



# Who are we?

Abengoa (MCE: ABG.B)
 is an international
 company that applies
 innovative technology
 solutions for sustainable
 development in the
 infrastructure, energy
 and water sectors.

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# Abengoa in Water

 Abengoa provides sustainable solutions to the integral water cycle through large desalination plants, water and wastewater treatment plants urban and industrial, and hydraulic infrastructures.

# 3 Our references

- Desalation
- Water treatment
- Urban wastewater treatment and reuse
- Industrial wastewater treatment and reuse
- Hydraulic Infrastructures
- Hydroelectric power stations

Our strengths

 Experience, references, internationalization and competitiveness.

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**Abengoa** (MCE: ABG.B) is an international company that applies innovative technology solutions for **sustainable development** in the infrastructure, energy and water sectors.

### **Constructing energy infrastructures**

- Generating conventional and renewable energy.
- Transporting and distributing energy.

### Providing solutions for the integrated water cycle

- Developing desalination and water treatment processes.
- Constructing hydraulic infrastructures.

### Being a reference in the transmission and distribution sector

- Developing transmission lines, electric distribution and railway electrification projects.
- Constructing installations and infrastructures for all types of plants and buildings.

### Obtaining results in the services area

- Providing operation and maintenance services for plants optimization.
- Managing private assets efficiently.

### Furthering new horizons for development and innovation

- Our 280 accumulated awarded patents since 2008 position us as technological leaders in sectors such as solar thermal technology.
- Renewable energy storage and our bet for energy efficiency and water consumption (water-energy nexus).

# A Viable Company with Solid Fundamentals



**Solid business** of engineering, procurement, construction and operation and maintenance in high growth markets



Global footprint makes Abengoa's business more resilient and the size of its backlog and pipeline provides revenue visibility



**Credibility** regained with stakeholders



**Leaner organizational structure** and high operational efficiency



The development of commercially viable cutting-edge technology has become Abengoa's key competitive advantage



A more focused business model and a healthier, sound capital structure, together with a multidisciplinary set of capabilities places Abengoa in a solid position for future value creation



Formed by a team of committed and skilled people that have specialized and competitive know-how

# Main **Magnitudes**



Global presence with a recognized position of leadership in main world rankings (GWI, ENR).



9.3 GW of installed power in conventional generation plants, of which 1.4 GW are under construction.



2.3 GW\* solar power constructed,+ 1,000 MW under construction,and 480 MW of wind power.

\* 30% of the worldwide installed solar thermal energy capacity already under operation.

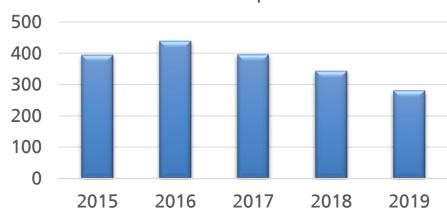


+ 27,000 km of transmission and distribution lines and more than 330 substations worldwide over the last 15 years.



1.8 million of m<sup>3</sup>/day of desalinated installed capacity and 2.6 million m<sup>3</sup>/day under construction.

### Numbers of patents



280 patents at the end of 2019.

