

The Water Connection

On World Environment Day, Dow Water & Process Solutions analyses the human connection to one of the world's most important elements: water. Moving beyond a linear economy model where we "take, make and dispose" of raw materials, to a circular approach in which raw materials are "recycled and reused" is one of the basis to "connect people to nature".

1 SEAWATER

99% of all water on Earth requires treatment to make it potable, since it's saline or ocean-based.¹

2 DESALINATION PLANT TO PROVIDE FRESHWATER

70% of the world's desalination plants are located in the Middle East.² Saudi Arabia alone is producing 20% of the world's desalinated water.³

DOW SEAMAXX™

DOW SEAMAXX™ Reverse Osmosis elements reduce the energy consumption by up to 10%, and therefore also reduce operation costs.

6 TREATED AND RETURNED TO THE SEA

Approximately 95% of water used in plant operations can be reused. More than 70% of wastewater is reused in most of the GCC countries.⁷

3 MUNICIPAL USE OF FRESHWATER

In the UAE, the average of indirect and direct water used by a citizen, is 8,600 liters a day.⁴

5 AGRICULTURAL USES

In the Middle East and North Africa, 80% of water use is for agriculture.⁶

USE OF FRESHWATER IN HOTELS

Park Hyatt Dubai uses Dow Reverse Osmosis and Ultrafiltration technologies to filter wastewater, saving enough water to fill 62 Olympic-sized pools.

4 REUSE OF MUNICIPAL SEWAGE WATER IN INDUSTRY

In the Middle East, key water and energy-intensive industries that could benefit from wastewater reuse are metals and petrochemicals, as well as energy utilities.⁵

DEMOWARE PROJECT

The DEMOWARE project reuses municipal wastewater for industrial use instead of using water from the river.

1. National Geographic
2. The Water Project
3. Food and Agriculture Organization of the United Nations
4. Global Water Footprint
5. World Resources Institute
6. World Economic Forum
7. Water & Wastewater International

