

# THE DEVELOPMENT OF SDG 6 AND TEDAGUA'S CONTRIBUTION TOWARDS THE GOAL

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This article explores the journey from the development of the Sustainable Development Goals to SDG 6: water for all. From responding to crises such as the volcanic eruption in La Palma (Spain), to introducing portable water plants for emergencies, to innovations such as nutrient recovery in WWTPs, and the flagship Provisur project in Peru, Tedagua demonstrates how innovation and collaboration can contribute to a more sustainable and resilient world.

## The development of the SDGs

It is important to understand how the Sustainable Development Goals were born, how they were agreed upon and what was in place before the well-known Agenda 2030 established by the United Nations.

In September 2000, 189 leaders of member countries met at the United Nations headquarters to sign the Millennium Declaration, a historic document in which they committed to achieving a set of eight quantifiable goals by 2015, such as reducing extreme poverty and hunger, reducing child mortality, and others. These eight goals were defined as the Millennium Development Goals (MDGs).

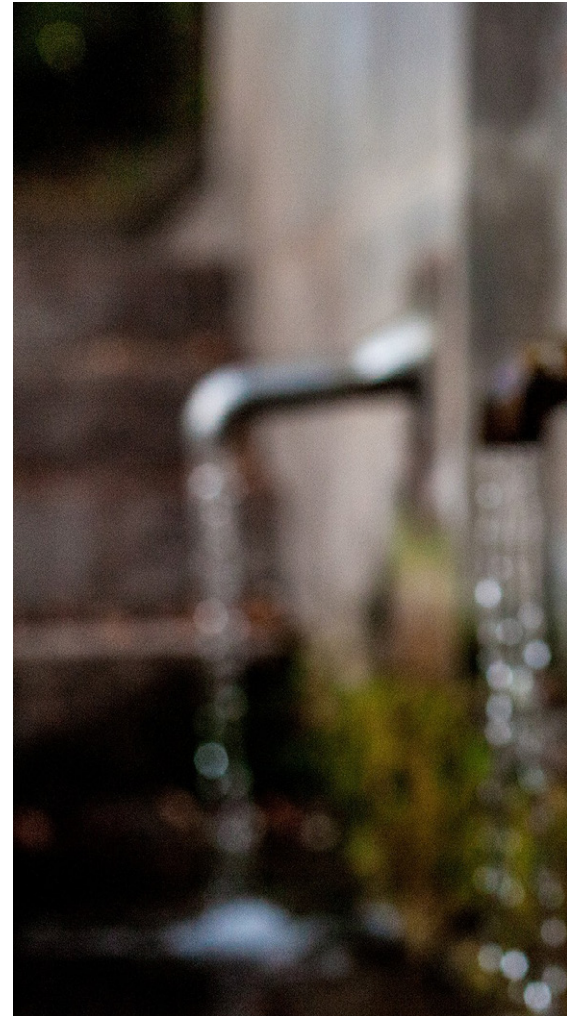
## Paradigm shift: water takes on a prominent role

The definition of the new SDGs that replaced the MDGs took place in Janu-

ary 2016 after a global consultative process that lasted more than three years. Metrics, including disaggregated data by country, as well as social, climate, cultural and economic trends, were analysed. It became clear during this process that there was a universal problem of access to water and that the problem would worsen in the coming years due to the impact of climate change.

The results of this analysis alerted the United Nations about the need to address the water issue. Data were put on the table such as the fact that more than 663 million people still did not have access to drinking water, that water shortages affected more than 40% of the world's population, that every day nearly 1,000 children died from diarrhoeal diseases preventable by having access to water and sanitation, and that 70% of deaths from natural disasters were due to floods and water-related disasters.

The report derived from this analysis helped to raise awareness among both public and private institutions of the need to prepare a global strategy to solve the problems arising from the lack of water and sanitation. A new goal, SDG 6, was defined, to ensure the availability



and sustainable management of water and sanitation for all, an ambitious but necessary goal.

It is very striking that when the discussions to define the SDGs started within the OECD and member countries, some leaders said that the water issue did not need a specific goal. The argument was that water is linked to everything: energy development, health, infrastructure, agriculture, the economy, so why a specific water goal? If it was already dealt with collaterally in the other goals, then there was no need to give it a category of its own, it would be addressed indirectly by implementing the other solutions.

**SDG 6 was defined to ensure the availability and sustainable management of water and sanitation for all, an ambitious but necessary goal**



Ensuring access to safe drinking water to communities where it is needed is a key objective for Tedagua, part of SDG 6.

This has been the traditional problem with water, it is so important and linked to everything that its management and governance are taken for granted. We had to explain why a specific objective was needed to solve the water problem and give it the status it deserves. The water problem is not a sectoral problem, it is a priority economic and social challenge that we must solve to ensure the well-being of the population.

By elevating the water problem to the category of SDG, it is much easier to plan concrete actions by public and private entities, allowing, in addition, to quantify and monitor the results of these actions.

#### Current status of SDG 6

The latest report published by the UN in 2023 takes stock of progress to date. The report emphasises that, despite great progress, thousands of people still lack access to safe drinking water, sanitation and hygiene. A six-fold increase in progress is needed in the case of drinking water, a five-fold increase for sanitation and a three-fold increase for hygiene. Water use efficiency has increased by 9% but still 2.4 billion people lived in water-stressed countries in 2020.