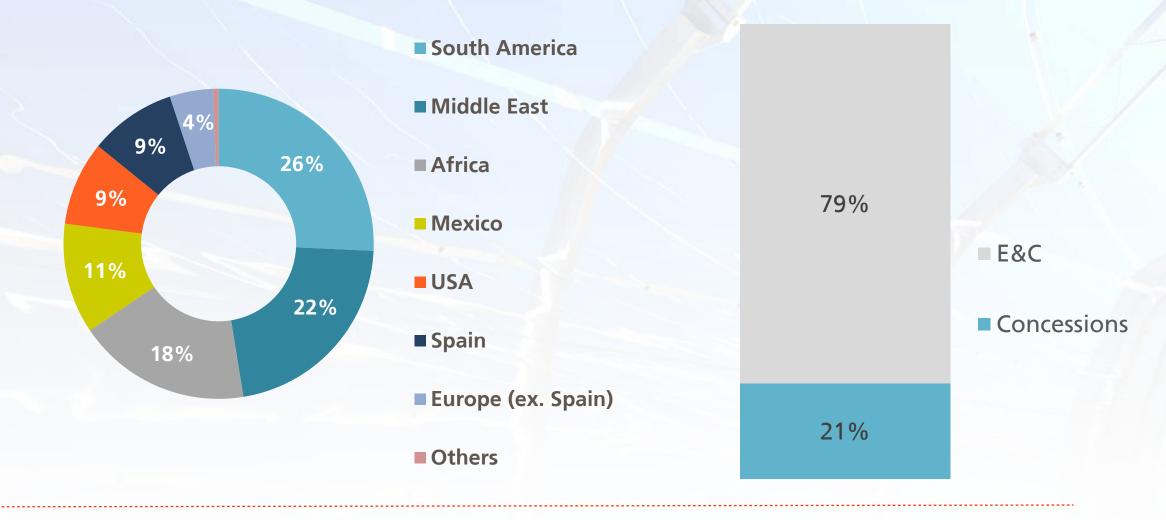
### Main **indicators**

Results as of close of 2019

Abengoa Figures	2019
Sales	1,493 M€
EBITDA	300 M€
Employees	14,025

### Revenues by geographies





### Main projects under execution

- Waad Al Shamal (Saudi Arabia)
- Taweelah (UAE)

- Noor Energy 1 (UAE)
- Chuquicamata Humos Negros (Chile)
- Agadir (Morocco)
- O&M solar plants (Spain)
- Rabigh (Saudi Arabia) Fulcrum (USA)

# New Projects 2019

Abengoa has been awarded in 2019 new projects for a total value of €1,107 million, including world's largest reverse osmosis desalination plant in Taweelah. Among them:

Taweelah	UAE	<ul> <li>Construction of the world's largest reverse osmosis desalination plant with total capacity of 909,000 m³/day.</li> </ul>
Dubal	UAE	<ul> <li>Construction of a seawater reverse osmosis desalination plant with total capacity of 41,000 m³/day</li> </ul>
RWEL Klaipeda- Vilnius	Lithuania	<ul> <li>Electrification of more than 730 km of railway lines.</li> </ul>
Switching Substation Río Malleco	Chile	<ul> <li>Construction of a 220 kV substation in Chile.</li> </ul>
Seville Airport	Spain	<ul> <li>Civil works and installations in the expansion of the San Pablo Airport in Seville.</li> </ul>
Southern Peru Copper Corporation	Peru	<ul> <li>Construction of a retention dam to hold 40,000 m<sup>3</sup> at 3,500 meters above sea-level, and several singular buildings within the copper mining facilities.</li> </ul>

### Lines of **activity**

Abengoa organizes its activity in several business areas: Energy, Water, Transmission and Infrastructure and Services, all of which are based on R&D and Innovation.



### **Energy**

- Conventional and renewable energy generation.
- Proprietary solar technology and leader in worldwide installed capacity.
- 9.3 GW of installed capacity in conventional generation.
- Experts in hybridization of generation technologies to provide clean and distpachable energy solutions.

### Water

- Specialist in infrastructure for the integral water cycle.
- Excellence in technical capabilities.
- Leader in the international desalination market and a worldwide reference in the construction of hydraulic infrastructures and treatment plants.
- 1.8 million m³/day desalinated water capacity and 2.2 million m³/day of drinking water.

# Transmission & Infrastructure

- Leader in the international transmission and distribution and infrastructure market for the energy, industry, transport, environment, communications and rail sectors.
- More than 27,000 km of transmission lines and 330 substations.
- 4,500 electrified km and more than 80 traction substations.

### **Services**

- Service providers for infrastructure in the transmission, water, and renewable and conventional power generation sectors.
- Optimization of O&M, improving management and increasing production.
- 25 years of contracts average life.





**Abengoa**, through its **Water** business division, works as a **global technological operator** in this sector and integrates **development**, **engineering**, **technology** and **project execution** activities for public institutions, private and industrial clients.

It also provides sustainable solutions to the integral water cycle, both to the shortage of water resources, through large **desalination** and **water treatment plants**, and **hydraulic infrastructures**, as well as to the protection of the environment, with the construction of **wastewater treatment plants urban** and **industrial**.



### Abengoa in Water

Abengoa, with more than 75 years of experience, is a leading company in the international desalination market and a worldwide reference in the construction of hydraulics infrastructures and treatment plants.

