Signe Natir

FOR A SUSTAINABLE & INCLUSIVE MAURITIUS

WATER STEWARDSHIP

Guidelines for businesses

Introduction to the SigneNatir

WATER STEWARDSHIP *Guidelines*

Water, an invaluable and finite resource fundamental to life is characterized by its dynamic and perpetual transformation, transitioning between solid, liquid, and gaseous states across the atmosphere, land, and oceans. Businesses must operate with awareness within this intricate cycle, understanding the profound impact of water management on human life, ecosystems, and economic activities. Freshwater plays a pivotal role in supporting various human activities, including irrigation, industrial processes, and the generation of hydro-electricity, affecting the 'food-energy-water nexus.'

Climate change intensifies these challenges, influencing the global water cycle and exacerbating water-related risks, such as flooding and drought. For Mauritius, a water-stressed nation facing both scarcity and climate change impacts, responsible water management is vital. In response to these challenges, Business Mauritius has crafted its Water Stewardship Guidelines, proposing 20 distinct business actions that can be implemented across economic sectors.

Our Water Stewardship Guidelines are in line with the following SDG 6 targets

TARGET 6.3

Improve water quality, wastewater treatment, and safe reuse.
"By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally".

TARGET 6.4

Increase water-use efficiency and ensure freshwater supplies.
"By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity."

TARGET 6.6

Protect and restore water-related ecosystems.
"By 2030, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes."

TARGET 6.B

Support and strengthen the participation of local communities in improving water and sanitation management.

Implementing the WATER STEWARDSHIP *Guidelines*

Companies are not obligated to adopt all business actions; instead, we advocate for a flexible approach, enabling companies to select actions that best resonate with their core business activities and that are reflective of individual capacities and contexts.

By pledging to uphold this guideline, companies commit to initiatives that advance effective water stewardship. Whether through educating stakeholders about water conservation or actively engaging in sustainable water practices, companies can play an active role in advancing responsible water stewardship.

As we learn from one another and make progress in our water stewardship journey, these guidelines can evolve and improve.

WATER FACTS AND FIGURES

Most trees are made up of more than **50%** water

An adult person is made up of about **60%** water

GLOBAL WATER AVAILABILITY

71% of the Earth is covered by water

97% of the world's water is saline ocean water

96% of all freshwater is locked in ice sheets, glaciers and snow packs

Less than **4%** of freshwater is considered easily accessible and available for essential ecosystem functioning and human society's water resource needs. (Durack, 2015; Abbott et al., 2019)

This represents a total volume of about 835,000 km3, mostly contained in groundwater (630,000 km3), the remaining 205,000 km3 being stored in lakes, rivers, wetlands and soils.

SOCIAL FACTS

Around 4 billion people live under conditions of severe freshwater scarcity for at least one month of the year, with 0.5 billion people in the world facing severe water scarcity all year round.

(Mekonnen and Hoekstra, 2016)

Globally over 80% of wastewater resulting from human activities is discharged into rivers or sea without any treatment, contributing to water pollution and environmental degradation.

