

Opening a faucet and having clean water is a banal gesture in many parts of the planet. However, for more than 2 billion people it is just an impossible desire. But it can come true.

The exhibition arises in the context of the International Decade for Action - Water for Sustainable Development and in the framework of United Nations Sustainable Development Goal 6: Water and sanitation for all by 2030.



The new exhibition of Pavilion of Knowledge – Ciência Viva Science Centre gives voice to the basic right to clean water. In an appealing and positive tone, it invites children and adults to enter, explore and discover the many facets of the availability and use of water on our planet. The 29 interactive exhibits engage the visitors in a call to action, inspiring them to commit for a future with water for all.

The 4 thematic areas of the exhibition explore the contrast between life with and without access to water. Key messages such as the concept of water footprint, the importance of adequate sanitation, the increasing relevance of efficient water management measures in cities, and the crucial role of water in ecosystems and biodiversity are addressed throughout the exhibition.

Please find below some exhibit highlights.



### PRESENT WITH ACCESS TO WATER

# PRESENT WITHOUT ACCESS TO WATER

# FUTURE WITHOUT ACCESS TO WATER

## FUTURE WITH ACCESS TO WATER

What is the role of water in ecosystems and biodiversity? In this area, water is presented as a daily necessity, made available through supply and sanitation infrastructure. Consumption patterns are explored, with special focus on water footprint, drawing attention to the consumption levels of a significant part of the planet.

This area explores inequalities in access to water and the physical and social consequences of the unavailability of clean water. It explores political issues and extreme situations such as conflicts / wars / migrations due to the lack of water. On a more positive note, it focuses on the adaptability of some species, exploring the habitats in which water is scarce..

After crossing an area that presents the negative effects of human action on the water available for consumption, the visitor is confronted with disaster scenarios related to the water crises: climate change, desertification and extreme drought, flooding, among other extreme and devastating visions of what the world without access to water could be. Its purpose is to raise awareness for the effects of our behaviors and urge the visitors to make a commitment for the future of water.

The tour ends with proposals for future solutions based on innovation and technology, encouraging the visitor to adopt responsible consumption behaviours, in line with the commitment previously made.



# PRESENT WITH ACCESS TO WATER

#### WATER - UNFILTERED EXHIBITION

Water particles present the title of the exhibition in a playful way.

#### WATER, WHO ARE YOU?

Water is a chemical substance. What are its characteristics and specificities?

#### PLANET WATER

From space, our planet is blue. However, of all existing water, only about 1% is available for consumption. In this exhibit, we face the limitation of this scarce and valuable resource.



#### UNBALANCED CYCLE

Our action affects the water cycle through deforestation, over-extraction or climate change. This exhibit challenges the visitor to discover the human actions that affect the water cycle.

#### WE ARE WATER

We are water. Without water we wouldn't survive. In a multimedia game we hydrate the brain, lungs and skin of someone dehydrated. Quick, there is no time to lose!

#### WATER IS LIFE

Throughout the planet, ecosystems need water. Mangroves, coastal areas, marshes, rainforests. This exhibit portraits the immense biodiversity of planet Earth.



#### WATER FOR WHAT AND WHOM?

This exhibit presents the amount of water consumed in agriculture, industry and domestic use.

#### URBAN CYCLE OF WATER

This exhibit presents the urban water cycle and the infrastructures that support it. From the dam to our houses, and then to a wastewater treatment plant, visitors can follow the path of water in augmented reality.

#### INVISIBLE WATER

Almost everything we produce consumes water, but this consumption is not always visible. A four-meter-high totem built with water bottles, reveals the water that is used to produce a cup of coffee, a steak or a T-shirt.



#### WATER FOOTPRINT

In a grocery shop we can choose products that represent services, actions or goods we use daily. After the selection of the products what will be our water footprint?

#### WATER, HUMAN RIGHT

This exhibit transports the visitor to an environment where there is no access to drinking water and confronts him with the reality of millions of people worldwide.