### Water Treatment

- Desalination
- Water treatment
- Wastewater treatment and reuse

- More than 4.4 M m<sup>3</sup>/d desalinated water
- More than 2.2 M m<sup>3</sup>/d drinking water
- More than 1.5 M m<sup>3</sup>/d treated wastewater

# **Hydraulic** Infrastructures

- Pipelines and pumping stations
- Irrigation systems
- Regulation reservoirs
- Hydroelectric power stations
- Hydrological and hydraulic infrastructure management
- More than 500,000 hectares irrigated or modernized
- More than 400 MW installed

# 3 Industrial Water

- Power
- Pharmaceutical
- Oil and Gas
- Chemical
- Mining
- Steel

- Food and beverage
- Electronics
- Pulp & paper
- More than 650,000 m<sup>3</sup>/d treated industrial water





### Abengoa in **desalination**

Abengoa is a leading company in the international desalination market, and its figures support this

- Fourth place for its desalination capacity contracted in 2020 and 2021, and fifth place since 2010, according to IDA Water Security Handbook 2021-2022 and the Global Water Intelligence magazine.
- First position in Treatment & Desalination category in ENR's Top International Contractors ranking for 2021.
- We provide water to a population of more than 20 million people worldwide
- More than 30 plants built in the United States, India, China, Africa, Middle East, Latin America and Spain
- Plants under construction in Morocco, Tunisia, Saudi Arabia and United Arab Emirates
- Operation & Maintenance contracts and Concessions, for periods between 15 and 27 years, in Spain, Morocco, Algeria and Ghana.





# Abengoa in **desalination**

Conventional and advanced reverse osmosis processes of seawater and brackish water to produce drinking and process water.

### Middle East and Asia

Taweelah. United Arab Emirates	909,000 m <sup>3</sup> /d
Jubail 3A. Saudi Arabia	600,000 m <sup>3</sup> /d
Rabigh. Saudi Arabia	600,000 m <sup>3</sup> /d
Shuaibah. Saudi Arabia	250,000 m <sup>3</sup> /d
Salalah. Oman	114,000 m <sup>3</sup> /d
Qingdao. China	100,000 m <sup>3</sup> /d
Chennai. India	100,000 m <sup>3</sup> /d
Dubal. United Arab Emirates	47,750 m <sup>3</sup> /d
Barka I. Oman	45,000 m <sup>3</sup> /d

#### **Africa**

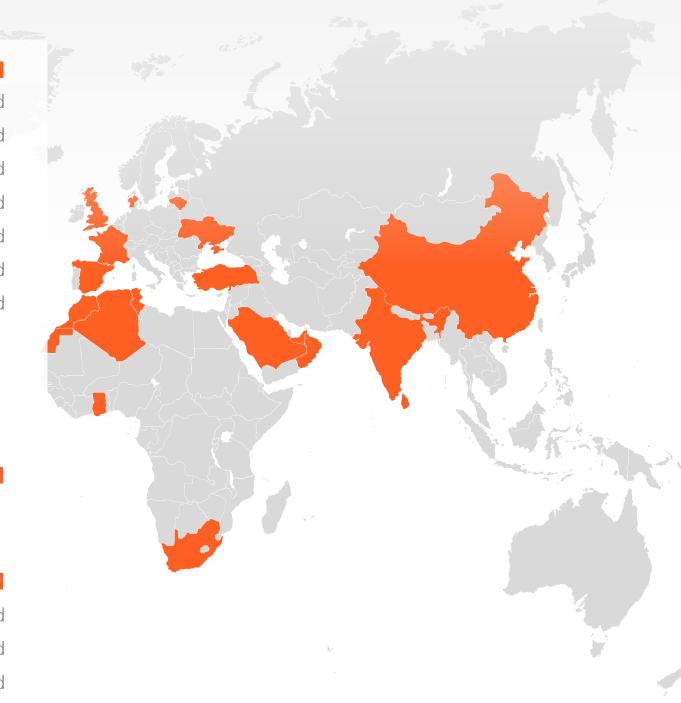
Agadir-Chtouka. Morocco	275,000 m <sup>3</sup> /d
Honaine. Algeria	200,000 m <sup>3</sup> /d
Ténès. Algeria	200,000 m <sup>3</sup> /d
Skikda. Algeria	100,000 m³/d
Accra. Ghana	60,000 m <sup>3</sup> /d
Sousse. Tunisia	50,000 m <sup>3</sup> /d

#### **Mexico**

Durango  $1,700 \text{ m}^3/\text{d}$ 



# Fortaleza. Brazil. Mantoverde. Chile. Agamos. Chile 86,400 m³/d 33,000 m³/d 4,800 m³/d



# Abengoa in water treatment

Conventional and advanced processes of drinking water treatment.