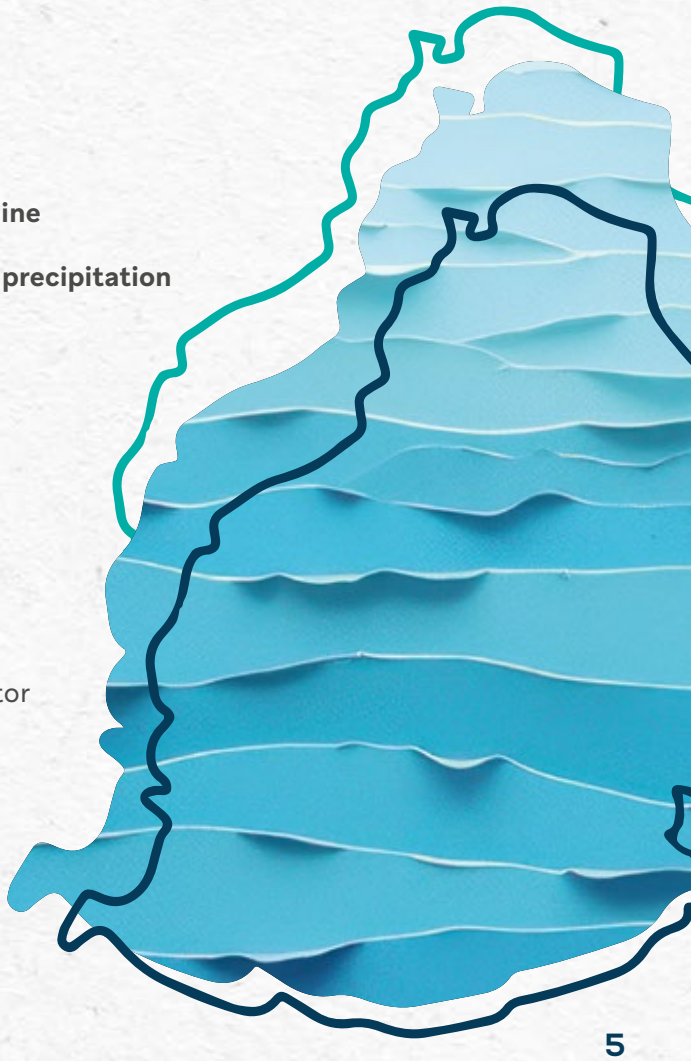
(UNESCO, 2017)

Waterborne diseases cause over 3.4 million deaths annually, with 2.2 million of those deaths being children.

(WHO)

WATER FACTS FOR MAURITIUS

- **The CWA's distribution network has 5,200 km of pipeline**
- **In 2021, Mauritius received 3,776 (Mm3) of water from precipitation**
  - 10% of the water went as ground water recharge
  - 30% evapotranspiration
  - 60% surface runoff
- **In 2021, total water utilisation was estimated at 968 million cubic metres**
  - 38% for Hydropower
  - 31% for the agricultural sector
  - 31% was used by domestic, industrial and tourism sector
- **Around 84% of the total water utilisation was met from surface water and 16% from ground water**



(Sources: Statistics Mauritius, CWA)

THE Guidelines

CATEGORY 1

Assessment and management

Objective

In the pursuit of sustainable water management practices, Category 1 focuses on establishing a robust assessment and management system. This foundational category comprises four key actions: assess the current state, their implications on the business, establish business's response and communicate with stakeholders. It is import to note that in the absence of local regulation on ESG to date, reporting and disclosures in Mauritius is entirely voluntary.

Relevant business actions

1.1. **Company water profile:** Assess the water profile of your company by establishing the physical scope of your operations and analysing conditions and trends.

1.2. **Water risks and impacts assessment:** Evaluate water risks and impacts considering double materiality. Analyze both the direct operational risks and the broader impacts on the environment and society beyond the site's boundaries.

1.3. **Set goals:** Establish water priorities and actions, setting goals and measurable targets aligned with your specific circumstances (compliance, cost-benefit analysis), and industry standards.

1.4. **Communication:** Communicate progress and strategies and engage with stakeholders for continuous improvement and building a shared understanding of water-related challenges and opportunities.

CATEGORY 2

Efficiency and Technology

Objective

Category 2 underscores the pivotal role of Efficiency and Technology in advancing water stewardship, aligning with the Sustainable Development Goal 6.4. This category comprises four strategic actions designed to optimize water usage, leverage technology for efficiency, and embrace sustainable practices within industrial and operational contexts.

Relevant business actions

2.1. **Monitoring and maintenance:** Regularly track water usage, pressure changes and leakages to identify inefficiencies and minimise water losses. Ensure regular maintenance to prevent leaks and inefficiencies.