Concerning the essential strategies to achieve SDG 6, the report highlights the need to increase investment and capacity building in the sector, promote in-

novation and empirical action, improve inter-sectoral coordination and cooperation between all stakeholders, and adopt a more integrated and holistic approach to water management.

#### Aligning public strategies with Tedagua's strategy

The fact that the United Nations has set global water targets serves as guidance for companies such as Tedagua. These targets, defined in the SDGs, set a clear path towards a future where equitable and sustainable access to water is a reality for all. For Tedagua, leaders in the water sector, this international direction is more than a guide: it is a fundamental commitment.

At Tedagua we distinguish ourselves by our dedication to the core values that define our approach. From quality and excellence in the provision of safe and reliable drinking water, to social and environmental responsibility that goes beyond current regulations, the company constantly strives to exceed expectations. Our commitment to innovation and continuous improvement not only translates into the adoption of advanced technologies, but also into the active promotion of research and development, thus ensuring effective and sustainable solutions to meet the changing needs of customers.

#### Tedagua's contributions to SDG 6: success stories

★ *Transforming challenges into opportunities: Tedagua's response to the La Palma volcanic crisis*

One of the latest success stories was Tedagua's rapid reaction to the emergency caused by the eruption of the Cumbre Vieja volca-

**Tedagua's commitment to innovation and improvement ensures effective and sustainable solutions to meet the changing needs of customers**



## The response to the water emergency in La Palma demonstrated Tedagua's commitment and its ability to act effectively in crisis situations



no, which caused a water emergency with great social and economic impact on the island of La Palma (Canary Islands, Spain).

SDG 6 includes the commitment to reduce the impact of water-related natural disasters. The volcano indirectly affected the island's entire water network. In the midst of adversity, this exemplary collaboration has brought hope and resilience to a community in need, highlighting the importance of determination and collaboration in the most difficult of times.

In collaboration with the Government of the Canary Islands and the Instituto Tecnológico de Canarias (ITC), Tedagua responded with the supply and commissioning in a record time of 17 days of two portable desalination plants, each with a production capacity of 2,700 m<sup>3</sup>/day, using reverse osmosis technology, together with the necessary intake, pumping and electrical connection facilities.

Despite the difficult logistical conditions and the urgency of the project, we managed to coordinate efforts with national

suppliers and public authorities, finally managing to re-establish the water supply to the banana plantations, which are the island's economic engine, very quickly.

★ *New business line: containerised desalination plants*

In response to current needs and following our extensive experience on the island of La Palma, Tedagua has recently launched a new line of business: containerised desalination plants for different uses and demands. This new production line will focus on providing fast and effective solutions covering four verticals: industry, urban areas, irrigation and emergency situations.

Tedagua's Engineering department in collaboration with our Innovation team have designed three standard models with different characteristics and production capacities. This first portfolio of models will be expanded throughout 2024 with the aim of opening up the range of customers and providing a service based on excellence and speed.

These containerised plants, being modular, are easy to transport and have a "plug and play" connection, contributing to the goal of increasing universal and equitable access to drinking water.

★ *Innovation for a sustainable future*

The latest UN report refers to innovation as a catalyst for change. At Tedagua we

have developed an innovation plan focused on improving water management and promoting sustainability. Our vision encompasses the production of purified water and clean energy, as well as the valorisation of waste, all with a deep respect for the environment, efficient use of resources and active community involvement. This vision is underpinned by our outstanding experience and leadership in the water sector, where we have led projects related to desalination, potabilization, treatment and reuse. We also support our vision with constant research and development of new digital technologies, such as artificial intelligence, machine learning and virtual reality, which allow us to offer new solutions and improve our customers' experience.

★ *Provisur Project in Peru*

This unique project led by Tedagua covers all phases from design, construction and operation of the water cycle in districts of Lima, Peru. The initiative, which arose from a public-private partnership,

Tedagua reacted quickly to the volcano emergency on La Palma (Canary Islands) by supplying two desalination plants in containers.



**In response to urgent needs, Tedagua has a new business line for its water production systems: portable water plants for emergencies**

Quick and efficient work in coordination with local authorities made it possible to supply water for irrigation in only three weeks.



has radically transformed the quality of life in areas such as Santa María del Mar, San Bartolo, Punta Hermosa and Punta Negra, benefiting more than 100,000 people in the southern part of Lima.

The magnitude of the project includes a 34,560 m<sup>3</sup>/day seawater desalination plant, pumping stations and a new 15,552 m<sup>3</sup>/day wastewater treatment and reuse plant, as well as upgrading two existing plants. This exemplary project not only demonstrates professional excellence in overcoming complex challenges, but also the ability to find integrated solutions that are effective and efficient in humanitarian development.

It is more than proven that an efficient and well-coordinated public-private partnerships are essential to achieve the ambitious goals set by the United Nations in the next 7 years.

In conclusion, the creation of SDG 6, which seeks to ensure the availability of

water and its sustainable management, represented a fundamental milestone in raising awareness of the seriousness of the water problem worldwide.

Despite progress, much remains to be done, with millions of people still without access to safe drinking water. However, companies like Tedagua are committed to making a significant contribution through successful projects, demonstrating that innovation and collaboration are essential to address water challenges on the road to a more sustainable future.

**The Provisur project in Peru demonstrates professional excellence in overcoming challenges, while shaping a sustainable water future**