#### THE PATH

About three out of ten people worldwide do not have easy access to drinking water. In this exhibit the visitor is challenged to carry a jerican and find out how long can he walk.



#### THE PATH - A DAY IN THE LIFE OF AYSHA

A UNICEF film introduces us to Aisha, a child who spends 8 hours per day fetching water.

#### CHOLERA HUNT

Leptospira and Campylobacter are not just funny names for stuffed toys. These are viruses, bacteria or parasites, which thrive with the lack of sanitation. The visitor's mission is to hunt these pathogens and perceive the impact they can have on health.

#### SANITATION FOR ALL

An animated film focuses on the importance of sanitation. Diseases, gender inequality, and truancy are some of the consequences of its absence. A new culture of water and sanitation is urgent.



#### WATER AS A WEAPON

Water is both a motive and a weapon in conflicts globally. This exhibit shows how the access to water is a source of worldwide conflicts.

#### IF I WERE A CACTUS...

In a fun game the visitor can "dress" the humps of a camel, the exoskeleton of a beetle or the ears of a fox and get to know the adaptations of different species to water shortage.

#### MACGYVER OF WATER

Capturing humidity from the air, filtering dirty water or desalinating seawater are some of the techniques currently used to maximize access to water. Get to know them.

#### **FUTURE WITHOUT ACCESS TO WATER**



#### **TUNNEL OF POLLUTION**

The visitor crosses a tunnel surrounded by polluted water and rubbish. This exhibit is a call for action in the matter of water pollution.

#### LABYRINTH OF CHOICE

The future of water depends on our individual and collective choices. The visitor enters a labyrinth and is confronted with different paths that reflect future scenarios in water availability.

#### COMMITTED TO THE FUTURE OF WATER

To ensure a future with water for all it is urgent that everyone acts. In this exhibit the visitor is invited to commit to concrete actions for securing the future of water.

#### **FUTURE WITH ACCESS TO WATER**







#### IS DESALINATION THE SOLUTION?

Desalination is already common in some parts of the planet as a solution to recurrent water shortages. From environmental impacts to technological requirements, what defines this complex solution?

#### TEA? COFFEE? SWEAT? OR TEARS?

Discover how astronauts' sweat or urine become a delicious coffee or a comforting soup.

#### EFFICIENT HOME

In this efficient house the visitor is a plumber. His challenge is to maximize the reuse of water with the right connections. Will it be from the sink to the shower? Or from the washing machine to the toilet?







#### **EFFICIENT SHOWER**

Feel like an opera singer while you experience a water recycling shower in this exhibition. It's shower time!

#### SEEN FROM SPACE

Satellites are a crucial help to understand how water resources need to be managed. The work of ESA – European Space Agency, shows us what are the current water and biodiversity challenges and shed light on how to tackle them.

#### ZERO WATER LEAKS

A scenario where water ends in a city is not far from reality in some parts of the world. In this exhibit, the inhabitants avoid the day zero, avoiding waste and water leaks in an urban environment.



#### **BALANCING THE WORLD**

This exhibit explores the United Nations' Sustainable Development Goals, associated with water (Goal 6). All parts of the game (Goals) are relevant to achieve global balance.

#### THE RIGHT WATER

The efficient use of water in agriculture – by far the largest consumer of water globally – is a crucial step for sustainability. Vegetables and fruits cultivated with the "right water" will be a distintive factor for consumers in the future.

#### WATER BAR

In this bar we make a toast to water and to its diversity.



# TECHNICAL DETAILS

Exhibits: 29.

Target audience: school groups, families and general public.

**Space required:** suitable from 600 m² to 700m².

Languages: Trilingual.

**Accessibility:** This exhibition is accessible to people with special needs.

Educational materials: Teachers guide.

Marketing/PR: Campaign materials and templates available.

## **CONTACTS**

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