



PHILIP MORRIS INTERNATIONAL



Philip Morris Water Management

Last updated 07/2023





Water is the most important natural resource, which is essential for the functioning of the ecosystem, society, and economy. Without water, there is no life on Earth. That's why it's so important to conserve it and make sure not to pollute it. Our future depends on it!

According to the World Health Organization, about 8 million people worldwide do not have access to clean drinking water. More than 3.5 million die each year from diseases caused by the consumption of dirty unfiltered water. According to the World Economic Forum, the most likely crisis we may face in a dozen or so years will be a shortage of clean water, which will entail problems with food and energy production. In this scenario, we need to start requiring ourselves to manage water responsibly and sustainably in a way that goes beyond legal compliance. Philip Morris International also responded to this challenge by introducing the Alliance for Water Stewardship (AWS) certificate to its main pillars of sustainable development in 2017. The company's ambition is to certify the standard in all our plants by 2025. The Krakow factory was the eleventh PMI plant in the world and the second company in Poland to receive the AWS certificate in 2020. This is a great honour for us but also a commitment.

AWS certification is based on a standard that enables water users to reduce their water footprint, mitigate water-related risks, and manage water in a transparent and collaborative way with stakeholders operating in the same territory. It is a global tool that helps its partners in sustainable water management in a transparent and formalised way.

Why are we doing this? Thanks to the fact that we have implemented the standard, we know what are the greatest risks related to water in the locations where we work. Believe us that depending on the regions of the world they are very different. We have conducted an in-depth analysis of water consumption at various stages of our production processes, which allows us to look for saving opportunities. We have also collected a wealth of information on indirect water use, including in the supply chain and the services provided, which helps us make more informed business decisions. We limit water consumption in the plant. We have the opportunity to cooperate with various entities in projects related to sustainable water management.

We present to you the Water Report, in which we have the honour and pleasure to share our experiences, believing that some of them can also be used in other organisations. We strongly encourage you to cooperate on the projects. Together we can do more!

Local AWS Team of Philip Morris Polska Tobacco Sp. z o.o. (PMPL–T) and Philip Morris Polska S.A. (PMPL)



The actions we take should respond to the needs of a given region. The biggest problem in our area is the pollution of surface waters; unfortunately, the quality of water in rivers and lakes in our country is very poor. Floods and droughts, inevitably influenced by climate change and ecosystem degradation, pose a medium level threat. Another threat is the strain on water consumption and the depletion of its resources.

Thanks to monitoring activities, we were able to identify many areas for improvement. These include both process optimization activities and the implementation of water conserving technologies. The most important projects launched last year are the following:

1. Reduction of steam consumption by integrating steam and adiabatic humidification systems in the shop floor producing tobacco products.

2. Replacement of osmotic membranes at water treatment plants.

3. Reduction of the consumption of steam needed for the preparation of cut tobacco.

4. Change of software supporting the internal distribution of substances between tanks



PHILIP MORRIS

INTERNATIONAL

As a result of the projects implemented in the factory in 2022, we anticipate water savings of almost **9,000 m3** per year



Since **2019** Primary and Diet Department zmniejszył has reduced water consumption by more than **One-third**



Since 2019, PMPL has been engaging its employees and stakeholders in projects related to the protection of water resources and green areas, raising awareness in the field of sustainable water management.



By 2024 PMPL aims to reduce its water consumption by 20% compared to 2020.

In 2022, the total amount ofwaterconsumed was 187 979 m³ from the municipalwater system. Year by year, the rate of water consumption per million cigarettes produced is also decreasing, however, at a slower rate than we predicted some time ago.



*m³ / million cigarettes





Our water projects at PMPL focus on 5 AWS results:





GOOD WATER GOVERNANCE

SUSTAINABLE WATER BALANCE



GOOD WATER QUALITY STATUS



IMPORTANT WATER-RELATED AREAS



SAFE WATER, SANITATION AND HYGIENE FOR ALL (WASH)

GOOD PRACTICES



Sowing meadows with flowers

We are actively working to increase the share of green areas. This year, areas of 1,100 m² were designated, on which flower meadows were sown. Flowers that are not only melliferous but also aesthetic have been sown.



