# **Corporate Social Responsibility Report 2022**





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# Letter of the Management Board

102-14 Statement by senior management

Ladies and gentlemen,

We present you with the next Corporate Social Responsibility Report for 2022. We do this by being aware of the times in which we all live, i.e. the many threats arising both from the war in Ukraine and the global crisis, both economic and environmental.

This time also poses unusual challenges for the water supply and sewage industry. We are responsible for critical infrastructure in the area of public utilities, we are responsible for the continuity and security of water supply and sewage disposal.

The Warsaw Waterworks (*Wodociągi Warszawskie*), working like everyone else, in unusual circumstances, fulfilled their mission and fulfilled their goals in a consistent and effective manner. As always, the most important are the objectives of water treatment and safe water supply and the lawful discharge of waste water. At the same time, we continued our activities in the investment area, both those that are important in the context of the entire city and smaller ones, but very important for the development of the network, and especially important for residents.

Last year, we built and modernized almost 69 km of water supply and sewage system. We have commissioned photovoltaic installations on the premises of the Company's plants and facilities, including the Nowodwory Pumping Station, the Northern Plant, the Białołęka Zone Station and the Dębe Plant. We have completed the modernization of the collector at Bacha, Sikorskiego and Witosa streets and rebuilt the Powiśle II Sewage Pumping Station. We have also increased the share of energy produced internally from both biogas and photovoltaics. Thanks to the use of state-of-the-art construction methods, including trenchless technologies, the works carried out were less burdensome for residents of the city. We plan and execute our investments with respect for the natural environment, effectively managing its resources. Bearing in mind the dynamically progressing climate change, in cooperation with the Warsaw authorities, we continued work to counteract its effects, including the increasingly frequent phenomena of hydrological drought or storm surges. We implement modern technologies, develop a circular economy and gradually strive to achieve energy self-sufficiency of all our plants. At the same time, we develop and care for internal management systems, including cybersecurity.

No change, no innovation, no design would be possible without our employees. It is thanks to their professionalism and commitment to everyday work that we perform tasks at a high level. As a good employer, we ensure stable employment, professional development, safe working conditions and an atmosphere based on values such as respect, friendliness and kindness. Together, since the beginning of the war in Ukraine, we have actively participated in helping Ukrainians, participating in many projects of the President of the capital city of Warsaw. The efforts of our employees are also appreciated by the residents of Warsaw and the municipalities to which we provide services, which is confirmed by our regular surveys. MPWiK is perceived as a reliable enterprise, and 86% of Warsaw residents positively assess the quality of the water we supply.

We are pleased to present the Corporate Social Responsibility Report for 2022.

Management Board of MPWiK

# About us

**MPWiK's mission** 

Our vision

Value system

**Company and authorities** 

**MPWiK in numbers** 

Water supply operations and sewage ssystem

Water supply plants

Sewage disposal and sewage treatment plants

**Our customers** 

**Tariffs for service recipients** 

**Our suppliers** 

**Industry position** 

Membership in organizations

**Prizes and awards** 

New visual identification





# **MPWiK's mission**

Every day, we contribute to the development of Warsaw and its neighboring municipalities. For the sake of the highest quality of provided services, we provide water and discharge and treat wastewater with respect for the natural environment. We do it all for us and for future generations.

# **Our vision**

We are constantly strengthening our position among the best European companies. In an atmosphere of cooperation and respect, we care about the high quality of our services addressed to residents. As we grow, we do not forget the natural environment from which we derive the best. Our value is our employees who have a real impact on the development of the Company every day.

# Value system

102-16 Values, principles, standards and norms of behavior in the organization



About us

# **Company and authorities**

### 102-5 Form of ownership and legal form of organization

By operation of law from 1<sup>st</sup> January 2003. Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji in Warsaw was transformed into a joint-stock company. From that moment, Warsaw became its sole Shareholder.

102-18 Governance structure

### **General Meeting of Shareholders**

The Capital City of Warsaw, on behalf of which acts the Mayor of Warsaw.

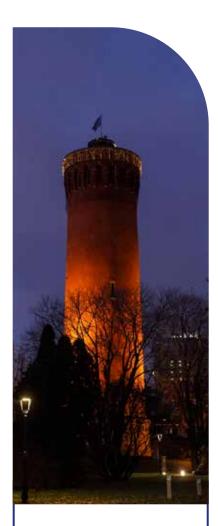
### Supervisory Board (as at 31.12.2022):

Tomasz Bratek - Chairman of the Supervisory Board,
Jacek Drozd - Member of the Supervisory Board,
Wojciech Duch - Member of the Supervisory Board,
Jarosław Jóźwiak - Member of the Supervisory Board,

Ludwik Rakowski – Member of the Supervisory Board,

Sławomir Stanisławski - Member of the Supervisory Board.





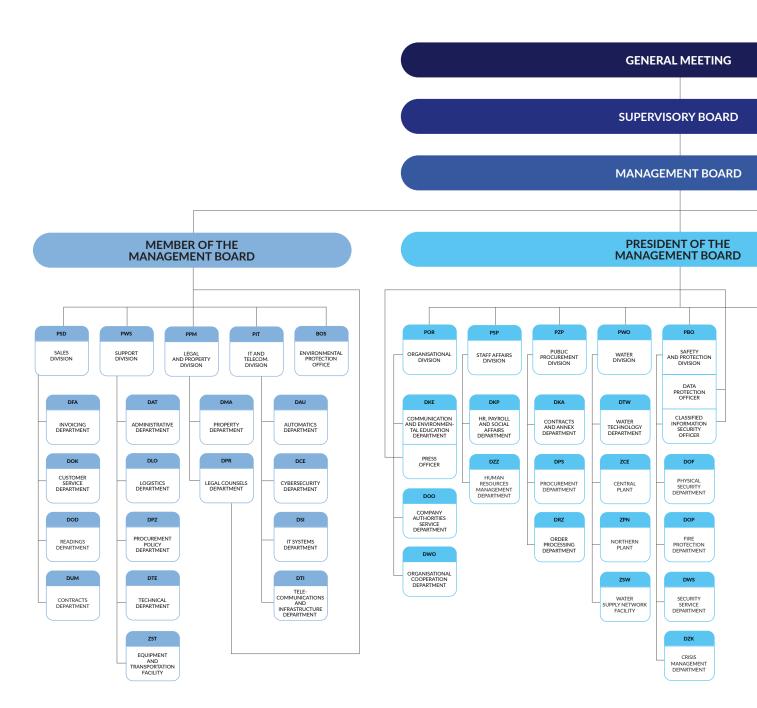
## Management Board (as at 31.12.2022):

