



PHILIP MORRIS  
INTERNATIONAL



ALLIANCE FOR  
WATER STEWARDSHIP

# WATER MANAGEMENT

PHILIP MORRIS

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**Water is one of the most widespread substances in nature and thus the most important natural resource, which is essential to the functioning of the ecosystem, society and economy. Without water, there is no life on Earth - its surface is covered with water in 71%. That is why it's so important to save it and make sure not to pollute it. Our future depends on it!**

The UN Sustainable Development Goals leave no doubt about the importance of water - both directly, looking at Goal No. 6 - Clean Water and Sanitation, and indirectly in goals such as No. 13 - Climate Action, and No. 15 - Life Under Water.

The evidence showing how important water is to everyone in the world, and the fact that we are increasingly seeing problems with it, speak for itself:

- Over the past decade, the World Economic Forum has ranked water-related risks among the top five worldwide in its annual Global Risks Report (SIWI, 2020).
- Climate change is causing an intensification of the water cycle in nature. Thus, it brings more intense rainfall and associated flooding, as well as increasingly intense droughts in many regions (IPCC, 2021).
- According to UNICEF and WHO reports, about 2.3 billion people worldwide lack soap and water to wash their hands at home (WHO/UNICEF 2021).
- Since 1970, the population size of freshwater species has declined by an average of about 84 percent. (WWF Living Planet Report, 2020).

The above facts leave no doubt as to how important matter is to take care of water resources, as well as to take an interest in the challenges and threats that affect water management in the region.

Philip Morris International has also responded to this challenge, adding the Alliance for Water Stewardship (AWS) certification to its core sustainability pillars in 2017.

The company's ambition is to have this standard certified at all of our facilities by 2025. The Kraków plant was PMI's eleventh plant worldwide and the second company in Poland to receive AWS certification in 2020. This is a great honor for us, but also an obligation. 2023 was a challenge for us, as we embarked on a recertification audit. Since the acquired AWS standard certification is valid for three years, last year's positive audit result allowed us to keep the certificate and renew it for another three years.

The implementation and keeping the AWS standard at the Kraków factory allows for sensible water management and the implementation of solutions to save water in ongoing production processes, but also to improve the quality of wastewater produced in the process. This standard enables broad stakeholder collaboration, provides a basis for discussion and allows us to analyze risks concerning water management in our region. Our goal is not only to save water in our production processes - we also strive to mitigate our impact on the water environment by taking care of biodiversity or educating our employees on environmental topics and more.

We present to you the Water Report, in which we have the honor and pleasure of sharing our activities and experiences, believing that some of them may inspire or be directly applicable to other organizations as well. We strongly encourage you to cooperate on the projects. Together we can do more!



We try to make sure that the actions we take respond to the threats in our region. Thanks to tools such as Water Risk Filter, we have the ability to identify them. Our biggest problem in the region is surface water pollution - unfortunately, the quality of water in our country's rivers and lakes is classified as high risk. The next classified risks in our region are shown in the adjacent table. The aforementioned risks are identified and discussed together with our stakeholders during meetings of the Water Alliance.

RISK	THREAT LEVEL
Surface water pollution	High ●
Flood	Medium ●
Deterioration of the ecosystem	Medium ●
Droughts	Medium ●
Amount of water consumption	Small ●
Access to sanitation and safe drinking water	Very small ●



From 2019 a local AWS standards team, led by a sustainability manager and a project leader, is working at the Kraków factory.

The team includes specialists from various departments such as: Primary (department for preparation of tobacco for production), Facility (department for maintenance of the building and installations and utilities), General Services (department dealing with services provided to PMI, i.e. canteen, laundry of work clothes or maintenance of green areas), Internal Communications and External Affairs and representative of Philip Morris Tobacco Ltd. (engaged in the contracting of tobacco for production and cooperation with tobacco growers).

We monitor our water consumption and identify areas, where we can implement new solutions or improve those already in place to take care of both the quality of wastewater and save water that is consumed in the manufacturing processes of our products.

