# Water Stewardship **REPORT** 2024

Philip Morris Products S.A.

Neuchâtel



## Letter from Philip Morris Products S.A.

Water scarcity is recognized by the World Economic Forum as the greatest global risk in terms of potential impact on both humanity and environment. Growing populations and economies as well as climate change effects are leading to an exponential increase in demand, competition and disputes over freshwater resources.

The **Philip Morris Products S.A.** factory in Neuchâtel, Switzerland **(PMPSA)** has implemented the Alliance for Water Stewardship (AWS) Standard with the aim of integrating a water stewardship *modus operandi* in its water management approach. With the achievement of the <u>Core Level Certification</u> in November 2021, PMPSA has become the first AWS Certified site in Switzerland.

The AWS Standard implemented by PMPSA provides a useful framework for water footprint reduction, implement concrete actions within the wider catchment context, and work in partnership with local Stakeholders for sustainable water resource management and mitigation of shared water challenges.

Every year PMPSA continues to implement sustainable water practices both within and outside its site boundaries, with the aim of leading by example, raising awareness and encouraging other catchment Stakeholders to take on an active role as virtuous water stewards.

PMPSA is deeply proud of its transformation process and although there is still a long way to go to build a sustainable future, the AWS philosophy is a great starting point and has already made an incredible difference.

PMPSA focus on sustainability is also significant in the **Tobacco Supply Chain**. With a specific focus on the tobacco cultivation process, PMI is committed to the responsible and sustainable management of natural resources. To achieve these goals, as part of the **Sustainable Tobacco Program** (STP), PMI has developed a set of **Good Agricultural Practices** (GAP), against which the cultivation processes of suppliers are evaluated, and opportunities for improvement are identified. Good Agricultural Practices are those that are economically viable, safe and oriented towards a quality harvest that at the same time support, protect and improve the environment and respect workers. The program was developed with input from farmers, industry companies, government agencies and universities.



PHILIP MORRIS PRODUCTS S.A.

## Water Stewardship Commitment

PMI has been implementing the **Alliance for Water Stewardship** (AWS) Standard since 2018 and has the ambitious milestone to certify all priority factories by 2025. Currently, 24 PMI factories had been certified AWS. Water stewardship in PMI is about reducing a Site's water footprint by acting both onsite and in local territory. By synergic collaboration with Stakeholders, joint projects to mitigate waterrelated risks, as well as reducing potable water consumption and promoting water recycling, PMI factories around the world are contributing to collective addressing the complex challenges facing the water resource that we all relay upon.

With the following document, PMPSA discloses a public commitment to water stewardship and its contribution to sustainable water use at site and catchment-based level. PMPSA firmly believes that following water stewardship principles and best practices will help build a sustainable future and positive changes to the entire territory.

PMPSA publicly commits to undertake and sustain the following best practice water steward principles:

- Endorse, sustain and uphold the AWS principles and 5 outcomes: good water governance, sustainable water balance, good water quality, conservation of important water-related areas and safe water, sanitation and hygiene for all.
- Engage and involve stakeholders in an open and transparent way and exchange with public authorities when needed.
- Comply with legal and regulatory requirements related to water.
- Respect water-related rights, including ensuring appropriate access to safe water, sanitation and hygiene for all workers in premises under the site's control.
- Implement the AWS Standard in alignment and in support to existing catchment sustainability plans.
- Continually improved and adapt the site's water stewardship actions and plans in order to mitigate shared water-related risk and challenges.
- Implement and disclose progress on water stewardship program(s) to achieve improvements in water stewardship results.
- Maintain the organizational capacity required to successfully implement the AWS Standard, by ensuring that employees have the time and resources required to accomplish the implementation and maintenance of all AWS requirements.
- Support water-related national and international treaties.
- Disclose material on water-related information to water relevant authorities and other public audience in an appropriate format.

Through this **Water Stewardship Commitment**, PMPSA reaffirms its dedication to responsible water stewardship and its role in safeguarding this fundamental resource for current and future generations.

