

Desalination

IDOM



The IDOM logo is positioned in the top right corner of the page. It consists of the letters 'IDOM' in a bold, dark blue, sans-serif font. The background of the slide features a large, abstract geometric shape on the left side, composed of several triangles in shades of blue, extending from the top left towards the bottom center.

Our commitment,
your success

About IDOM

We are an **association of independent professionals** working in the fields of Consulting, Engineering and Architecture, united in our way of doing things and shared objectives, at the service of our clients.

- €324 M
turnover
- 65
years
- 125
countries
- 4,300
professionals
- 45
offices
- 920
partners

Our pillars

Our activity is governed by elements that allow **our professionals to grow and resolve the challenges of our clients.**

- We believe in **excellence.** We strive for excellence in everything we do.
- We believe in **the power of human relationships** as a motivating force to overcome difficulties.
- We are passionate about **resolving problems** that no one has solved before.
- **Innovation** is present in all our activities.



If you want to know more about our activity and our projects, scan this code with your phone to see our corporate video.



“ Desalination projects of the 21st century are unthinkable without the inclusion of digitization which, in turn, leads to higher levels of competitiveness. ”

Ferran Pallás Vallés (center of the image)
Desalination Director

Francisco García Díez (right of the image)
Director of Thermal Power BD

José Antonio Aguilar (left of the image)
Project Manager

Services

- Conceptual design
- Feasibility Studies
- Basic engineering
- Detailed and Constructive Engineering
- Procurement Management
- Owner's Engineering
- Integration of Renewable Energies
- BIM design
- Digitization - Expert Systems

Detailed engineering for facilities that together have a total capacity to treat over 6 million m³/day.



IDOM's 2021 ranking
by Engineering
News-Record (ENR)
as International
Design Firm:

#47
in the world

#8
in Latin America &
Caribbean





● KINGDOM OF SAUDI ARABIA

RABIGH 3 IWP

Basic and detailed engineering

The Rabigh 3 reverse osmosis desalination plant, located on the Red Sea coast, has a production capacity of **600,000 m³/day**, expandable to 1.2 million cubic meters, and will serve the cities of Jeddah, La Mecca, Taif and the surrounding towns.

The innovative design of this plant guarantees the highest efficiency, reliability and availability in comparison to plants around the world.

600,000 m³/day



● UNITED ARAB EMIRATES

TAWEELAH IWP

Basic and detailed engineering

Located in Abu Dhabi and with a complete pre-treatment by dissolved air flotation and gravity filters, prior to the reverse osmosis membranes, the plant has a capacity of **909,200 m³/day**.

The **70 MW photovoltaic** plant will partially supply the energy demand of the plant and will contribute to making the cost of water produced the lowest in the world achieved to date (March 2022).

Integration of the biggest photovoltaic park in desalination plant

The largest reverse osmosis desalination plant in the world

909,000 m³/day



● OMAN

SALALAH IWP

Basic and detailed engineering

The Salalah reverse osmosis desalination plant is located on the shores of the Arabian Sea and is designed to produce a flow rate of **120,000 m³/day**.

The plant has a submerged catchment with its intake and a complete pre-treatment by means of dissolved air flotation and double-layer filtration stages using gravity and pressure filters. Reverse osmosis is produced in five independent trains, with their corresponding energy recovery equipment.

120,000 m³/day

● GHANA

ACCRA SEA WATER DESALINATION PLANT

Basic and detailed engineering

The Accra reverse osmosis desalination plant is the first such desalination plant in West Africa.

Designed to produce a flow rate of **60,000 m³/day**, the plant has a pretreatment process using ultrafiltration membranes. Reverse osmosis is produced in four trains fed by a pressure center that reduces energy consumption, thanks to the greater efficiency of the installed high-pressure pumps.

60,000 m³/day



● KINGDOM OF SAUDI ARABIA

SHUQAIQ 3 IWP

Basic and detailed engineering

The Shuqaiq 3 reverse osmosis desalination plant is located on the Red Sea coast. The plant is designed for a production capacity of **450,000 m³/day**.

It will supply drinking water to the Asir and Chazan regions.

450,000 m³/day

Water planning and management

- LAOS
INTEGRAL WATER PLANNING

Evaluate the resource and its sustainable use

Within the Program for Integrated Management of Water Resources, IDOM has assisted the Ministry of the Environment of the Lao People's Democratic Republic, including annual reports on the status of the basin, the drafting of a study with recommendations to mitigate the expected impact of climate change and technical support to the National Commission of the Nam Ngum River.

Treatment

- COLOMBIA
OPTIMIZATION OF DRINKING WATER TREATMENT PLANTS IN CALI

Improving existing infrastructures

In order to update existing plants to new environmental requirements, improvements have been proposed in the operation and efficiency of the two EMCALI drinking water plants that serve 80% of the population of Cali, with a nominal flow of 7.5 m³/s and 2.5 m³/s, respectively.

Dams and large hydraulic works

- SPAIN
EL HIERRO ISLAND HYDROEOLIC POWER PLANT

The challenge of energy self-sufficiency

The island of El Hierro has accepted the challenge of ensuring that the electrical energy supplied comes from renewable sources, with the commissioning of a hydroelectric plant.

IDOM has participated in the project from the conception phase to its start-up, providing engineering services, procurement management and technical assistance for construction and commissioning.

Transportation and distribution

- COLOMBIA
DESIGN OF SUPPLY AND SANITATION NETWORKS

Committed to the universal right to water

IDOM has participated with Empresas Públicas de Medellín (EPM) in several of these contracts, designing more than 50 km of sanitation networks and 35 km of water networks.

Cover photo: © metamorworks / Shutterstock.com

Page 6-7: © Acciona

Page 11: © Acciona

Edition Date: March 2022_Rev. 01

For further information on our references visit our website idom.com/en/sector/water/desalination or contact us desalination@idom.com

IDOM

idom.com
desalination@idom.com