Renata Tomusiak - President of the Management Board,

**Dariusz Dąbrowski** – Member of the Management Board,

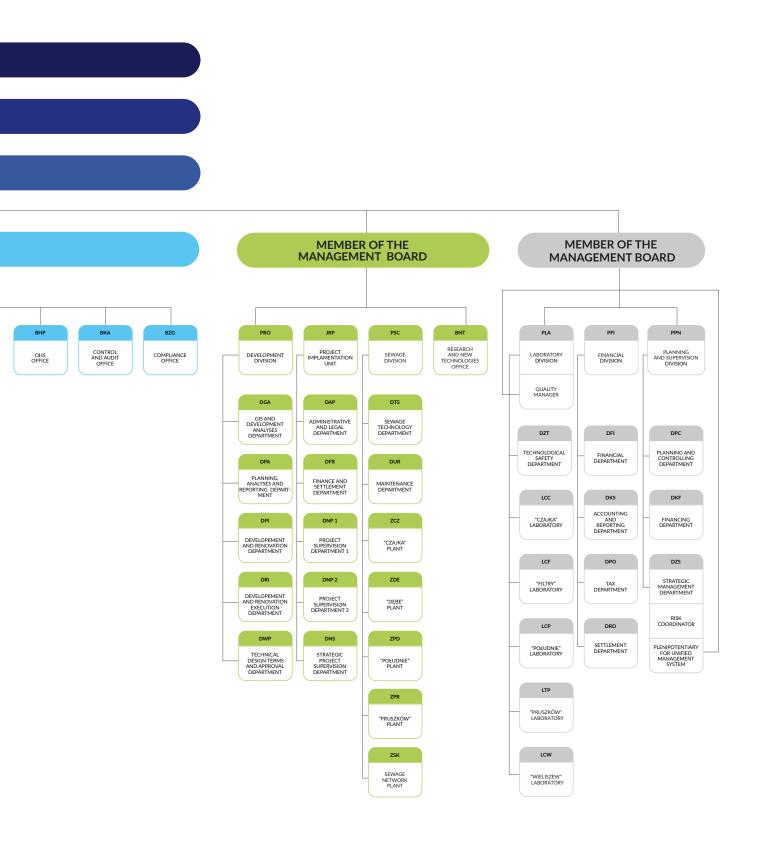
Lucyna Golatowska – Member of the Management Board,

**Tomasz Mencina** - Member of the Management Board. Organizational structure of the Company in 2022.



102-1 Organization name

As Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji w Warszawie S.A., we are the only servants in the capital who, on behalf of the municipality, perform tasks in the field of collective water supply and collective waste water drainage and treatment. We operate in the public utility sector, which is why with our activities we significantly contribute to increasing the comfort of life of residents, undertaking initiatives in line with the idea of sustainable development and care for environmental protection.



# **MPWiK in numbers**

102-7 Scale of operations

We are the largest water and sewage company in Poland and one of the largest in Europe. This is evidenced by the following values:



# Water supply and sewage system operations

102-2 Main brands, products and services 102-6 Markets served

Our services are provided in the following areas:

# collective water supply or collective sewage disposal in Warsaw and:

- the city of Piastów,
- the city of Pruszkow,
- the municipalities of Michałowice,
- the municipality of Nieporęt,
- the municipality of Raszyn,
- the municipality of Serock,
- the municipality of Wieliszew,
- the municipality of Brwinów;





### water supply and sewage disposal or treatment pursuant to the provisions of the Civil Code to local water supply and sewage companies with:

- the municipality of Brwinów,
- the municipality of Michałowice,
- the municipality of Izabelin,
- the municipality of Stare Babice,
- the municipality of Lesznowola,
- the municipality of Piaseczno\*\*,
- the town of Zabki,
- the town of Marki,
- the town of Legionowo\*,
- of the town and municipality Ożarów Mazowiecki\*\*\*.

\* Sewage treatment only

\*\*\* Including waste water treatment and sewage disposal

<sup>\*\*</sup> Water supply only

# Water supply plants

The source of water for Warsaw and the surrounding towns and municipalities are the Vistula River and Lake Zegrzyńskie. They cover approximatelly 99% of the demand of residents. The remaining 1% comes from local underground water intakes located in the Wawer and Wesoła districts. Infiltration water, taken from beneath the Vistula River bottom through the intakes sites of the Central Plant, covers about 70% of the demand for water intended for consumption by the residents of Warsaw.

### **Central Plant**

- "Filtry" Water Treatment Station
- "Praga" Water Treatment Station

The structure of the Central Plant also includes local treatment stations and pumping stations intaking deep water:

- "Radość" Water Treatment Station,
- "Falenica" Water Treatment Station,
- "Stara Miłosna" Water Treatment Station,
- "Wola Grzybowska" Water Treatment Station,
- OSP Centrum Pumping Station.

### **Northern Plant**

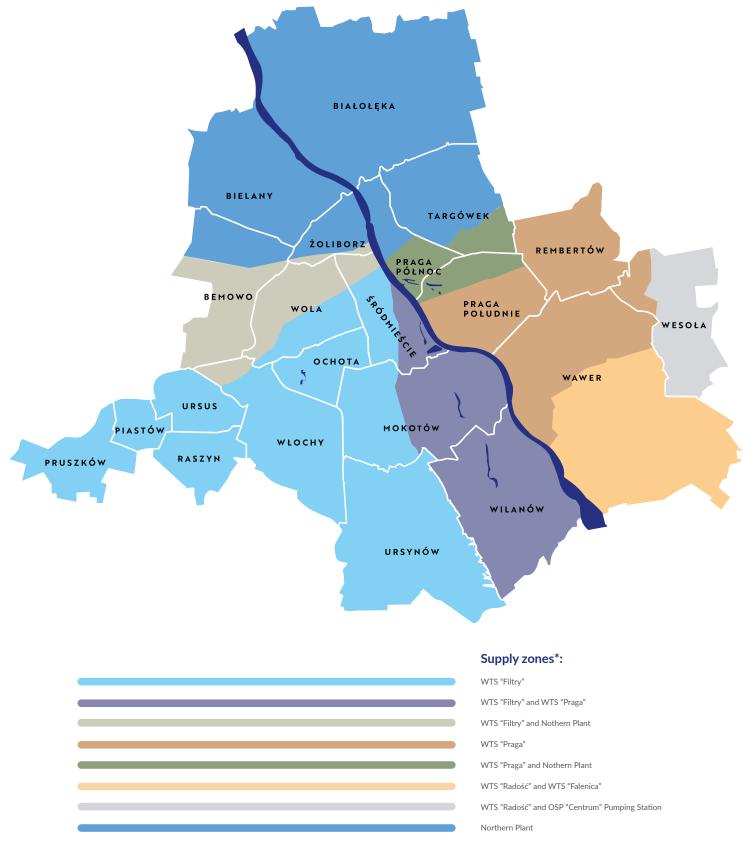
### "Filtry" Water Treatment Station

- the oldest water treatment plant in Warsaw, which since 1886 has been supplying water to residents of the capital. It was designed by William Lindley, a British engineer, and its construction was supervised by his son, William Heerlein Lindley.

During the day, the station treats about 190,000 m<sup>3</sup> of water, which is more than half of the demand of the Warsaw agglomeration.

### "Praga" Water Treatment Station

began operation in 1964, with the launch of "Gruba Kaśka" – the largest infiltration well in Europe. Its originators were Władysław Skoraszewski – the author of the project and Stanisław Wojnarowicz –then director of the MPWiK. "Praga" WTS collects water from beneath the Vistula River's bottom using three infiltration intakes. **The Northern** Plant was launched in 1986. Since 2010, a modern, currently modernized Pressure Flotation Station has been operating within it. It was the first facility in Poland to use the pressure flotation technology in water treatment.