Animal protection programme

We know how important environmental education is from an early age. That is why, in October, in "Misie Filipisie" kindergarten, classes with a beekeeper were conducted, who educated children about the role of bees and other insects in the ecosystem. During the classes, children also had the opportunity to insect paint houses, which will be installed in the green areas next season.



Nanołączki [Nano-meadows]

In cooperation with the Flower Foundation, distributed 150 flower seeds that could be sown on a balcony. Thanks to this, you could have your own meadow full of colours and greenery at your fingertips.

















GOOD PRACTICES

Cleaning of the Dłubnia River

In cooperation with stakeholders from the EcoTravel foundation, took part in the cleaning of the Dłubnia River flowing through Kraków. The river was cleaned by people during kayaking and by people walking along the shore. Participants were given prizes for participation. The result of the action was the collection of many kilograms of garbage that polluted the river area.









 Konkurs "Kropla do kropli" na Platformie PMI Masters Oszczędzanie wody w fabryce PMPL
Pomysły można zgłaszać do 30.04.2022
Zbiórka elektrocodpadów przed budynkiem G Wymień zużyty sprzęt elektryczny lub elektroniczny na nagrody 26.04.2022 wtorek s.3:00.9:30 oraz 13:00-15:00
Webinar "EKO kosmetyki dla domu: sprzątanie, kuchnia i pranie" Warształy tworzenia ekologicznych środków czystości 10:05:2022 - 13:00 w j. polskim
MENENCEN EVENENCE EVENENCE

Obchody Dnia Ziemi

ień Ziemi oficjalnie obchodzimy 22 kwietnia, ale dla nas jeden dz za mało. Działania dla Ziemi prowadziliśmy w naszej fabryce zar wietniu, jak i w maju. Dziękujemy Wam za zaangażowanie!

onkurs "Kropia do Kropil" toda bijedne začenijacych sasobon, atego v manch konkursu "Gogla do oda" žiteratilim povityk, u jaki posobi otava oszczędzać wodę w takryce. zestawitkiek klaskiterije bundo ekswych koncepcji Tirzij pracownicy:

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 Medina 12

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tyły sadzona rostin rozdziwane dzan istone odpady. dod ity: ekokosmetyki o śre ie, że proszek do prania czy płyn lepsi

Earth Day

We raise the awareness of employees by conducting many campaigns promoting care for the well-being of the planet. The PMI "Every Masters drop counts" competition encouraged employees to submit ideas on how to conserve In cooperation water. with Remondis, a collection of e-waste was also held. Plant seedlings were distributed for participation in the collection. "Eco-friendly cosmetics for the home: cleaning, kitchen and laundry" workshop also was conducted, during which 183 employees learned how to make their own detergents at home.



Water Day

As every year, we conduct special activities on the World Water Day. A quiz was organised to check general knowledge about water and where it comes from. Those interested could also find out where the water in PMPL comes from. In addition, using the mass media. the sustainable development team reminded everyone about the holiday and about respecting water and reducing its consumption.



W zależności od tego, w której części Krakowa mieszkasz - jesteś zaopatrywany przez inny zakład uzdatniania wody. W niektórych obszarach woda pochodzi z więcej niż jednego zakładu. Jeśli chcesz dowiedzieć się.

skąd bierze się woda w Twoim domu wejdź na stronę Wodociągów Miasta Krakowa. Fabryka Philip Morris Polska zaopatrywana jest w wodę z dwóch źródeł – z ZUW

radrywana jest w wodę z uwoch zroden – 220 Raba oraz z ZUW Rudawa. Poniżej garść informacji na temat krakowskich zakladów uzdatniania wody.

Zakład Uzdatniania Wody Raba

jwiększy, mogący wyprodukować 186 tys. m^a wody na dobę zakład wodociągi ikowskich.

Dbecnie zaopatruje w wodę ponad połowę mieszkańców Krakowa a także lostarcza ją do kliku innych miejscowości (m.in. Dobczyc, Myślenic, Świątn jórnych. Sieprawia i Wieliczki).