Director Manufacturing PMPSA (Dora Delgadillo)

Manager Sustainability PMPSA (Frederic Voegele)

## Water Stewardship Strategy

In line with <u>Philip Morris International's Water Stewardship Ambition</u>, PMPSA has identified a **Water Stewardship Strategy** which aims to define the current, overarching **mission** and long-term **vision** of our water stewardship journey, as well as the **goals** set to motivate the purpose and direction of our water stewardship plan.

#### Mission

Our mission is to safeguard local water resources through an out of the box approach, to ensure continuity to our operations and preservation of our catchment area. By integrating sustainable water management and stewardship practices, we aim to reduce water consumption, minimize pollution, protect freshwater ecosystems and mitigate water-related risks. By engaging stakeholders fostering innovation and technological development, as well as advocating for water education and collaboration to address shared water challenges, we aim to contribute to the resilience and wellbeing of our local water resources for current and future generations.

#### Vision

Our vision is to foster a culture of innovation and continuous improvement in water management and stewardship practices and inspire others to prioritize water stewardship in their operations. We aim to be recognized as a model of water stewardship excellence and catalyst for change in our catchment area. Through innovative technologies for water footprint reduction, strong partnerships with stakeholders and synergic projects to enhance water resilience, we aspire to create a watersecure future where water risks and challenges are minimized, and shared water resources protected.

#### Goals

Our desired goals aim to achieve sustainable water balance, optimum water quality, good water governance, adequate WASH (Safe Water, Sanitation and Hygiene) and IWRAs (Important Water-related Areas) conservation/restoration. They can be summarized as follows:

- Water conservation water footprint reduction by implementing water saving technologies such as water-efficient appliances, smart irrigation systems, wastewater recycling, rainwater harvesting, leak detection/prevention, water-efficient agricultural practices etc.
- Flood management flood risk mitigation and prevention via the execution of flood risk assessments, implementation of flood control infrastructures, adequate stormwater management, and warning/forecasting systems
- Water quality protection prevention and mitigation of water body pollution and contamination, via water quality/bio-monitoring campaigns, adequate and innovative wastewater treatment infrastructures, agricultural best practices etc. to ensure that water sources remain clean and safe for both human consumption and ecosystems

Infrastructure maintenance and upkeeping

 implementation of proactive leak
 detection and repair program(s) to identify
 and address water losses in pipelines,
 equipment, and infrastructures, with the
 aim of reducing failures, water losses and
 associated costs



- Engagement and collaboration engagement with diverse and representative groups of stakeholders (i.e., employees, suppliers etc.) to investigate on shared water challenges, promote best practices and/or investigate on collaboration opportunities that benefit both the site and the catchment area
- Education, awareness and training awareness creation amongst employees, suppliers, local communities etc. on the importance of water conservation, pollution prevention, safe water sanitation and hygiene prescriptions, sustainable water management practices but also emergency preparedness (i.e., for water-related incidents, spills, leaks and floods)
- Governance and partnership support and implementation of catchment sustainability plans, strengthening data collection, analysis and availability especially amongst local stakeholders, enable partnership opportunities especially with public sector, service providers and institutional stakeholders
- Ecosystem restoration and rehabilitation protection and enhancement of important water-related areas and their ecosystems by restorative/rehabilitative actions such as reforestation, habitat destruction minimization, litter collection, improving aesthetic/recreational value improvement, support of biodiversity conservation initiatives etc.
- Safe and accessible water, sanitation and hygiene maintenance of adequate water, sanitation and hygiene infrastructures for employees, execution of dedicated trainings on the importance of good hygiene practices and periodic assessments on water, sanitation and hygiene prescriptions on-site
- **Transparent and proactive disclosure** establishment of a comprehensive monitoring and reporting system to periodically disclose relevant water-related data, progress of water stewardship program and performance indicators, with the aim of ensuring transparency and accountability.

By consolidating a **Water Stewardship Strategy**, PMPSA has described and motivated our water stewardship **mission**, **vision** and **goals**, to be considered as the fundamental steppingstones which have led to the development and continuous improvement of our water stewardship **action plan**.

## **Internal Water Governance**

## **Organizational chart**

In PMPSA, the internal governance for water management involves several key positions responsible and accountable for:

- water management activities as well as compliance obligations with water-related laws and regulations within our premises;
- implementation of the Alliance for Water Stewardship (AWS) Standard prescriptions through site and catchment-based actions with the aim to achieving compliance across all 5 outcomes areas.