 $^{\ast}$  Supply zones depend on the current water consumption of residents





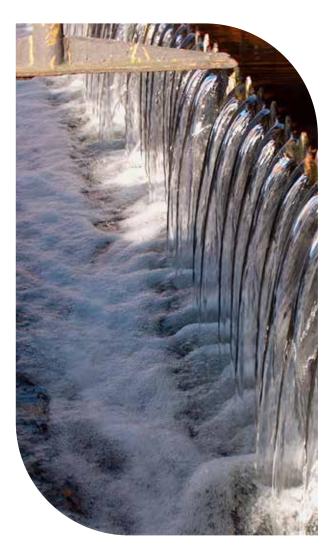


# Sewage disposal and treatment plants

Collecting of municipal and industrial sewage, infiltration water and rainwater (for the combined sewage system) to the city sewage system, and then treating and discharging to the receiver is our second core task.

Within the structure we operate four sewage treatment plants:

- "Czajka" Plant,
- "Południe"" Plant,
- "Pruszków" Plant,
- "Dębe" Plant.



"Czajka" Plant is a biological treatment plant with enhanced removal of nitrogen (N), phosphorus (P) compounds, meeting the standards of wastewater discharged for agglomerations of ≥ 100 000 residents. Thanks to extensive modernization of the plant in 2009-2012, the sewage from the right and left bank of Warsaw and Marki, Legionowo, Jabłonna, Zielonka and Ząbki flow into the treatment plant. "Czajka" is the largest wastewater treatment plant in Poland in terms of capacity.



### **"Pruszków" Plant** was established in 1969. In 2013-2015, we expanded the process line with two new biological reactors with secondary precipitation tanks, built a new separate fermentation chamber and a biogas cogeneration unit.



- "Pruszków" Plant,
- "Dębe" Plant.

a small combined share of industrial sewage. This mechanical-biological treatment plant, which consists of two process lines, was put into operation in 2006.







# **Our customers**

Customers of our services include:





We provide access to water treatment and sewage treatment services to

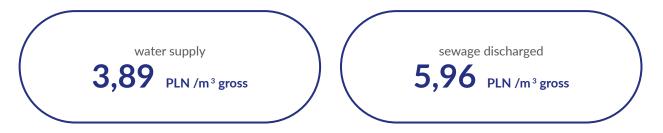
# more than 98%

residents of Warsaw agglomeration.

23

# **Tariffs for service recipients**

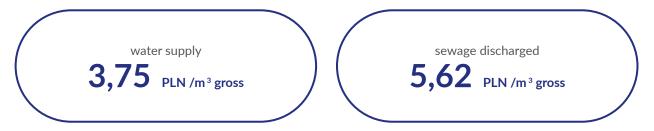
Prices for **Warsaw** communes of **Michałowice**, **Nieporęt**, **Raszyn**, **Serock**, **Wieliszew**, and municipalities of **Piastów** and **Pruszków** were assumed at **PLN 9,85** per cubic meter gross, including:



According to the new tariff approved by Państwowe Gospodarstwo Wodne Wody Polskie, from January 27, 2023 residents of Warsaw and its suburbs will pay **4,29 PLN/m**<sup>3</sup> water and **6,59 PLN/m**<sup>3</sup> sewage in the first year of tariff validity.

.....

Prices for Company's customers in the **Brwinów** commune amounted to PLN **9,37** /m<sup>3</sup> gross (valid until November 29, 2022), including:



In accordance with the Decision of the State Water Company Wody Polskie, October 27, 2022 number WA.RZT.70.3.2021/17 the tariff for collective water suplly and collective sewage discharge was approved, effective from November 30, 2022.

water for human consumption <b>3,80</b> PLN /m <sup>3</sup> gross		water for other purposes <b>3,82</b> PLN /m <sup>3</sup> gross	
5	sewage discharged		

# **Our suppliers**

Relations with suppliers who ensure the continuity of the Company's operations are important to us. Guaranteeing and maintaining safety are our top priority. We have signed contracts with leading media suppliers with the appropriate potential and service services.



### Electricity

We have signed a contract with one major electricity supplier with national coverage and distribution agreements with three electricity distributors.

The value of electricity services provided to our Company in 2022 amounted to approx.

# PLN 76.74 million

(turnover – PLN 60.50 million, distribution – PLN 16.14 million, reinvoices – PLN 0.10 million).

### Natural gas

Our natural gas supplier is a supra-regional operator. The value of services provided in 2022 amounted to approx.





### Thermal energy

We have concluded a contract for heat energy with a network operator from Warsaw. The value of services provided in 2022 amounted to approx.

PLN 4.72 million.



# **Position in the industry**

As part of strengthening our position in the industry, in 2022 we were involved in the following events:

### **Rankings:**

The 11<sup>th</sup> edition of the National Ranking of Water and Sewerage Companies for 2022 organized by the editors of the "Strefa Gospodarki" magazine; we achieved the first place ex aequo with Katowickie Wodociągy S.A., thus confirming the leading position in the industry year-to-year (the evaluation of the companies participating in the ranking took into account the scope of: economic. financial and technical data, effectiveness in obtaining EU funds, HR and training policy, cooperation with local communities and support for CSR initiatives).

### **Conferences and congresses:**

- 20th Anniversary International Conference, Exhibition and Technology Shows Trenchless Engineering 2022, during which a trenchless method was presented, which most often investments are made in our Company, including the construction of the Vistula River collector, Linde Bis or Mokotowski Bis,
- Perspektywy Women in Tech Summit 2022 at the Expo XXI Center in Warsaw, attended by over 10,000 participants from 73 countries around the world, over 500 speakers, 250 scholarship holders from Central and Eastern Europe



in five stages: Inspirational, Technological, Future Labs, career and Climate Positive Zone on environmental education,

8<sup>th</sup> Congress of Polish Water Suppliers, i.e. the largest conference event in the water and sewage industry organized by the Chamber of Commerce "Polish Waterworks," which coincided with the 30<sup>th</sup> anniversary of the Chamber; the industry presented itself as a key sector for the Polish economy, but also requiring support in the context of the economic situation in the country, Europe and in the world. MPWiK was a content partner of the congress, including a debate entitled. In the era of transformation, during which Renata Tomusiak, the President of the Management Board of MPWiK, took the floor as a panelist; participants could use the educational materials prepared

by the Company, they were also served, among others, healthy drinks based on the Warsaw tap,

- Congress of Water Management and Flood Protection, during which the lecture entitled. Drought - an important aspect in water management was given by Anna Olejnik, Deputy Director of the Water Division,
- XXV Scientific and Technical Congress WOD-KAN-EKO in Łódź, during which the Company was represented by Marek Smółka, spokesman, who took part in the debate entitled: Wod-Kan with good PR, i.e. building an image,
- the 12<sup>th</sup> edition of the Mazovia Forum devoted to the role of the European Union in the development of the region; during the event, the Company presented its achievements in the implementation of projects

co-financed from EU funds and provided information and education stands with drinks based on the Warsaw tap water,

- 15<sup>th</sup> edition of the Smart City Forum devoted to the functioning and development of smart cities - President of the Management Board of MPWiK Renata Tomusiak took part in a debate and presentation of the best solutions in the field of investments in renewable energy sources and the circular economy,
- CITY-WATER-QUALITY OF LIFE at the Congress Center of the Wrocław University of Science and Technology, whose main theme was ecology in the context of solutions for cities and their impact on the aquatic environment. Renata Tomusiak, the President of the Board of Warsaw Waterworks, spoke among the congress experts.

