



DESCRIPTION

The **Global Clean Water Desalination Alliance (GCWDA)** is a multi-stakeholder platform launched at the United Nations Climate Change Conference (UNFCCC) COP21 in December 2015

in Paris. Gathered under the Lima Paris Action Plan (LPAA), the GCWDA is dedicated to **take actions and promote dialogue** on clean desalination and significantly reduce CO₂ emissions in the desalination industry today and in the future.

OBJECTIVE

The GCWDA brings together key stakeholders from the **energy and desalination industries, water utilities, governments, financing institutions, academia and R&D** with the goal to reduce the CO₂ emissions of the world's water desalination plants at a moment when seawater desalination appears as a crucial solution to face exponential growth of water use. As such, the GCWDA aims to reconcile the equally urgent needs to address several sustainable development goals including access to clean water, innovation and economic growth with the urgency of containing global warming.

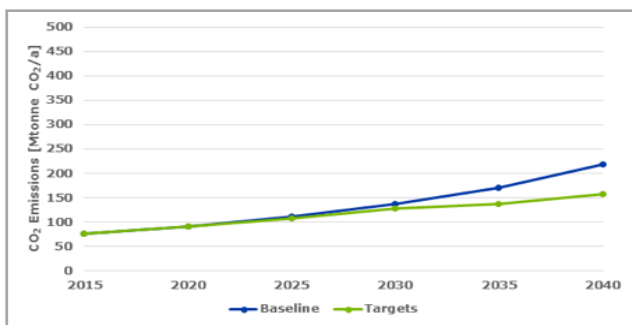


Figure 1 – Estimated CO₂ Emissions of Global Water Desalination Plants. Source: Masdar, 2015

TARGETS AND MEANS OF IMPLEMENTATION

GCWDA members have committed to the following key targets:

- ⇒ **Between 2020 and 2025:** Ensure that 20% of new desalination plants are run on clean energy and low carbon processes.
- ⇒ **By 2030:** Ensure that 40% of newly built desalination plants are run on clean energy and low carbon processes.
- ⇒ **After 2035:** Ensure that 80% of newly built desalination plants are run on clean energy and low carbon processes.

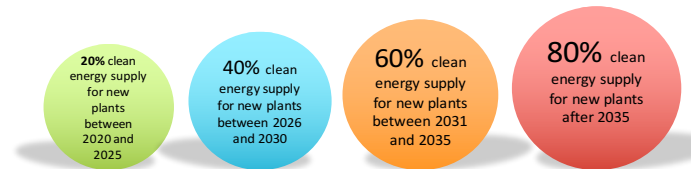


Figure 2 – GCWDA Targets

GCWDA's means of implementation for clean energy supply for desalination plants include:

- **Investment** in additional research, development and demonstration (RD&D).
- **In-kind and direct contributions** to support the regional and national activities of the GCWDA.
- **Technical advisory services** in policy and investment.
- **Education, training and communication.**

Box 1. Water Crisis Facts

The **Global Risks Report 2017** edition of the **World Economic Forum** reports that water crises have emerged as a consistently central feature of the world risk landscape, strongly interconnected with many other risks, such as conflict and migration.

In its **July 2017 drinking water factsheet**, the **World Health Organization** indicated that 884 million people lack basic drinking water services, and 2 billion people use contaminated drinking water.

Clean water desalination will increasingly and rapidly become a key climate resilience solution by addressing hydric stress while contributing to the limitation of CO₂ emissions.

MEMBERSHIP & SECRETARIAT

GCWDA membership consists of public, industrial, governmental and non-governmental actors that share a common vision of environmentally friendly water desalination with low or no CO₂ emissions and are ready to commit, contribute to or participate publicly in the GCWDA activities. **As of September 2017, the GCWDA had 150 members.** Membership in the GCWDA is formalised through an expression of interest and validation by the board and is free of cost. The Secretariat of the GCWDA is currently hosted by Masdar.

Mohamed Al Ramahi, CEO of Masdar



"Masdar is proud to lead the GCWDA and to contribute our experience in connecting renewable and desalination technologies to address what is one of the most pressing issues in the region and the world."