The organizational chart of the water-related internal governance team well as their roles and responsibilities are illustrated below:



## **Internal Water Governance**

### **Roles and Responsibilities**

#### Frederic Voegele

Manager Sustainability

## • Ensures Environment Health and Safety compliance within the organization.

- Main sponsor of sustainability projects
- Promotion of sustainability best practices within the organization
- Share water challenges with the Site Leadership Team

#### Ioana-Maria Simionca

Sustainability Engineer

- Leads the Water Stewardship internal team
- Liaise with regulators
- Ensures water related incidents are investigated and correctives and preventives actions are taken to eliminate recurrence
- Identifies and leads water related improvement actions

#### José Arias

IFMS Engineer

#### **Giulia Penone**

Communication Operations Executive

- Managing of the activities linked to the utilities engineering
- Follow-up of water consumption and wastewater management
- Implementation of social and community actions to raise employees/stakeholders' awareness
- Leads of the internal communications masterplan linked to sustainability topics
- Coordination with the EHS team for the preparation of water/environment awareness campaign: communication material for the screens and events
- Coordination and organization of AWS-related webinar and workshops with stakeholders

<b>Patrick Lagadec</b> Manager Internal & External Comms, Corporate Affairs	<ul> <li>Leads External Communication with main stakeholders (industrial &amp; institutional)</li> <li>Coordinates the preparation of water related webinar and workshops</li> <li>Engages institutional stakeholders for water related project in the catchment area</li> </ul>
<b>Hajar Hida</b> Process Engineer	<ul> <li>Point of contact for the Primary water-related topics.</li> <li>Management of water-related projects linked to the Primary area</li> </ul>
Beat Schornoz Senior Innovation Lead	<ul> <li>Point of contact and support for MDC (Manufacturing Development Center) water-related topics</li> <li>Key person for new MDC water-related projects implementation</li> </ul>
Yann Ravessoud Senior Project Engineer	<ul> <li>PMPSA Engineering team point of contact</li> <li>Support for new water-related project implementation in the factory</li> </ul>
<b>Pascal Bolle</b> Facility Services Manager	Maintenance of PMPSA water network

## Water Risks and Shared Water Challenges

Since 2021, PMPSA has been conducting **water risk assessments** on the Neuchâtel Lake catchment area, to identify the main water risks faced by the Site, as well as the challenges shared amongst local Stakeholders.

To ensure a detailed and comprehensive analysis, the water risk investigation is conducted annually by using a combination of:

- global tools such as the Filter and AQUEDUCT
- stakeholder surveys submitted in July 2024

The most relevant water risks in the catchment area detected by the Water Risk Filter by WWF are directly linked to **flooding events and water quality** (respectfully **Figure 1 and 2**) aggravated by the impacts of climate change, which are producing increasingly extreme and catastrophic events.



Figure 2: Water Quality Risk in the Neuchâtel Lake catchment area (Source: <u>Water Risk Filter,</u> August 2024)

In 2023 and 2024, heavy rainfall led to severe flooding across various regions of Switzerland. The intense weather conditions caused rivers and lakes to overflow, leading to widespread disruption.

However, PMPSA is located in a residual risk zone, and is not impacted by any severe flood events.

PMPSA has a long-lasting relationship with its **Stakeholders** which have been involved throughout the implementation of the AWS Standard framework since 2021.

For this reason, in 2024, PMPSA has created a dedicated **investigation survey** which aims to identify, assess, and prioritize shared water challenges amongst its catchment Stakeholders, in order to collect valuable insights. The scope of this investigation is to:

- · consolidate or further detail the water risk categories previously identified
- increase awareness and understanding amongst catchment Stakeholders on shared water challenges
- identify potential mitigation or preventative actions based on prioritized water challenges

	Shared by nº of Stakeholders	Frequency of occurrence			Magnitude of impact			Level of
water challenge		Rare	Sporadic	Continuous	Minor	Moderate	Major	prioritization
Water governance limitations	5	3	2	0	1	4	0	Very High
Water scarcity	4	2	2	0	1	0	3	Very High
Flooding	3	1	2	0	0	2	1	Moderate
Water quality degradation	3	1	2	0	2	1	0	Low
Regulatory challenges	2	0	2	0	0	2	0	Low
IWRA deterioration	2	1	1	0	1	1	0	Low
Infrastructure vulnerability	2	2	0	0	0	2	0	Low
WASH inadequacy	1	1	0	0	0	1	0	Very Low
Reputational damage	1	1	0	0	1	0	0	Very Low