### Fair:

The International Trade Fair of Machines and Equipment for Water Supply and Sewerage WOD-KAN 2023 at the Bydgoszcz Fair and Exhibition Center, which is the most important trade fair for the water and sewage industry, bringing together companies and specialists who have the opportunity to exchange experiences, get acquainted with the offers of the companies and learn about the latest technologies and solutions appearing in the industry.



### Letters of intent:

- we have signed a membership declaration as part of the Enable Clean Energy for Poland Coalition, which brings together companies that focus on green energy in their activities,
- we signed a letter of intent with Veolia Energa Warszawa on cooperation on the project of heat recovery from Warsaw installations and sewage network; the aim of the activities is to assess the possibility of recovering socalled lost heat and heat from wastewater in order to use it for own needs and the needs of the city,
- we have concluded a cooperation agreement with the State Academy of Applied Sciences in Chełm in the field of assessing the properties of materials used in the implementation of the investment.

### Other:

- we have launched a joint ٨ initiative with water companies from Poznań, Wrocław and Kraków condemning the military aggression of the **Russian Federation against** a free Ukraine. thanks to which the Moscow-based company Mosvodokanal was excluded from the European Benchmarking Program and thus lost access to a database containing important information about the European water sector,
- as part of the aid provided to Zakłady Wodociągów i Kanalizacji Sp. z o.o. in Szczecin, we provided an ozonator that was used to oxygenate water in Odra River.

# **Membership in organizations**

102-13 Membership in associations



From March 22, 2022, we are a supporting member of the Association of Water Suppliers of the Mazowieckie Voivodeship. The most important benefits for our Company within the framework of cooperation are: cooperation in standard and critical situations, mutual exchange of experiences and the search for new technological, administrative, legal and environmental solutions, achieving mutual benefits and development of potential through cooperation, strengthening cooperation aimed at the development of water and sewerage companies from Mazovia

and improving the quality of services provided to external and internal customers.

In July 2022, we joined Aqua Publica Europa (members include companies from France, Belgium, Luxembourg, Spain, Portugal, Italy, Austria, Germany, Hungary, Ireland, Martinique, Montenegro, Greece, UK), associating public water and sanitation services working to promote public water management at the European level. The organization's mission is to address common water-related challenges and contribute to European environmental and social goals, as well as to shape EU and international policy in this field.

We also continue cooperation with industry organizations: Polish Waterworks Chamber of Commerce, an organization of the Employer of the Republic of Poland, the Polish Association of Sanitary Engineers and Technicians, the POLLAB Club of Polish Research Laboratories and the European Benchmarking Co-operation network.

# **Prizes and awards**

- Investor's Titanium Laurel for MPWiK for the renovation of Burakowski sewer for the most important achievements in the trenchless industry in 2022,
- VACC AWARD in the Company category for promoting preventive vaccination in public space,
- First place in the general classification XXX Nationwide Water Workers Games

- 1 gold medal in canoeing and 3 silver medals in indoor volleyball, climbing and nordic walking,

- 3<sup>rd</sup> place in the "Cycling Gamification of the City of Warsaw" and 2<sup>nd</sup> place in the individual ranking,
- Certificate of the Valuable Monument of Mazovia for the Water Tower in the "Filtry" Plant.



# New visual identification

Since December 28<sup>th</sup> 2022, pursuant to Resolution No. 557/2022 of the Company's Management Board, our company has a new promotional trademark and a new visual identification book, which is a set of rules for graphic elements, as well as colors and typography. It creates image consistency and a uniform visual layout of the Company's messages. It allows us to communicate in a clear way with our stakeholders and all those to whom we direct our information and promotional activities.



A new feature of the Visual Identification Book is the new Company logo, which is the primary element of visual identification. Along with it, the simplified name of the Company -Warsaw Waterworks was adopted for use. The most characteristic element of the basic trademark is the mermaid-shaped signet, the form of which is also part of the heraldic sign. The mermaid symbol is unequivocally associated with Warsaw and water. The shape of our trademark is designed in such a way that it refers to water (drop), Vistula (fin), sewage and water supply pipes (linear part).

The full legal name of the Company remains as follows: Municipal Water Supply and Sewerage Company in Warsaw Joint Stock Company and is presented in the footer of a letterhead paper. The latest version of the promotional logo of Warsaw Tap Water has been entered in the Book. The logo consists of a home faucet with a tap stylized on green leaves and a drop of falling water. Such symbolism of the sign refers to ecology.



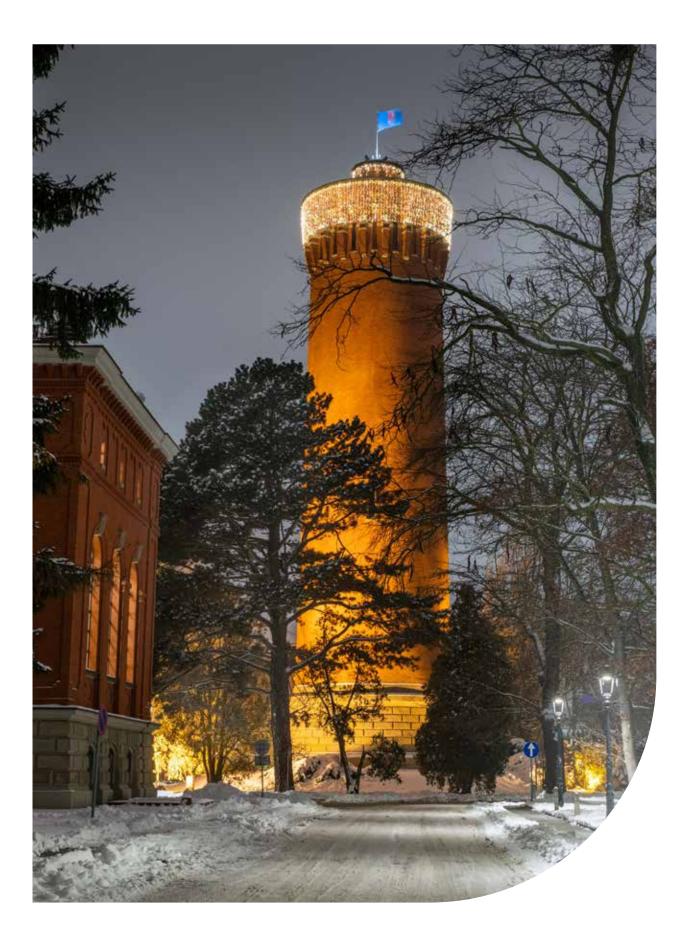
The Visual Identification System also includes the refreshed MPWiK heraldic sign – a historical version of the sign, in which on the left side there is a sign (which consists of simplified drawings of the water tower, the coat of arms of Warsaw number 1886 being the date of launching our activity and the inscription "WATER SUPPLY AND SEWERAGE") along with the full name of the Company. The logo is separated by a vertical, black line.