STRATEGY

The GCWDA advocates actions to reduce CO₂ emissions stemming from water desalination by:

- **Powering** new water desalination plants with clean energy sources;
- **Replacing** existing fossil fuel based energy sources of water desalination plants with new clean energy sources;
- **Retrofitting** existing water desalination plants with more energy efficient technologies; and
- **Attracting** investments in the water desalination sector for CO₂ emission reduction purposes.

The GCWDA formulates and implements its programme of work by coordinating closely with existing structures, initiatives and facilities sharing the common objective of promoting the development and deployment of CO₂ emissions reduction solutions for water desalination.

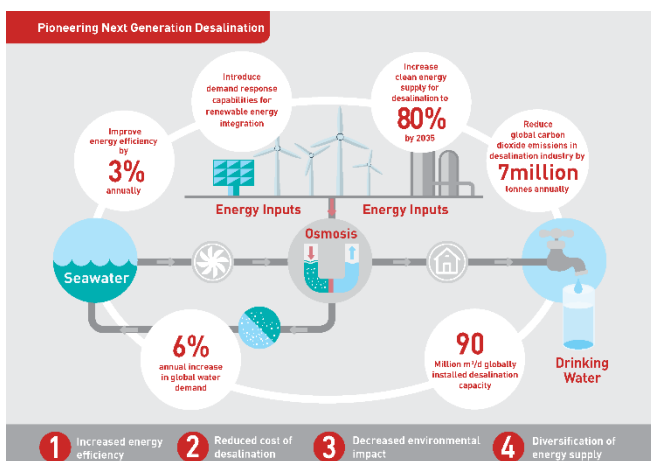


Figure 3 – Next Generation Desalination will be able to achieve increased energy efficiency, while reducing the cost of desalination and environmental impact

KEY FEATURES

The GCWDA activities are implemented through four work streams.

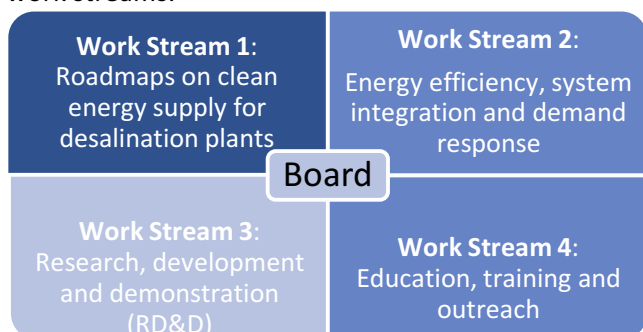


Figure 4 – The GCWDA Work Streams

GOVERNANCE

The GCWDA is governed by a Steering Committee (“Committee”) regrouping all Members. The Committee approves the composition of a Board

formed of representatives of the GCWDA constituency (industry, finance, governments, NGOs and international organizations) and its geographical composition. The Board prepares and proposes the GCWDA’s action plan then supervises and coordinates the work streams of the GCWDA. The Committee meets once a year, while the Board meets as many times as required.

A GCWDA trust fund will be established in 2017-2018 and hosted by a partner organization of the GCWDA.

SPONSORS

The GCWDA has been benefiting since its launch at COP21 in Paris, in 2015, from political support, direct and in-kind contributions of various members including the government of France and governmental organizations of the UAE and the USA, as well as corporate members. Further resources will be mobilised in 2017-2018.

SERVICES AND TOOLS

The GCWDA promotes services that help guide its constituency and partners such as the development of national clean desalination roadmaps, access to a wide multi-stakeholder platform as well as the organisation of dialogue events and investment fora.

Conducive regulatory and policy frameworks and incentives for clean desalination	Awareness about clean energy and energy efficiency solutions for desalination	Country support for the deployment of clean desalination
e.g. Tax credits, rebates and special tariff structures.	e.g. Outreach events, capacity building on clean desalination solutions.	e.g. Development of regional and country specific clean desalination roadmaps.

Figure 5 – Examples of GCWDA Services

BUDGET AND MILESTONES

The **GCWDA** annual budget is approximately US\$2million (subject to availability of resources).

CONTACT

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