Table 1 illustrates the results of the Stakeholders:

Table 1: Results ofPMPSA Stakeholder'sfeedback

The following water challenges rank medium/high priorities according to the interviewed stakeholders:

- water scarcity and water governance limitations are classified as a very high priority
- flooding is classified as a moderate priority



In comparison with Water Risk Filter global tool results, stakeholders perceive that:

- water governance limitations are an issue, due to poorly enforced/inadequate water policies and legal/regulatory frameworks. Some root causes highlighted in the survey are also lack/limited data and information system, as well as long-term planning/vision
  - water scarcity is an issue, and some root causes highlighted in the survey are excessive water use, droughts or even lack/limited preventative mitigation strategies

## Water Stewardship Plan

PMPSA has created a **Water Stewardship Plan** which is periodically updated and structured around all 5 AWS outcomes:



The Plan aims to address water risks, shared challenges, incorporate best-practices in current management activities and achieve the goals reported in the Water Stewardship Strategy by detailing actions and associated Specific, Measurable, Achievable, Relevant, and Time-Bound (S.M.A.R.T) targets.

The actions reported in PMPSA's Water Stewardship Plan can be subdivided in 2 categories:

- **Technological** actions for water footprint reduction and quality improvements, via water saving technologies, recycling, optimization of plant settings, monitoring devices etc.
- **Community/Social** actions for improving internal and external water governance, WASH provision, status of IWRAs and mitigating shared water challenges in the catchment area

Here forward several actions of PMPSA's Water Stewardship Plan have been reported and described in detail.



# Annual Water Stewardship workshop with local stakeholders

**Scope:** annual water stewardship workshop in collaboration with local catchment stakeholders to disclose PMPSA's water stewardship performance, benchmark on water-related best practices, as well as investigate on potential synergies to mitigate shared water challenges and contribute towards a water secure catchment territory. The workshop has been followed by a factory visit, to allow stakeholders to concretely see what PMPSA does in terms of water-related projects and initiatives

**Results:** participation of **13 local Stakeholders**, both in person and via a Teams meeting. All of them responded to a questionnaire to which PMPSA received feedback on its water stewardship journey, actions implemented in relation to the 5 AWS outcomes and efforts to catchment water risks

**Value creation:** enhanced communication, networking and relationship building amongst Stakeholders, greater ownership of initiatives and projects, alignment of interests and priorities, capacity building

## **Employees engagement**

#### World Water Day activation

Involvement: internal PMPSA employees and contractors

**Scope**: awareness-raising campaigns in relation to sustainability and water-related subjects, to enable more informed choices on water use at home and at work and to make employees aware about the consequence of their actions. The initiative included:

- **tips** on best practice behaviours to have in relation to water, at home and at work
- dirty water tanks installation in every relax room of the factory, together with banner with shocking sentences about water
- **internal communication** material on the factory screens
- interactive stand at the factory canteen

**Results:** engagement of approximately **400 employees** and contractors

**Value creation:** education on the importance of water conservation, efficiency and sustainability, contribution to mitigating risks related to water scarcity by encouraging greater water conservational efforts and behavioural changes, both at work and at home

#### 1 CHF for the climate

Involvement: PMI Swiss-based employees

**Scope**: fundraising campaign to collect money to dedicate to tree planting in the Gros de Vaud region, in collaboration with a local association. The initiative included:

- a local news on the PMI Swiss intranet site
  - training of the cashiers of the canteens in
    - Neuchâtel and Lausanne sites
- internal communication on the factory screens

**Results:** approximately **600 CHF** collected (excluding separated contribution from Swiss market)

Value creation: awareness that each of us can do something to contribute to the preservation of our planet, contribution to the improvement of landslides risks by planting trees and thus implanting new roots in the ground