**Below we cite some examples of technical and engineering projects we are implementing:**

1. Implementation of a process for washing adhesive apparatuses in closed loop washing machines.
2. Use of heat recovery water from a dryer for a wet dust collection unit in one of the Primary department's lines.
3. Reduction of the consumption of steam needed for the preparation of cut tobacco.
4. Replacement of key steam system dehydrators with modern ones using the Venturi effect.



# WATER SAVING

## GOALS VS. PERFORMANCE

In last year's Water Report, we declared that by 2024 we aim to reduce water consumption by 20 percent in comparison to 2020 (meaning the water we use for production processes).

### What stage are we at?

Comparing the figures at the end of 2023 with those of 2020, our water consumption has decreased by **19 %!**

In 2023, we used almost 12,000 cubic meters less tap water than in 2022, 54 percent from which was possible with reduction in the use of water diverted to the production process of our products.

We also monitor the water consumption of the process in an indicator per million cigarettes produced.



2021      2022      2023      2024



2,79\*



2,37\*



2,58\*



2,44



2,81\*



\* m<sup>3</sup> / milion cigarettes

We ended 2023 with a water consumption rate of 2.44 m<sup>3</sup>/million cigarettes, an achievement better than the target of 2.58 m<sup>3</sup>/million cigarettes.

Our target for 2024 is consumption of 2.81 m<sup>3</sup>/million cigarettes. It is higher than in 2023, which is due to the fact that our Kraków factory is in the process of transforming from a conventional factory to a dual factory producing innovative tobacco products that provide a better alternative for adult smokers - which results in the addition of new processes.



# WATER PROJECTS IN PMPL

## FOCUS ON FIVE AVS RESULTS:



GOOD WATER MANAGEMENT



SUSTAINABLE WATER BALANCE



GOOD WATER QUALITY



SAFE WATER SANITATION AND HYGIENE FOR ALL



IMPORTANT WATER-RELATED AREAS

### GOOD PRACTICES



#### Restoration of urban flower meadows



Together with the Urban Greenery Administration, we were able to restore 1.5 hectares of urban flower meadows, which had a positive impact on both the image value and biodiversity of the area. Flower meadows not only look, smell and even sound beautiful, but also have a positive effect on water retention, which is especially important in urban areas. Our employees also joined in the action, volunteering to sow meadows in Lotników Park.



#### Insect houses



Currently, nearly 7,000 square meters of land owned by Philip Morris Polska S.A. in Kraków are covered with flower meadows. To ensure that visiting insects can stay in the area longer, we installed seven houses for them during the spring. They were created during a workshop on insects that was held at our Misie Filipisie preschool for the children of the staff.



#### Pollinators - our friends

We received an unusually large number of beautiful entries for the photo contest of the above name. By holding a contest for employees, we wanted to remind them of the important role that insect pollinators play in nature.

## GOOD PRACTICES



### Cleaning up the Dłubnia River and the area of the planned Woźniców Park

For several years now, we have been participating in an action organized by our stakeholder: the EcoTravel Foundation, which invites residents to clean up the banks of the Dłubnia River twice a year. We are very satisfied with the fact that with each action there seems to be less waste. Sadly, tires, used equipment, construction waste, bottles that should never reach the riverbank, are still found.

In June, we were pleased to support the cleanup of the site of the future Woźniców Park. Together with the Urban Greenery Administration, councilors and residents of District XIV, we collected waste from the area, while learning about the development plans.



### Earth Day



As part of our Earth Day celebrations, every year we engage employees in actions to promote care for the well-being of the planet. This time we invited the Board of Directors to plant dozens of trees on the site, and a collection of electro-waste was held in cooperation with Remondis. Plant seedlings were distributed for participation in the collection. During the webinar, experts from the Urban Greenery Administration told our employees about the role of biodiversity in the city.



### Water Day



March was an opportunity for us to learn more about the problem identified as the biggest water risk in Poland - surface water pollution. An assessment of the condition of the water by the Environmental Protection Inspectorate showed that more than 90 percent of the water in the rivers is of poor quality. This is caused by a number of factors, but each of us can take action, such as joining cleanup campaigns, and in this way improve water quality. Through internal communication channels, we reminded our employees that clean water is not an infinite resource. We need to take care of it, because it is essential for life.