PHILIP MORRIS INTERNATIONAL

GOOD PRACTICES

Cleaning meadows in Nowa Huta

In cooperation with ZZM (*Municipal Greenery Board*), MPO (Municipal Cleaning Company) and PMI Volunteer Club, we took part in cleaning Nowa Huta meadows.

The result of the action was the collection of 55 bags full of garbage, car tires and a TV set.



Zaangażowanie partnerów

Lidoym z katych (polic) by Andred Largels, a predox wydziała Gospodeń Konnanie (a Klametu Ungels Massu Roberto D, retrostanist instructional (a klametor) i polici s descaje ministraji o ministi klamitski u klameto polsków planu znalady się mini, szvert w klamotu szegzychi rozprozonaj oparej na energi odowskiesi rowaj trendw siejechych (w tym particki w klastrokowski) u modernizaji klamitskych bydyków. Okauje się ji w wielu szektach działania władz miasta są spójne z politykami firm prywatnych w zakresie ochrony środowska o daje szanie na doby wydołrzacz.

steimy dumni, še duistania nastej proji na razez zasobów wodnych stały docenione, ale pamiętajmy ie rewardziłych to nie tylio nagroda, ale rezie wszystkim obowiązanie, by swoich działaniach i planech hymowsze polityke srównowatonego rządzania wodą. W tym wszystkim okudatorze i współpraca z lokalowym okudatorze i współpraca z lokalowym terzemi, głyż przystelić cywilitacji letry od wody", jak zawady francusti letry od wody", jak zawady francusti



Posprzątajmy Dłubnię!

Drodzy, czas na mobilizację! Dość śmieci w naszych nowohoućih rzekachi Zaprzaszamy na dziesiątą edycję akaj sprzesłan – zczysta Dubnieł, rkolero oganizatorem test Fundacja EcoTravel. Obszar sprzątania to ul. Mekinos Wańkowicza, jest to ak. Jr4 ha. Teren jest mocno zrbinicowany - prowadzey droga, a potem biotniaj kenia Gostia wrodu rzek Dubni. W skaji mozła wsieć udział każdy – zaberz za sobą rodzinę i zmajemych Pamatejskie o wyzdomno bubwi i stroju

Kiedy? 9 października (niedziela), od godziny 11:00 Gdzie start? Zalew Nowohucki przy Grill Manhattan 88Q przy ul. Bulwarowej (okolice Domu Wędkarza) Kto mote wtięł udział? Katydr Zapraszamy do udziału z ardułemi jerzejadziej

co zabrać ze sobą? Wygodne obuwie, stró lostosowany do pogody i dobry nastrój @





Meeting with stakeholders

We maintaine high partner involvement. This is evidenced by a meeting with stakeholders, during which important topics related to energy and climate change were discussed. PMPL's efforts to protect water resources were appreciated as well. It is worth remembering that the AWS certificate is not only an award, but above all a committment to continue the policy of sustainable water management in its activities and plans.



Testing the quality of groundwater on the premises of the plant

In 2022, groundwater quality tests were carried out on the premises of the plant.

These tests are important for maintaining good quality groundwater in the PMPL and adjacent areas.















PHILIP MORRIS **INTERNATIONAL**

WASH campaign

We run an active campaign reminding about good habits. The aim of the campaign is to increase employees' awareness of, among others, the principles of proper hand washing, i.e. washing with warm water, also washing the outer parts of the hands for 30 seconds.

GOOD PRACTICES



Educational campaign about the AWS standard

During the campaign, PMPL educated employees about what the AWS standard is for, what actions are being taken to reduce water consumption and what activities have been organised and will be organised in the future. The campaign also encouraged the implementation of good water-conserving habits.



MYJĘ RĘCE

MYJĘ RĘCE

Są lepsze zajęcia

niż chorowanie.

zajecia

ze

niż chorowanie.

Conference with AGH

KONFERENCJA

3

In 2022, we had the opportunity to participate in the Responsible Business Conference organized at AGH. We introduced students and other participants of this event to related to sustainable topics water management in the conducted enterprise and workshops on risk management in water management. It was also an opportunity for us to talk about the AWS standard and the actions we take within it.