#### Awareness created around the "Tri-Plage" event

**Involvement:** internal PMPSA employees and contractors, possibility to involve families and friends

**Scope**: awareness-raising communication regarding the lakeshore cleanup initiative organized by the local association AQSB! in specific Thursdays of July, August and September. The initiative included:

- communication on factory screens
- **announcement publication** on the factory Viva Engage community



**Value creation:** education on the importance of water conservation, contribution to mitigating risks related to water pollution by encouraging greater water conservational efforts and behavioural changes



#### Lakeshore clean-up event

Involvement: PMI Campus employees

**Scope**: active participation of employees in a lakeshore cleanup activity in a defined perimeter around the PMI Neuchâtel Campus. The initiative included:

• internal communication for employees to be aware of the event

• provision of materials for the activity (rubbish bags, grippers, etc.)

• plogging activity with a sport coach organized to enliven the initiative

Results: approximately 80 employees participated to the clean-up activity in 2023 (2024 data not available yet) and the following have been collected:

- 172 aluminium cans
  - 71 glass bottles
  - 115 PET bottles
- 4250 cigarette butts

Value creation: education on the importance of water conservation, contribution to mitigating risks related to water pollution by encouraging greater water conservational efforts and behavioural changes

#### Internal communication campaign "Sème le changement, récolte la durabilité"

**Involvement:** internal PMPSA employees and contractors, plus visitors and anyone coming across the internal screens

**Scope**: awareness-raising communication campaign regarding the concrete actions and results that the factory had and will have about water and energy consumption and savings

Value creation: awareness of the concrete energy consumption/savings data of PMPSA factory, so that employees can realize the effective consequences of the projects implemented on site

Reduce

waste

post-consumer



#### Sustainability fair in Lausanne, Rhodanie Campus

Involvement: Rhodanie Campus employees

**Scope:** participation to the sustainability in Rhodanie, to show people what the factory is doing in terms of water management and savings

**Results:** approximately **300 employees** participated to the sustainability fair

Value creation: education on the importance of water and environment conservation

Preserve nature

## **Technological actions**

#### Air compressor cooling backup

**Scope**: installation of a backup connection in addition to the pumping station in order to avoid the use of potable water for cooling the compressors during pumping station maintenance

The initiative included:

- New piping installation
- Work procedure update

**Results:** no potable water use during maintenance (**500m**<sup>3</sup> saved per maintenance)

Value creation: reduction of potable water consumption





# Automated pH correction for wastewater

**Scope**: installation of equipment that automatically regulates the output and ensures that the wastewater PH remains within the required limits

The initiative included:

- New piping installation
- BMS parameters setting
- Work procedure update and training

Results: drastic reduction of out-of-range value

Value creation: water quality improvement

#### Venturi steam traps phase 1

**Scope**: replacement of the hydrostatic steam traps in building R with new venturi steam traps in order to reduce steam losses

The initiative included:

- Replacement of the steam traps
- Maintenance plan update

**Results:** reduction of steam losses in the condensate network with expected saving of **500m<sup>3</sup>**/year of lake water

Value creation: reduction of lake water consumption



![](_page_16_Figure_8.jpeg)

#### AI HVAC phase 2

**Scope**: improvement of the current algorithm using Al technology in order to reduce the energy consumption for cooling, heating and humidification. Since the steam is used for humidification, its savings is generating water saving, which is also higher than the steam saving because of the efficiency of the reverse osmosis process

The initiative included:

- New set points parameters
- Testing and validation of the algorithm

**Results:** water saving linked to steam consumption reduction estimated of **900m<sup>3</sup>/year** 

Value creation: reduction of lake water consumption

## **Performance, KPIs and Results**

Since 2019, PMPSA has drastically reduced its water consumption and consequently the impact on catchment surface water resources. This has played a major role in contributing to the mitigation of water-related physical risks such as water scarcity and baseline water stress that are affecting the catchment territory.

From 2019 to 2023, the absolute value of **saved potable** water was of  $\approx$  **19,250 m**<sup>3</sup>, equivalent to the annual consumption of  $\approx$  **385** water users (50 m<sup>3</sup> per user)

![](_page_17_Figure_3.jpeg)

We hope you enjoyed PMPSA water stewardship journey towards a more sustainable future.

![](_page_18_Picture_1.jpeg)