Central America	
San Juan del Sur. Nicaragua	16,850 m <sup>3</sup> /d
Boaco. Nicaragua	9,700 m <sup>3</sup> /d
South America	
Aguas Corrientes. Uruguay	660,000 m <sup>3</sup> /d
Arequipa. Perú	130,000 m <sup>3</sup> /d
Loja. Ecuador	43,200 m <sup>3</sup> /d
Asia	
Ratnapura. Sri Lanka	13,000 m <sup>3</sup> /d
Africa	
Xangongo. Cunene. Angola	24,500 m <sup>3</sup> /d

and the second second	
Spain	
El Carambolo	432,000 m <sup>3</sup> /d
Olivares	95,000 m <sup>3</sup> /d
El Conquero	90,000 m³/d
Huesna	90,000 m³/d
Pinyana	60,500 m <sup>3</sup> /d
Reus	30,000 m <sup>3</sup> /d
Oja-Tiron	28,000 m <sup>3</sup> /d
Ames y Brion	15,000 m <sup>3</sup> /d
Sallent, Avinyo,	13,000 m <sup>3</sup> /d



2,200,000 m<sup>3</sup>/d

Global water treatment capacity



+ 11 millones

People we supply



+ 15 plantas

Plants constructed



# Abengoa in **urban wastewater treatment and reuse**

**Central America** Boaco. Nicaragua 10,000 m<sup>3</sup>/d 5,000 m<sup>3</sup>/d Ciudad Sandino. Nicaragua **South America** Pariachi. Peru 37,800 m<sup>3</sup>/d 19,500 m<sup>3</sup>/d Melo. Uruguay Tacuarembó. Uruguay  $9,240 \text{ m}^3/\text{d}$ Buin Oriente. Chile  $7,250 \text{ m}^3/\text{d}$ Asia Nasrullaganj. India  $4,200 \text{ m}^3/\text{d}$ Maheshwar. India  $5,000 \text{ m}^3/\text{d}$  Physical-chemical processes, biological treatment, membrane bioreactors, advanced tertiary treatment, advanced oxidation processes, anaerobic digestion, sludge management.





1,500,000 m<sup>3</sup>/d

Global urban wastewater treatment capacity

+ 6.5 millones

People we serve



+ 60 plantas

Plants constructed



# Abengoa in **Industrial wastewater treatment and reuse**

United States	
Solana	14,100 m <sup>3</sup> /d
Hugoton	6,650 m <sup>3</sup> /d
Carty	490 m³/d
Mexico	
Norte III (ZLD)	1,700 m <sup>3</sup> /d
Durango (CCD)	1,700 m <sup>3</sup> /d
Hermosillo	1,400 m <sup>3</sup> /d
El Sauz	750 m <sup>3</sup> /d
A3T	300 m <sup>3</sup> /d
South America	_
Punta Pereira. Uruguay (Various)	376,000 m <sup>3</sup> /d
Cerro Dominador. Chile (ZLD)	300 m <sup>3</sup> /d
La Sierra. Colombia	40 m³/d
Netherlands	
Rotterdam	39,120 m <sup>3</sup> /d

Water treatment for power plants, process water treatment, mining wastewater treatment, iron and steel industries, biorefineries, advanced oxidation processes, zero liquid discharge, etc.





650,000 m<sup>3</sup>/d

Global industrial wastewater treatment capacity



# Abengoa in **hydraulic infrastructures**

#### **Central America**

Ciudad Sandino sup. and sew. Nicaragua San Juan del Sur sup. and sew. Nicaragua El Boaco sup. and sew. Nicaragua Leng: 70 km. Diam: 500-150 mm

Leng: 47 km. Diam: 500-150 mm

Dam: 190,000 m<sup>3</sup>

#### **South America**

Loja supply system. Ecuador Arequipa supply system. Peru Quebrada de Manchay sup. and sew. Peru Tierra Amarilla pipeline. Chile Leng: 45 km. Diam: 600 mm

Leng: 11 km. Flow: 260.000 m<sup>3</sup>/d

Leng: 400 km

Long: 125 km. Diam: 500-560 mm.