## GOOD PRACTICES



### New water filters in the halls



For the sake of our production workers, we installed seven new water filters in the production halls during the summer. Hydration is especially important when temperatures are high, so we are confident that water filters located closer to workplaces will be eagerly used. We also encouraged people to drink water straight from the tap via awareness campaigns and by donating SodaStream saturators at the annual Operations Conference.

### We educate in cooperation with Wodociągi Miasta Krakowa



In 2023, at one of the cyclical meetings of seniors, who worked at the Philip Morris plant in Kraków, we hosted a representative of Wodociągi Miasta Krakowa, who encouraged people to drink tap water.



We were also able to invite actors working with the waterworks to the Misie Filipisze staff preschool with a performance of "Wyprawa Batyskafem. Misja Skratek". During the performance, the children learned, among other things, what they should not throw into the sewage.



### Stakeholder meeting and workshop with service providers















Every year we meet with stakeholders of the Alliance for Global Water Adaptation to discuss and share experiences. This time the main topics were the quality of surface and groundwater in the region, green retention in the city, and a presentation of the Czysa Dłubnia campaign. For our part, we had the opportunity to share projects underway at the factory and good agronomic practices in the cultivation of tobacco.

At the workshop, we also met with representatives of the companies we work with on a daily basis at the factory. We had the opportunity to get feedback on the solutions we are implementing and suggestions on what we can do in the future.



## 2024 PLAN

### EXAMPLES OF ONGOING/PLANNED PROJECTS

PROJECT	IMPLEMENTATION DATE	AWS RESULTS	DESCRIPTION	PURPOSE
Support for the publication of "Z życia Łąk Nowohuckich"	January	 	Financial support for the printing and promotion of the publication of the C.K. Norwid Culture Center	Printing of 500 publications
Increase water retention capacity	December		Installation of storage reservoir and considering new options as part of the transformation	Improvement of water retention at PMPL site - installation of retention tank
Optimization of the tobacco dryer cooling process	July		Optimization of water consumption for the process	Reduction in consumption by 40 cubic meters
Webinar on Water Day covering water retention for employees	March	 	Increase of awareness of water retention opportunities	Engagement of 100 employees
Installation of drinking troughs for animals	July		Caring for animals appearing on the PMPL site	Installation of 2 drinking troughs
"Woda w obiektywie" photo contest for employees	August		Increasing of awareness of employees in the subject of water in an artistic way	Engagement of 50 employees
Improvement of filtration conditions on wet dust removal	December		Replacement of filter mats	Improvement of filtration efficiency and wastewater quality
Projects in collaboration with stakeholders	All year	  	Cleaning the Dłubnia River with the EcoTravel Foundation/a walk in the Nowa Huta Meadows with OKN/a trip for seniors from the WMK to Dobczyckie Lake	Improvement of filtration efficiency and wastewater quality





# SUSTAINABLE TOBACCO CULTIVATION AND GOOD AGRONOMIC PRACTICES

## (SUSTAINABLE TOBACCO PRODUCTION - STP)

The STP defines sustainable tobacco production as the efficient production of high-quality raw material under conditions that reduce environmental impacts as much as possible and improve the socio-economic conditions of the communities involved in its production.

The STP defines the rules and criteria that should be met by all those who cultivate and supply tobacco to STP producers.

They are organized around four thematic areas:

1. Cultivation
2. Environment
3. Society
4. Management

The STP also includes defined local best practices, by which planters are judged during the growing season. The evaluation is carried out on an ongoing basis by PMPL-T agronomic advisors, as well as by external entities designated by PMI.