TO NIE CZAS NA LANIE WODY.

Według ONZ do 2030 roku prawie połowa populacji może żyć na obszarach o poważnym niedoborze wody.



W PMI stosujemy praktyki, które pomagają w odpowiedzialnym

Materiał powstał w ramach projektu AWS, realizowanego przez PMPL, który ma na celu dbanie o zasoby wodne naszej planety i higienę.

W naszej fabryce zamontowaliśmy **wodomierze**, które monitorują i wykrywają wycieki. Sadzimy drzewa i zasialiśmy t**ąki kwietne** które utrzymują zdrowy ekosystem wodny na terenie zakładu.

zarządzaniu wodą.



WATER STEWARDSHIP

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WATER STEWARDSHIP





PLAN FOR 2023 - selected activities implemented in the first half of the year

Activity	Implementation date	AWS outcomes	Description
Engineering and technical projects	2023		Projects aimed at reducing water consumption, its recycling and improving the quality of wastewater
Increasing acces to water	January/June		Installation of water dispensers in production halls and handing over saturators to employees
Stakeholder meeting	June		Sharing experiences and expanding knowledge about water challenges
Water Day	March		Raising employees' awareness about water consumption
Earth Day	April/May		Electronic waste collection, tree planting, biodiversity webinar
Insect hotel, "Pollinators competition"	May/June		Installation of seven bug hotels and a competition for the best photo of a pollinating insect
Walk around planned Park Woźniców	June		Familiarization with the concept of the park along with cleaning the area
Renewal of flower meadows in Kraków	Мау		Resowing flower meadows by volunteers





SUSTAINABLE TOBACCO PRODUCTION (STP) GOOD AGRONOMIC PRACTICES

The STP defines sustainable tobacco production as the efficient production of high-quality raw material under conditions that limit as much as possible the impact on the natural environment 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 organised around four thematic areas:

- ✤ Cultivation
- Environment
- Society
- Management

The STP also includes defined local best practices, according to which growers are assessed during the cultivation season. The assessment is on an ongoing performed **PMPLT** basis bv agronomic consultants, as well as by external entities indicated by PMI.





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. Fertilisers improve plant growth and protection products protect them; however, 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 way that pollution does not occur and quality is maintained or improved
- Compliance with applicable laws, management of potential water pollution, introduction of buffer zones are assumed as minimum
- Avoid applying fertilisers during increased leaching and preparation of plant protection products near watercourses
- Store agrochemicals, fertilisers or manure in a way that prevents water contamination
- Maintain buffer zones during the application of plant protection products - at least 10 m from watercourses and water reservoirs.







WATER RISK ASSESSMENT

PMPL-T regularly undertakes risk assessment of water in tobacco-growing areas based on data from recognised institutions, including: The Central Statistical Office, the Chief Inspectorate of Environmental Protection, the Institute of Soil Science and Plant Cultivation – State Research Institute, the National Fund for Environmental Protection and Water Management, the State Water Holding Polish Waters, and own data collected during visits to farms and plantations of farmers from whom it purchases tobacco.

The following are assessed:

- Availability of surface and underground waters
- Availability of rainwater (seasonal variability, risk of drought, flood, local drainless pits)
- The impact of the use of agricultural land in the upper and lower reaches of the river
- Water pollution and contamination
- Water management

Information campaigns for growers are carried out to draw their attention to the environmental aspects of cultivation, including the management of water resources. In order to assess the impact of atmospheric phenomena on the yield quality and quantity, PMPL-T regularly monitors and analyses the data provided by the Institute of Meteorology and Water Management (IMGW) and the Agricultural Drought Monitoring System (ADMS) of the Institute of Soil Science and Plant Cultivation (IUNG) and suggests preventive measures to growers, including:

- Collecting rainwater for watering the seedbed
- Implementation of regenerative farming practices
- Cultivation on ridges
- Using less drought-sensitive varieties
- Optimal planting date
- Planting on ridges
- Buffer zones around water reservoirs