Flow: 17.280 m<sup>3</sup>/d. Pow: 4 MW

Montevideo pumping station. Uruguay

Leng: 80 km. Diam: 800-1200 mm

#### Europe

Denizli sup. and sew. Turkey.

Canal Navarra irrigation system. Spain

Almería desalination plant reservoir. Spain

Jucar-Vinalopo pumping station. Spain

Negratin-Almanzora pumping station. Spain

Leng: 440 km Diam: 300-2400 mm

Hectares: 23,000

Capacity: 50,000 m<sup>3</sup>

Flow: 864,000 m<sup>3</sup>/d Pow: 60 MW

Flow: 173,000 m<sup>3</sup>/d Pow: 12 MW

Dams, reservoirs and regulation ponds, intake towers, pumping stations, impulsions, large diameter pipelines, transfers, irrigation systems, supply and sewerage systems, ground and underwater pipes.

#### Asia

Ratnapura supply system. Sri Lanka Roorkee sewerage system. India Leng: 6 km. Flow: 13,000 m<sup>3</sup>/d. Leng: 18 km. Diam: 225-280 mm

#### Africa

Agadir- Chtouka irrigation syst. Morocco
Jorf Lasfar pumping station. Morocco
Tnine Gharbia pumping stat. Morocco
Loukkos pump. st. irrigation syst. Morocco
Shkirat pumping station. Morocco
Cunene supply system. Angola

Hectareas: 15,000 Leng: 809 km

Diam: 2,500 mm. Flow: 864,000 m<sup>3</sup>/d

Flow (total): 233,000 m<sup>3</sup>/d. Pow(total): 2 MW

Flow (total): 1.2 M m<sup>3</sup>/d. Pow (total): 15 MW

Flow: 311,000 m<sup>3</sup>/d. Pow: 6 MW

Leng: 100 km. Diam: 560-710 mm



+ 1,100 km

Large pipelines



+ 300

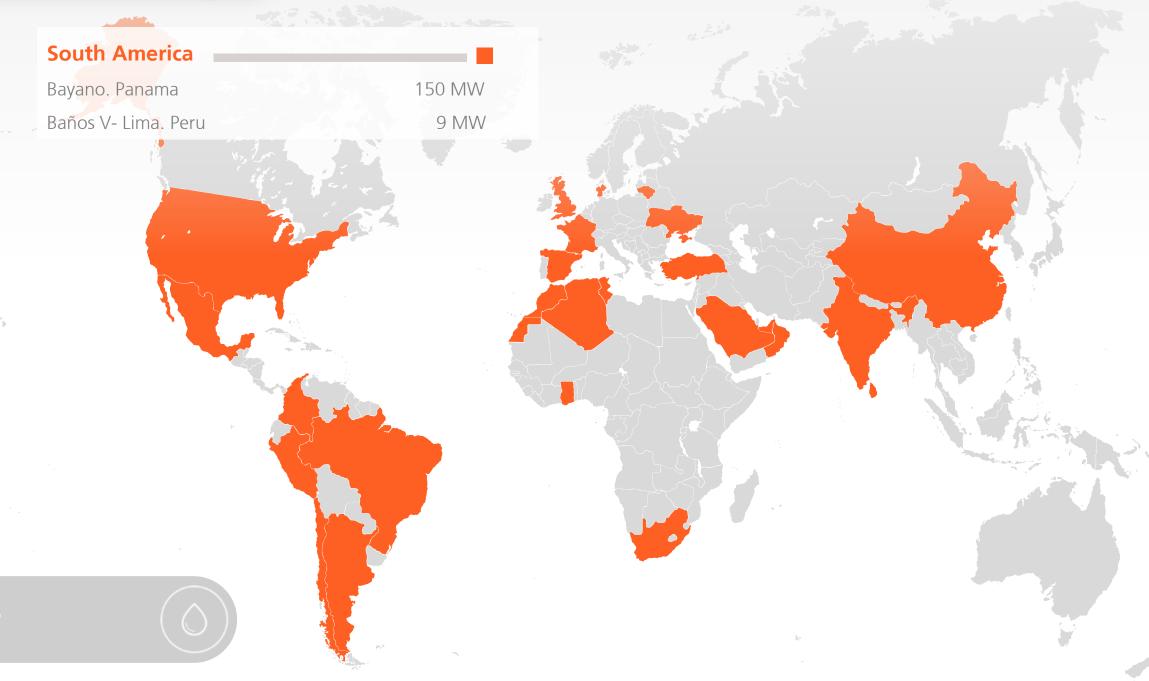
**Projects constructed** 



# Abengoa in **Hydroelectric power stations**

Power stations at the base of dams, run-off river plants and taking advantage of chutes in open channels, power stations in large transport pipelines.