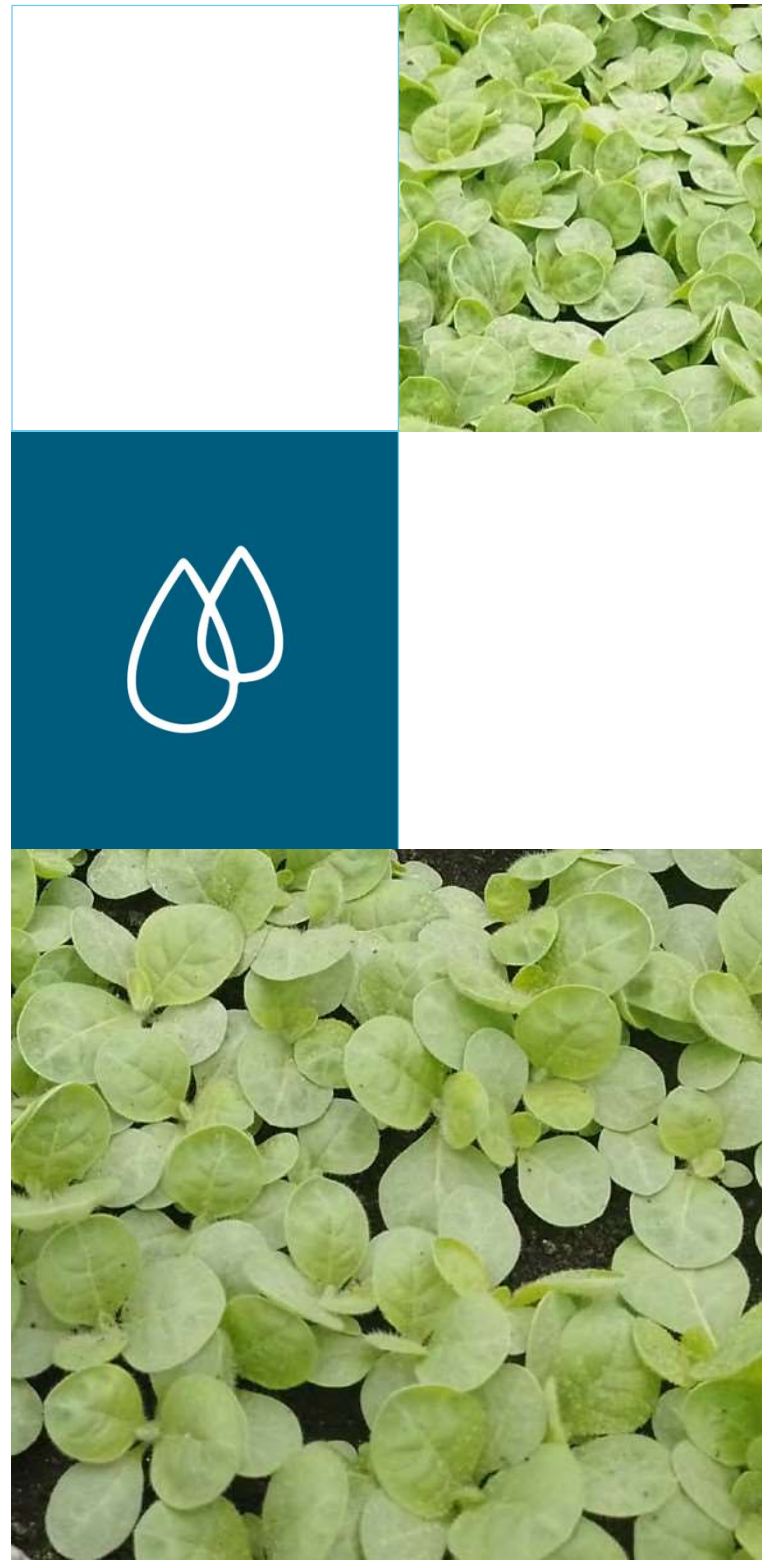
# SUSTAINABLE TOBACCO CULTIVATION AND GOOD AGRONOMIC PRACTICES

## (SUSTAINABLE TOBACCO PRODUCTION - STP)

Water is essential for all forms of life and is a necessary element of agricultural production. It must be used in the right amounts and at the right time to achieve the best results in your crop. Fertilizers improve plant growth, protectants protect them, but these substances can pass into groundwater or watercourses and affect aquatic ecosystems.