This heraldic symbol will only be used for commemorative material, such as diplomas.



Municipal Water Supply and Sewerage Company in Warsaw JSC

In August 2022, the Marketing Office of the capital city of Warsaw has developed guidelines for graphic marking of urban investments of particular nuisance for residents. By applying consistent standards, we build a greater understanding of the necessity of temporary traffic impediments among its participants (both pedestrians and drivers) resulting from the implemented urban investments.



# We serve people

Our Stakeholders Expert Councils Cooperation with the world of science Comfort of living for residents Customer service Information on actions taken Local community social activation Sponsorship and donations





# **Our Stakeholders**

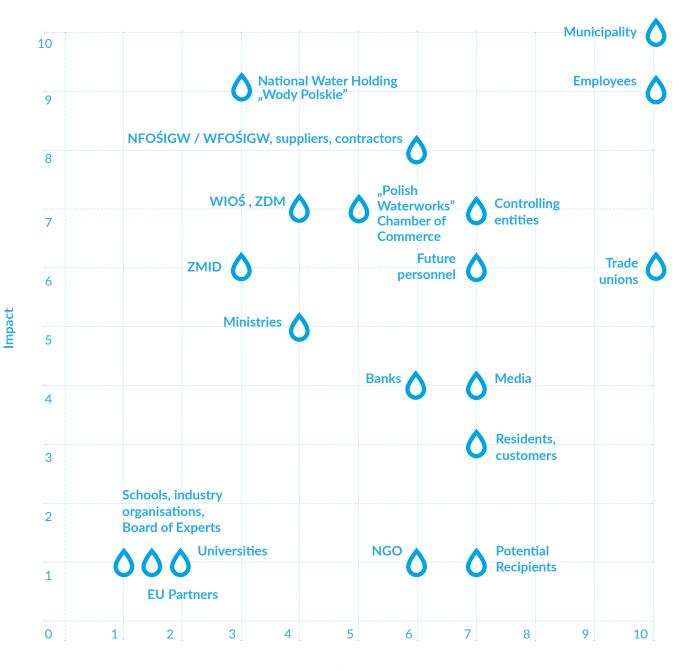
102-40 List of organization's stakeholder groups 102 42 Identification and selection of stakeholders involved in the organization 102-46 Process of defining the report's content (and implementation of reporting principles to define the report's content)

Trust and long-term cooperation are the basis for building partnership relations with key stakeholders in our business. We take care over our contacts and communicate with the surroundings in a predictable, honest and ethical manner.



We are guided by the principles of social responsibility, we act ethically and honestly towards our stakeholders. We pay attention to the impact that our activities may have on the natural environment. We are constantly developing our organizational culture.

### Stakeholder map



Interest

### Priority reporting topics in 2022.

102-44 Key issues and problems raised by stakeholders 102-47 Significant aspects identified in the process of defining the report's content

To emphasize our transparency and communicate our activities to stakeholders even more effectively, since 2019, we have published a Social Responsibility Report every year, in which we present our activities in a transparent manner. The areas reported by us in 2022, which are of key importance to us and our stakeholders, included:

### Natural environment

Subject name	Key aspects for stakeholders
Energy policy	✓
Harmful emissions into the air	✓
Sewage, waste and leakage	✓
Compliance with environmental regulations	✓
Materials and raw materials management	✓
Water consumption	✓
Supplier Environment Assessment	✓

### Society

Subject name	Key aspects for stakeholders
Prevention of unethical activities	✓
Policy towards local communities	<ul> <li>Image: A start of the start of</li></ul>
Preventing violations of free competition principles	✓

### Market

Subject name	Key aspects for stakeholders
Financial results, investments, employee benefits	✓
Wages and impact on the local labor market	✓
Providing services and supporting community	✓
Marketing communication	✓

#### Workplace

Subject name	Key aspects for stakeholders
Company employees	✓
Crew-management relations	✓
Diversity and equal opportunities	✓
Occupational Health and Safety	✓
Preventing discrimination.	✓
Trainings	✓



## **Expert Councils**

We participate in the work of the Competence Council in the Water and Sewage Management and Reclamation Sector, which is an initiative of the Institute of Environmental Protection – National Research Institute and the Chamber of Commerce "Polish Waterworks," whose aim is to identify the needs of the water and sewage management sector and reclamation in the area of qualification and development of the Sectoral Qualifications Framework.

Representatives of the Company participated in the work of the Consultative Council of the Faculty of Building Installations, Hydrotechnics and Environmental Engineering of the Warsaw University of Technology.

Since November 2004, the Board of Experts has been operating at our company, bringing together outstanding specialists in the fields related to the Company's activities.

This scientific body provides advisory assistance and scientific support to the Management Board in order to ensure the highest level of implementation of the statutory tasks of our Company.

#### Since 2004 41 meetings of the Board of Experts.

The subject of the last meeting of the Board of Experts was the failure of recuperators at the Thermal Sewage Sludge Treatment Station, analysis of the causes of the failure and discussion of remedial actions.



## **Cooperation with the world of science**

#### 102-43 Approach to stakeholder engagement

As the largest company in the water and sewage industry in Poland, we cooperate with leading research centers. On the basis of concluded scientific and technical cooperation agreements and implementation agreements, we undertake a number of initiatives. Their aim is to cooperate in the development of new technologies in the field of water supply and sewage, implement joint projects, support in the development of knowledge related to water supply and sewage disposal.

### The subject of cooperation are in particular:

- scientific research and development works,
- educational activities,
- organization of internships for students within the Company's organisational structure,
- organization of scientific and technical conferences, symposia and seminars,
- preparation of joint publications,
- granting student and doctoral scholarships funded by the Company.

We cooperate with universities and institutions such as:

 the Warsaw University of Technology,

- the Cracow University of Technology.
- the Czestochowa University of Technology,
- the Lublin University of Technology,
- the State Higher Vocational School in Chełm,
- the Jarosław Dąbrowski Military University of Technology,
- the Institute of Fluid-Flow Machinery, Polish Academy of Sciences,
- the Cardinal Stefan Wyszyński University in Warsaw,
- the University of Warsaw.

Together with the Institute of Plant Protection – National Research Institute in Poznań "Hydrostrateg," as a consortium partner, we have submitted the *HydroCare* project for funding as part of the strategic National Center for Research and Development "Hydrostrateg." The aim of the project is to reduce the occurrence of active substances, pesticides, pharmaceuticals and personal hygiene products in treated wastewater, and thus improve the functioning of aquatic ecosystems.

Treated wastewater can be used, among others, for agricultural purposes or watering urban greenery. This will provide an opportunity to reroute treated wastewater back to water treatment plants, thus contributing to a complete closure of the water cycle in the face of ongoing climate change.

