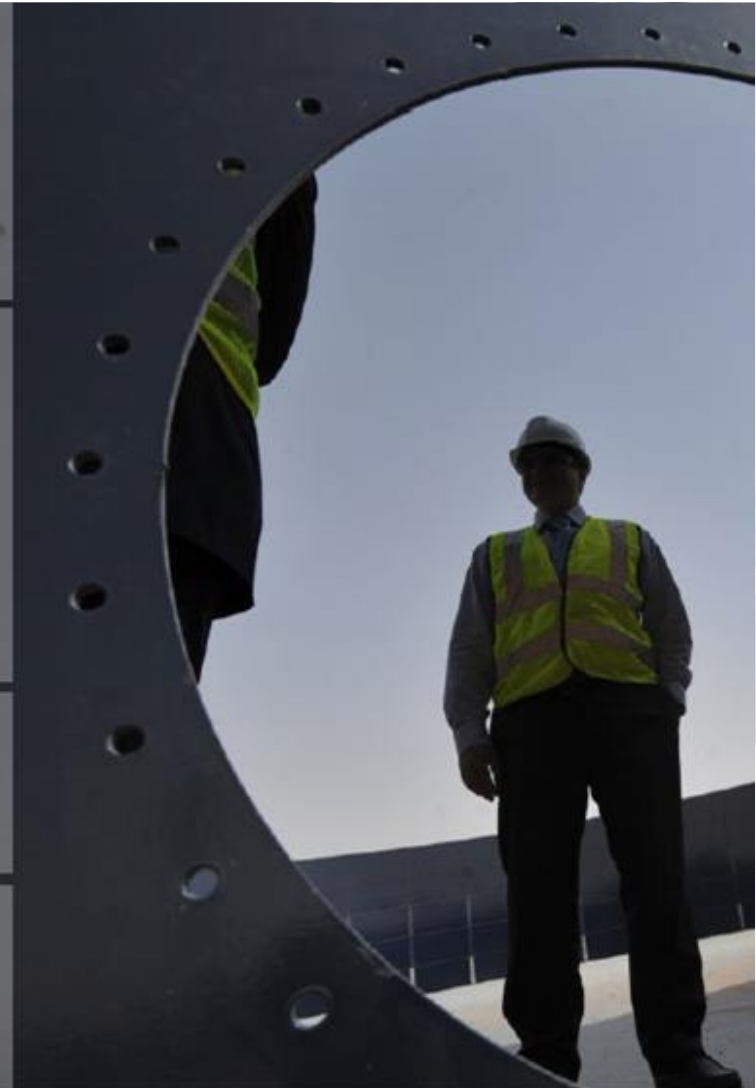
Our efforts have been centered around key areas, like the development of metrics-based performance culture.



Step 3 - By working hand in hand with NWC to meet the plans for progress across the utility, sustainable solutions have been deployed.



Step 4 - Achievement of targets based on key performance indicators (KPI) to boost productivity, identify efficiencies and reach NWC strategic goals accordingly to specific timelines.



Operations: Scope of Contract

Water

- > 11 treatment plants
- > 28 boosters stations
- > 260 wells
- > 9,000 assets
- > 2,500 work orders per month



- > Supporting & reinforcing NWC
- > Delivering measurable benefits
- > Innovative model that works under paid-for-performance contract

Wastewater

- > 6 treatment plants
- > Treatment capacity: 900,000m³ per day
- > 5,000km network
- > 270,000 connections
- > 9 pumping stations
- > 3,365 assets
- > 3,200 work orders per month



Drinking Water Production & Operations



Achievements

- 1 **Optimization of the production** with a 25% increase since summer 2008 of total peak volume of water produced from National Water Company's plants
- 2 **Over 53% continuity of supply** throughout the past 12 months
- 3 **Increasing water quality and compliance with international standards** with 99% conformity over the past 12 months
- 4 **Introduction of planned shutdown** to improve the production of assets and increase their availability
- 5 **Reduction of the environmental impact** through optimization of chemicals use
- 6 **Implementation** of pressure control and pressure modulation on the water network
- 7 **Increase of the leak detection teams** and introduction of new leakage detection techniques
- 8 **Implementation** of a new electronic work order management system
- 9 **Introduction, management & technical training** and application of standard

Wastewater Collection Treatment & Distribution

- **25,000 new connections** are made each year to the wastewater network in Riyadh.
- Safe, sustainable and controllable systems to **recover and treat wastewater**.
- **Reuse** of the water and the residuals are also amongst priorities to maximize the use of water resources.

1 Wastewater network improvements thanks to the implementation of new tools and initiatives

- New activities: House -Connections and trunk line cleaning
- CCTV inspections
- Survey of 9,000 clients for industrial discharges

2 Wastewater treatment plants operations progresses

- Organizational change program
- Improved team communication and planning
- Improved effluent quality
- New treatment works
- Sludge processing
- British Safety Council International Safety award received thanks to the safety culture change

Customer Service

- In a horizontally built city, > **420,000 customers**, a significant population growth and limited water resources, Riyadh City presents specific challenges!

- 1 Send pro-actively free tanker to customers** identified as not receiving supply from the network in order to avoid water shortage, and improve customer satisfaction experience
- 2 Increasing water conservation** through the **detection of violations**
- 3 Meter surveys** have enabled 80,000 properties to be inspected and repaired when necessary. It represents a volume of 15 millions m³ saved after 14 months
- 4 New Customer Services Headquarter**
- 5 Six customer service centers with renewed corporate identity** to serve better the subscribers in Riyadh
- 6 Set up of a single call center** to increase customer contact performance
- 7 Implementation of the new Customer Service Software**, as part of the strategic projects launched by NWC.

Human Resources

- 1 Supporting the growth of employees** through Identification and delivery of tailor-made training across various disciplines
- 2 Development of a performance management system** to increase staff productivity and efficiency
- 3 Assessment of all Riyadh employees (4,300 people)** according to Foederis method designed by Veolia' Human Resources department. This ambitious program is the basis of the reorganization and transfer plan of the RCBU personnel
- 4 Development of a strong Health & Safety culture** through continuous safety improvements (training, PPE, chlorine/chemicals use, etc.)
- 5 Establishment of a training center** with totally new training procedures.



- > More than 265,000 training hours to 16,000 people
- > 78% of the training are conducted internally
- > Significant improvement in absenteeism thanks to department training coordinators
- > 74 courses developed and brought by Campus Veolia are available in the training catalogue

Latest Developments

Pressure management

As a part of the action plan to improve the efficiency of the network and improve the continuity of water supply in Riyadh, the decision had been taken to implement a pressure modulation system in the areas of AlMourouj and Nasseem Zone, representing around 40,000 house connections.



The advantages of modulated supply are:

- > Network protection and reduction of the number of bursts
- > Oriented leak detection and leakage reduction by monitoring the night flow
- > Increase the continuity of supply and reduction of the shortages complaints while controlling the quantity of water needed

AMR – Smart metering

Smart metering has been implemented in the Al Mourouj area, where all the customers' meters have been replaced for AMR (Automatic meter Reading) meters.



The results:

- > Detailed knowledge of the customer consumption and evolution
- > Non Revenue Water follow-up, as both the volumes consumed and distributed are available