2.2. **Import/sell/install low-flow water fixtures:** Invest in low-flow taps, toilets, showerheads and other similar household appliances.

2.3. **Upgrade equipment and technologies:** Invest in the most water-efficient equipment and technologies available for your industry.

2.4. **Rainwater collection:** Collect and store rainwater runoff from roofs, parking lots, and other impervious surfaces for non-potable uses.

CATEGORY 3

Quality and Circularity

Objective

Category 3 is dedicated to advancing Quality and Circularity in harmony with Sustainable Development Goal 6.3. This category is designed to address the crucial need for safeguarding water quality and championing circular practices within organizational operations. Through four strategic actions, it aims to proactively prevent pollution, uphold wastewater quality standards, and cultivate sustainability in product and packaging practices.

Relevant business actions

3.1. **Pollution control at source:** Implement pollution control measures to prevent contaminants and pollutants from entering water bodies or wastewater systems, reducing the need for extensive treatment.

3.2. **Water quality:** Treat wastewater before discharge (systematically testing the level of pollutants), thus maintaining or improving site water quality.

3.3. **Promote water recycling and reuse:** Install systems to treat and reuse greywater for non-potable purposes, like toilet flushing and irrigation.

3.4. **Products and packaging:** Develop sustainable products and packaging to reduce water-related impacts.

CATEGORY 4

Water-related Ecosystems

Objective

Category 4 is dedicated to Water-Related Ecosystems, in alignment with SDG 6.6, recognizing the critical role of ecosystems in sustaining water resources. The overarching objective is to enhance and protect water-related ecosystems through strategic actions crucial for safeguarding the health and resilience of these ecosystems. This category aims to fortify responsible water management practices that acknowledge and prioritize the essential services rendered by water-related ecosystems.

Relevant business actions

4.1. **Water-efficient landscaping:** Use drought-resistant and endemic plants for landscaping.

4.2. **Permeable surfaces:** Implement permeable surfaces (pavements, sidewalks, parking lots, plazas) for runoff reduction and groundwater replenishment.

4.3. **Biofiltration systems and green spaces:** Install biofiltration systems and other green spaces, such as constructed wetlands, rain gardens, green walls/roofs or vegetated swales to increase permeability of soils, naturally filter and treat storm water and reduce runoff.

4.4. **Watershed restoration and protection:** Protect and restore existing wetlands, riverbanks and other watersheds, for water filtration and wildlife support.

CATEGORY 5

Collective Action

Objective

Category 5, aligned with SDG 6b, emphasizes the crucial role of Collective Action in addressing water challenges. It underscores the unique nature of water as a shared and indispensable resource, necessitating collaborative efforts that extend beyond individual organizations. The objective is to encourage strategic business initiatives that foster collective action, recognizing the significance of shared responsibility in achieving sustainable water management.

Relevant business actions

5.1. **Employee engagement:** Provide access to safe drinking water, adequate sanitation and hygiene awareness (WASH); whilst engaging employees in your water conservation efforts.

5.2. **Guest information:** Provide guests with information to support water stewardship, especially in times of scarcity. (E.g. signage, welcome packs, interactive displays).

5.3. **Supplier engagement:** Collaborate with suppliers to promote responsible water stewardship, especially in water-intensive industries and supply chains (e.g. cotton).

5.4. **Collaborative project:** Advocate and participate in collaborative projects with other stakeholders and local communities to address water-related challenges.

BUSINESS MAURITIUS
Building our Future

Together, let's build a sustainable and inclusive future for Mauritius

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This disclaimer informs readers that the views, thoughts, and opinions expressed in these guidelines are based on research conducted by the author, and are not to be considered as unique reference. Business Mauritius has tried, as far as possible, to provide complete and relevant information regarding both local and international contexts. The present document will be refined and updated on a continuous basis, following feedback from the sustainability network. For the latest version of the guidelines, please refer to the SigneNatir website: **www.signenatir.mu**

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