#### Scholarship program

We recognize the value of combining science with business to create innovative solutions that can be implemented in our company. We do this - among others - by running a scholarship program - an original project of the Company lasting continuously since 2014. The program is addressed to people who will undertake to write a paper on the activities of our company. Since 2021, in addition to master's and doctoral students, the project has also covered BA students preparing bachelor's and engineering theses.

In 2022, we implemented two subsequent editions of the scholarship program addressed to the students of the capital city's higher education institutions. Thanks to it, these students received funds enabling the implementation of research for their diploma thesis or doctoral dissertation as well as the opportunity to complete an internship under the care of professionals in our company. The main objectives of our scholarship program are:

- inspiring second-cycle and third-cycle students to engage in innovative scientific projects related to the conditions and directions of development for the water and sewage industry,
- related to the conditions and directions of development for the water and sewage industry;
- acquisition and training of specialists operating in the topical area of our Company.



I carried out my doctoral thesis entitled. The influence/of hydrodynamic disintegration of compacted excessive sediments on the course and efficiency of the methane fermentation process. I am glad that the potential in my research was recognized and I was able to implement it with the support of the company. I have been working at the Research and New Technologies Office (BNT) since December 2021, mainly implementing projects aimed at increasing the energy self-sufficiency of the Company's facilities.

#### Agnieszka Garlicka

Senior Specialist in the Research and New Technologies Office Scholarship holders are recommended by the Scholarship Program Chapter, which includes representatives of the Company and universities. In 2022, as part of the ninth and tenth editions of the program, we funded 8 scholarships, including 4 doctoral and 4 master's scholarships.

After defending the diploma thesis, the scholarship holder may expect a job at our Company.



# **Comfort of living for residents**

It is our duty to serve the people. In order to maximize our potential and constantly improve the level and quality of services provided, we constantly take the actions that our recipients expect from us:

- we ensure water supply to residents of Warsaw and the surrounding area, as well as collection and treatment of sewage,
- we immediately respond to reports and remove failures, while ensuring the continuity of our services. We meet the expectations of our customers, adapt to their needs, launching new contact channels,
- we are campaigning about our investments, including those carried out as part of EU cofinancing entitled: Water supply and sewage treatment in Warsaw - Phases V and VI, as well as new technologies,
- we actively participate in numerous ecological projects, involving the local community and showing that it has an impact on the development of the city,
- during the summer season, during city celebrations
   and events (e.g. city picnics, anniversary events), we provide
   mobile barrels with Warsaw tap
   water as well as water gates.







# Customer service

In 2022, we implemented a number of activities in the field of improving the quality of customer service, which contributed to the creation of safe forms of contact and enabled the quick implementation of all reported cases. Our activities took place in the following areas:

- direct service (12,157 people used the personal visit to the Customer Service),
- secretarial services (21,518 correspondence from clients was accepted and registered),
- electronic service provided through the Online Customer Service Office (eBOK) and electronic mailbox service with e-mail address: dok@mpwik. com.pl (through these channels we received 107 31, 8 different types of speeches/applications),
- telephone service provided through the Company's hotline (we handled 69,888 phone calls).

In 2022, we continued our intensive efforts to disseminate the eBOK system and the eFAKTURA service to the recipients of our services. The process of creating an account in eBOK is simple and fast, the customer can open an account in person or with the help of an employee during telephone or direct contact. As a result, in 2022 the number of eBOK users increased by 9,719 (20%), of which 8,081 new accounts were created



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Dynamic technological development and widespread digitization of processes also translated into the activities of MPWiK. In our company, the extension of the eBOK system is carried out on a continuous basis. We analyze and implement the proposals of the Service Recipients on an ongoing basis in order to facilitate and improve their contact with the Company. Geoportal Closer to the Resident is just an example of such activities. However, we are most proud of the Contact Center communication platform, which is now mainly a tool for all employees of the Customer Service Department. In 2022, we started work on implementing new functionalities of this system, i.e. Chat Bot and Chat on-line, which we will soon make available to Recipients of our services.

> Aneta Lizuń Customer Service Manager

by our employees. However, in the case of eFAKTURA, the number of recipients increased by 4,026 (17% compared to 2021). Customers also made 20,610 electronic

payments (23% more than in the previous year).

As at 31<sup>st</sup> December 2022, the eBOK account was already held

by 48% of all service recipients (48,366), and the eINVOICE was activated by 23.4% of all service recipients (23,627).

#### **Closer To The Resident Application**

In 2022, as part of the implementation of activities enabling customers to contact the Company through alternative forms of communication, a new application was launched, i.e. a geoportal *Closer to the Resident*. It is an electronic application system that provides recipients with access to information about Warsaw water supply and sewarage infrastructure and the possibility to submit selected applications electronically. The application enables automatic handling of the process of connecting a property to the municipal water supply or sewarage network. Residents using the new system are able to complete the necessary formalities and smoothly go through the entire connection process without having to leave home.

In 2022, the Company received 7,034 eForms via the system *Closer to the Resident*.

# Expansion of the Contact Center communication platform

In 2022, we continued to expand the Contact Center communication platform. This system enables the operation of various types of communication channels and ensures interaction with application solutions, improving the work of consultants. It also enables archiving and classifying data on the history of correspondence through all forms of contact with a given recipient of services. The modernization of the Contact Center was aimed at implementing new communication channels, i.e. Chat Bot (virtual advisor) and Chat online.



#### Remote water meter reading system

The remote water meters reading system has been in place in the Company since 2005. Currently, it covers 17,152 main water meters, which allows for over 216,000 remote readings annually used for billing purposes.

In 2022, we carried out work aimed at implementing a comprehensive solution for acquiring reading data from water meters, including the supply of an IT system, water meters, telemetry modules and ensuring data transmission. As a first step, a further extension of the system will cover the area of the Pruszków water main, consisting of approximately 4,500 main water meters.

#### **Mobile** Consultation **Points**

In 2022, we continued our efforts to actively attract new customers through the organization of Mobile Consultation Points. Thanks to them, Warsaw residents had the opportunity to participate in information and consultation meetings organized in six districts: Wawer, Bielany, Ursynów, Włochy, Wola and Wesoła.

Consultants provided residents with information on the terms



and conditions of connection to the municipal water or sewage network, the rules of providing these services and planned investments in the city of Warsaw. They also clarified individual customer cases concerning the services provided by the Company. In this process, we also continued activities related to the distribution of targeted correspondence covering residents whose real estate is located in the area of currently implemented investments these activities, in 2022 we sent correspondence to almost 1.200

#### **Targeted** correspondence

In 2022, we distributed correspondence regarding the connection to the water or sewage network to the owners/users of over 4,000 properties.

by the Company. As part of recipients.

### Informing about actions taken

We care about reliable and ongoing contact with our recipients, which is why we publish information about our activities and initiatives on the websites mpwik.com.pl and warszawskakranowka.pl as well as on social media (Facebook, Instagram, YouTube, X - formely known as Twitter).

We also informed the media about our activities, including sending them a number of press releases. Last year, the main topics were our key investments: Wiślany, Linde Bis collectors, Mokotów Bis or investments in particular districts, water and sewarage failures, as well as information about the Warsaw tap water, the Company's involvement in helping Ukraine or CSR activities.