### That is why it is important to:

- Manage water resources in such a manner that pollution does not occur and quality is preserved or improved. Compliance with existing laws, management of potential water pollution, introduction of buffer zones are taken as a minimum.
- Avoid fertilizer application during times of increased leaching and preparation of crop protection products near watercourses.
- Store agrochemicals, fertilizers or manure in a way that prevents water contamination.
- Maintain buffer zones, when applying plant protection products - min. 10 m from watercourses and bodies of water.





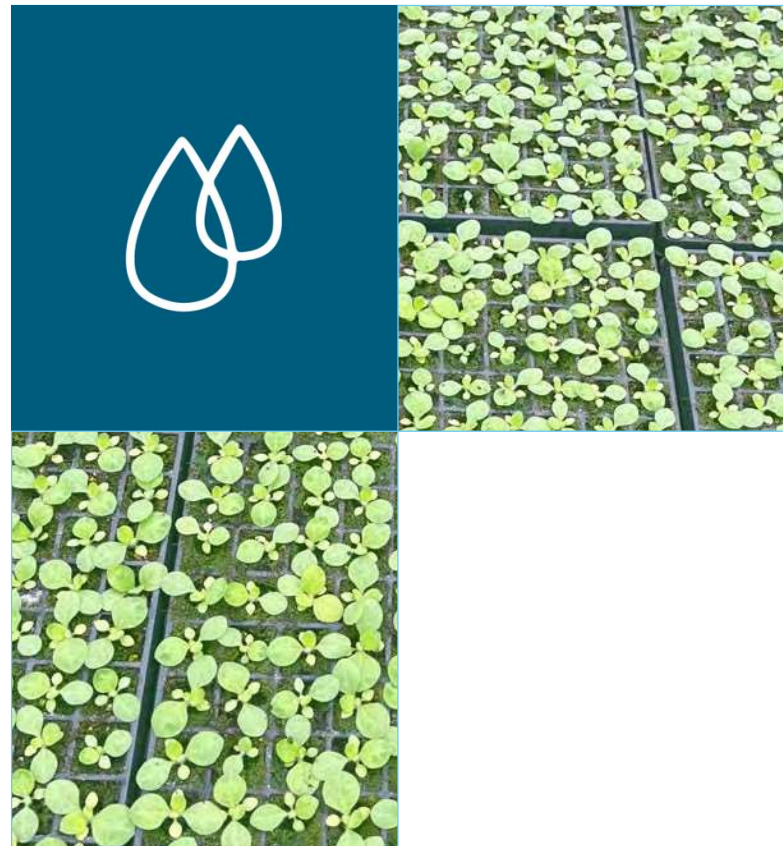
## WATER RISK ASSESSMENT

PMPL-T regularly undertakes water risk assessments in tobacco-growing regions based on data from recognized institutions such as, among others: Central Statistical Office, Chief Inspectorate of Environmental Protection, Institute of Cultivation, Fertilization and Soil Science, National Research Institute, National Fund for Environmental Protection and Water Management, Polish Waters, and own data collected during visits to farms and plantations of farmers from whom it buys tobacco.

### The assessments include:

- availability of surface and groundwater,
- rainwater availability (seasonal variability, risk of drought, floods, local washouts),
- impact of upstream and downstream agricultural land use,
- water pollution and contamination,
- water management.

Awareness campaigns for planters are being conducted, in order to draw their special attention to the environmental aspects of the crop, including water management, among others.



To assess the impact of atmospheric phenomena on yield quality and quantity, PMPL-T regularly monitors and analyzes data provided by the Institute of Meteorology and Water Management (IMGW) and the Agricultural Drought Monitoring System (SMSR) of IUNG and proposes preventive measures to planters, such as:

- rainwater collection for watering the seedbed,
- implementation of regenerative agriculture practices,
- using varieties that are less sensitive to drought,
- optimal planting date,
- planting on ridges,
- buffer zones around water bodies.

# WATER MANAGEMENT

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