Spain	
Itoiz. Navarra	28 MW
Lozoya. Madrid	21 MW
Canal de Navarra. Navarra	20 MW
Sahechores. Leon	13 MW
Tíjola and Los Manueles. Almeria	11 MW
Atazar. Madrid	10 MW
Alange. Badajoz	10 MW
Canal de Aragón y Cataluña	7 MW
Zufre. Huelva	5 MW
Guadalhorce-Guadalteba. Malaga	5 MW
Aracena. Huelva	5 MW
Cerrato. Palencia	4 MW
La Minilla. Sevilla	2 MW
Pedrezuela and Valmayor. Madrid	2 MW



+ 400 MW

Global installed power



+ 40

**Stations constructed** 





**Experience, references, internationalization and competitiveness**: the basis of our growth.

**Excellence** in technical capabilities and international positioning

Safety and health comes first

• Our accident rates are well below those of the sector. Low Frequency Rate 2020: 2.48.

Technology and know how

Proven experience in desalination, water and wastewater treatment and hydraulic infrastructures. Abengoa has a capacity of more than 4.4 million m³ /d of desalinated water throughout the world, of which close to 2.6 million m³ /d are under construction, and more than 300 projects executed in hydraulic infrastructures.

**2** International recognition

• Presence in the five continents, with more than 30 desalination plants in 13 countries, with a recognized leadership position in the main world rankings (ENR, GWI, IDA).

**Experience. Technical support** 

• Solid, committed and highly qualified team, with extensive experience in EPC and O & M, and specialized and competitive know-how, oriented to the satisfaction of our clients. Leadership in engineering and technology.

Pipeline diversified in geographies and products

• Wide product portfolio (desalination, wastewater treatment, water treatment, irrigation systems, pipelines and pumping, hydroelectric power plants, etc.). Great business opportunities in the short, medium and long term due to the growing shortage of water resources in many areas of the planet.

### Our **strengths**

Thanks to its experience, Abengoa has received international recognition in desalination by specialized institutions in the water sector

2021	<ul> <li>National winner of the 2021 MEED (*) Projects Awards. Water Project of the Year: Salalah, Oman</li> </ul>		
2020	<ul> <li>Desalination Plant of the Year: Shuaibah, Saudi Arabia (GWI**)</li> <li>Highly Commended: Desalination Company of the Year (GWI)</li> <li>GCC winner of the 2020 MEED Projects Awards. Water Project of the Year: Shuaibah, Saudi Arabia</li> </ul>		
2019	Best Public-Private Partnership: Agadir, Morocco (IDA***)		
2018	Highly Commended Desalination Company of the Year (GWI)		
2015	<ul> <li>Water Company of the Year (GWI)</li> <li>Best Public Private Partnership Project (International Finance Magazine)</li> </ul>		
2013	<ul> <li>Desalination Company of the Year (GWI)</li> </ul>		
2012	Highly Commended Water Company of the Year (GWI)		
2009	<ul> <li>Desalination Company of the Year (GWI)</li> </ul>		
2008	<ul> <li>Highly Commended Desalination Contract of the Year: Tlemcen Honaine, Algeria (GWI)</li> <li>Highly Commended Environmental Contribution of the Year: Chennai, India (GWI)</li> </ul>		
2007	<ul><li>Developer of the Year (GWI)</li><li>Desalination Deal of the Year: Beni Saf, Algeria (GWI)</li></ul>		
2006	<ul> <li>Best Desalination Plant of the Year: Carboneras, Spain (GWI)</li> <li>Highly Commended Desalination Company of the Year (GWI)</li> </ul>	(*) Middle East Market Intelligence Platform MEED (**) Global Water Intelligence Magazine (***) International Desalination Association, IDA	





# **ABENGOA**

Innovative technology solutions for sustainability

Thank you.