The press featured interviews and statements of the Company's representatives, including: Renata Tomusiak - President of the Management Board for the NBI magazine and Anna Olejnik - Deputy Director of the Water Division for polskatimes.pl.

We also communicated current activities through social media (including the Warsaw City Hall) and advertising media, news on the website, promotional and information banners, radio spots and posters.



#### **Customer satisfaction survey**

In April 2022, we carried out customer satisfaction surveys using computer-assisted telephone interviews (CATI) on a sample of 900 individual customers and 300 business customers. The main findings of the study are:

#### Selected campaigns

the overall assessment

of the Company on

a 10-point scale is

positive. 7,58 points

for retail customers

institutional customers,

7,57 points for

#### Warsaw Tap Water

Campaigns within the promotion of Warsaw tap water are carried out several times a year. During the World Water Day celebrations, it was informational and educational in nature and was carried out under the slogan: We have evidence of water quality. In March, we invited residents to participate in a city game. *In search of a lost drop, the purpose* of which was to go through 10 thematic stations concerning the Company. Almost 200 people took part in the competition. Additional activities during the World Water Day celebrations and educational activities included: Hadwa-O Science Theater, knowledge quiz Do you have evidence of water quality? and online education classes.

both institutional and individual customers positively assess the quality of water supplied by our Company - 77% and 80% respectively, consuming unboiled tap water is declared by **41%** of individual customers, who are assessed positively by **84%**, with 25% of them evaluating it very well.





As part of the campaign, we encouraged people to respect freshwater resources and choose Warsaw tap water as an ecological solution that reduces the water footprint and thus protects groundwater. Its aim was also to convince recipients of the safety and quality of Warsaw tap water, to dispel doubts related to drinking it directly from the tap, which was supported by specific arguments, i.e. the use of modern technologies, compliance with national and EU quality standards and constant water monitoring carried out by accredited laboratories of the Company.

Our drinking fountains installation project is still very popular as part of the promotion of Warsaw tap water. In 2022, the drinking fountains in schools and drinking fountains program in public buildings were combined under one name of the Water Drinking Fountains in Public Buildings Program. The program includes 3 models of devices:

- water drinking fountains for filling bottles and cups (connected to the sewarage and water supply network),
- water drinking fountains for filling bottles and cups with additional fountain for direct drinking (connected to the sewarage and water supply network),
- water drinking fountains for filling bottles and cups (connected only to the water supply network).

In 2022, we installed 15 drinking fountains in schools and institutions. In the years 2015-



2022, we installed a total **of 397 sources** (schools, institutions).

In December, we encouraged people to reach for the Warsaw tap also on holidays. In our morning program *Good Morning TVN* we organized cooking with Jakub Kuroń. We recommended traditional Christmas dishes in a modern version using Warsaw tap water. On the other hand, during the Christmas concert in Warsaw, we served hot tea based on Warsaw tap water.

At the end of the year, we presented a new version of the website of the Warsaw tap water. The website is the source of the most important information about our water: its sources, treatment and quality control process, composition, impact of each of us on water quality, the need to take care of water resources and our educational activities. All in a new, transparent and encouraging layout.



#### The Toilet is not a trash can

In November 2022, we drew attention to the problem of dumping waste into toilets. The campaign *Toilet is not a waste bin* aims to change the attitudes of Warsaw residents in terms of treating toilets as waste bins, environmental education and building environmental awareness, and as a result, reducing the number of sewarage failures caused by clogging the network with rubbish.

In 2022, we paid attention to the most frequently discarded hygiene items and food. The message was light and funny, but at the same time did not diminish

the importance of the problem. The graphics showed the effects of inappropriate habits without scaring, but still emphasized the essence of the problem.

#### **Traffic difficulties**

In 2022, we carried out an ongoing exchange of information on impediments to traffic in Warsaw as part of cooperation with the InfoUlice website and cooperation in editing the content present in the Warsaw 19115 City Contact Center and on the information banners displayed on the construction fences.





## Local community social activation

We carry out our activities with a view to the social, cultural and ecological needs of residents of Warsaw and its surroundings, including children and young adults. The results we achieve in this area are due to our daily work and cooperation with Warsaw as part of the sustainable development of the capital city.

# Educational programs

#### From the Vistula to the Vistula – Travels with Mr. Droplet

As in previous years, we continue our existing programs addressed to the youngest Warsaw residents, including our flagship Green Education Program From Vistula to Vistula - Travels with Mr. Droplet, as part of which we teach respect for the natural environment. In the winter semester 2022/2023. we launched a new thematic block entitled. Save water drop by drop in which we discuss the problem of dwindling water resources in the world and inequalities in access to clean drinking water. Its aim is to encourage young people to respect water and manage it sparingly on a daily basis.

In addition, we transformed the Warsaw *Tap Water Rules* classes into a new thematic block entitled. *Where does the water in the tap come from?* designed for secondary schools, where the history of the Warsaw Waterworks is discussed, as well as the process of treating Warsaw tap water.

In total, in 2022, we conducted 129 educational classes attended by 2,481 children and adolescents.



The idea of the Vistula to Vistula – Travels with Mr. Droplet Ecological Education Program, launched in 2007, aims to shape pro-ecological attitudes among the youngest. It is addressed primarily to primary and secondary school students. So far, about 45,000 students have participated in the meetings.

We also organized 14 meetings in the form of lectures for various age groups, both children and adults and seniors (e.g. lecture as part of *the City with a Heart* series), in the school environment (e.g. *Water free of bottles* in Nowa Prochownia) and business (e.g. lectures for companies, i.e. Mercedes-Benz).





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The meaning of environmental education for children and young people is extremely important. The educated young man will grow up and become a conscious adult, responsibly using the gifts of nature and the natural environment around us. Created by the Company The Green Education Program educates everyone, from the youngest residents of the Warsaw agglomeration, through children of primary and secondary schools, students, adults, to seniors from the University of the Third Age. We pass on knowledge about water treatment and wastewater treatment processes as well as the importance of water to everyone in an easy and pleasant way, through educational classes, lectures, campaigns and educational materials we create. Our work is a mission to which we devote ourselves wholeheartedly.

> Karolina Milnerowicz Head of the Education Section

#### Our presence at city events and holidays

#### Night of Museums in Warsaw

We have enabled to see a fragment of the sewage network in Warsaw Praga district. Those interested could visit the overflow chamber built over 100 years ago at the junction of Ratuszowa and Jagiellońska streets. In addition, we organized a virtual walk around the "Filters" Station, showing, among others, the clean water tank and the interior of the slow filter chamber, and talking about the history and present of the facility.

#### Cooperation with the Museum of Warsaw in the preparation of the exhibition: Let them Flow! The other rivers of Warsaw

The museum organized an exhibition about the rivers and streams that once flowed through Warsaw, impacting the formation of the city. Visitors could learn about cartographic plans, graphics, drawings and engineering drawings. We shared our archive collections, which allowed the



visitors to get acquainted with the processes that took place in the city, and explained what phenomena caused many rivers to disappear.

#### Stalls at events and mobile barrels

With our educational and promotional stand, we were present at 18 city events, providing



healthy drinks based on Warsaw tap water, animations for children and a blind test entitled: Recognize the Warsaw Tap Water. Mobile barrels with Warsaw tap water left 205 times for various events, we provided 19 water gates and provided water curtains during the heat. Every weekend from May the 1<sup>st</sup> to September 30<sup>th</sup>, the barrel truck was available during shows at the Multimedia Fountain Park. We used the Warsaw tap during the biggest events in Warsaw: concerts (among others, Co jest grane, Free Hearts as part of the 78<sup>th</sup> Anniversary of the Warsaw Uprising, Orange Warsaw Festival) and sports events (including Bieg Tyma, Bieg Konstytucji 3 maja, Bieg Flaga, Rowing Regatta Warsaw Head, Rowerowy Maj). The Company's laboratory was present during the winter swimming with the Wisła District.

Our stands also appeared at various fairs: Job Fairs at the Polish-Japanese School of



Information Technology, Job Fairs at the Piaseczno Labor Office, Praga Job Fairs, Ożarów Mazowiecki Job Fairs, Housing and Housing Fairs and the "Przeróbmy" Fair.

#### Participation in events commemorating the history of Warsaw

In order to commemorate the 79<sup>th</sup> anniversary of the Warsaw Ghetto Uprising, we joined the *Daffodil Campaign*. Paper flowers from POLIN Museum of the History of Polish Jews were distributed to employees in two locations – at 5 Starynkiewicza Square and 4 Zaruskiego Street. We also took part in the ceremony in front of the Monument to the Ghetto Heroes in Muranów and the Monument to the Evacuation of Warsaw Ghetto Fighters.

### Anniversary of the Warsaw Uprising

On the occasion of the 78<sup>th</sup> anniversary of the outbreak of the Warsaw Uprising, we introduced the importance of sewers during the insurgent activities. As part of cooperation with the Warsaw Uprising Museum and the Agora publishing house, two films on this subject were created.





During the ceremony, representatives of our Company laid wreaths at the monument of the Warsaw Uprising at Krasiński Square, at the plaque commemorating the signing of the order to start the Warsaw Uprising at 68 Filtrowa Street and at the Warsaw Uprising Cemetery in Wola. On that day, an internal ceremony was traditionally held - representatives of the crew laid flowers and lit candles at the plaque commemorating the employees of the Water Supply and Sewerage System (at 5 Starynkiewicza Square) who

lost their lives during World War II. A flag waving on the water tower at the "Filters" Station symbolized Fighting Poland. The Warsaw Uprising anniversary celebrations also took place on the Vistula. During the cruise of dozens of vessels, our company was represented by the motor boat Okoń. On July 30, 2022, our employees took part in the Warsaw Uprising Run at distances of 5 and 10 km. During the city events related to the celebrations, we took care to provide tap water to the participants of the ceremony.



#### **Earth Day**

On the occasion of this holiday, we published and distributed information and videos about our activities for sustainable development. We also showed up at the Koneser Praga Center, where we served the participants of Earth Day event *Przerób-my with Warsaw Tap Water*.









On the occasion of Warsaw Day, established in 2020, the first Mermaid Parade was held on 4<sup>th</sup> of June 2022. Platforms with mermaids representing Warsaw, Białołęka, Bielany, Mokotów, Ursynów, Wawer and our Company drove through the streets of Warsaw. Our mermaid referred to the Warsaw Mermaid, but thanks to the colors and elements of the water supply network that decorated it, it was very characteristic and original.



#### We support educational events and initiatives

#### **Glow with Glow**

Once again, we took part in the joint action of the Regional Directorate of State Forests in Warsaw and the City Guard of Warsaw entitled: *Glow with glare*. One of the Christmas trees decorated with unusual ornaments – reflections was placed near our headquarters. Each passer-by, cyclist or scooter user could take one reflector and hang on his clothes or vehicle to be better visible on the road.

#### **Science Picnic**

We took part in the Science Picnic of the Polish Radio and the Copernicus Science Center, the largest outdoor event in Europe promoting science. In 2022, the main theme was water. Our educators have prepared an extraordinary attraction. They guided the event participants through the water treatment process by building LEGO blocks.

# **Sponsorship and donations**

Every year, we share the effects of our sponsorship and charity activities with satisfaction. We are sensitive to the needs of Warsaw residents, engaging in various forms of help. We continue to support environmental campaigns, help the disabled and the needy, join initiatives that develop science and promote culture and a healthy lifestyle.

In 2022, we signed 9 sponsorship agreements and 14 donations.

Our activities in this area concerned:

- help Ukraine more about these initiatives can be found in the chapter of MPWiK on helping Ukraine,
- donations to 2 care and education centers as part of the Waterworks Family Run,
- Donations to veteran organizations: World Association of Home Army Soldiers, Warsaw Uprising Remembrance Association and the Archdiocesan Complex of Home Palliative Care; organizing medical and social care and friendly help for Warsaw Insurgents and former Home Army soldiers who participated in the Warsaw Uprising,
- financial support for the organization of the 24<sup>th</sup> Integration Ball and the Eight Magnificent Gala,
- support for the Warsaw ZOO, taking into account the needs



of Hugo the hippopotamus and Justyna the giraffe,

- sponsoring shows in the Multimedia Fountain Park

   a promotional spot of the Company, Wianki nad Wisłą and Chopin Concerts,
- sponsoring the Carnival Integration Ball organised by "Świat na Tak" Foundation and the Integration Sports Festival Warsaw 2021 organized by the Kasia Dulnik Foundation,
- support for the activities of the Archdiocesan Complex of Home Palliative Care OPP

and donations to two care and education centers,

- cooperation with the Legia Warszawa S.A. football club, as well as awarding the Water without Barriers Award to AZS UW Waterpolo as part of the XXII Plebiscite for the Best Athletes of Warsaw 2021,
- cooperation with the Chamber of Commerce "Polish Waterworks" and the Warsaw University of Technology.

Our sponsorship and charity activities in 2022 met the most important objectives of the sponsorship strategy, in particular to support:

- organizations providing assistance to people in need and with disabilities,
- veteran organizations to maintain the bonds of friendship,
- sports events, as well as a partnership aimed at promoting a healthy lifestyle and active leisure outside the home,
- organization of industry events as a leader in the water and sewage industry in Poland,
- helping Ukraine and Ukrainians.

In addition, in relation to the previous involvement in the modernization works of the Powązki Cemetery, initiated in 2017, we continued cooperation with the "Stare Powązki" Foundation, the subject of which is the assembly of 42 spas in the cemetery by the Company's employees. In August 2022, we concluded a contract with the "Stare Powązki" Foundation for the performance of works, using the Company's own resources, consisting in the installation of water draw-off points, which ended in October 2022.



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As a provider of services to residents, we strive to consciously and actively support all initiatives relating to the highest values, such as life and health, respect for people and their surroundings. We realize how important it is to support valuable initiatives and how valuable is the experience that we draw from them, which we try to use best for the purposes of broad education in future ventures.

> Daniel Pieniek Director of the Organizational Division

# Investing in the future

Multiannual Development and Modernization Plan (2022-2030)

Water supply and sewage system infrastructure

Investments in sewage network retention

Other significant investments





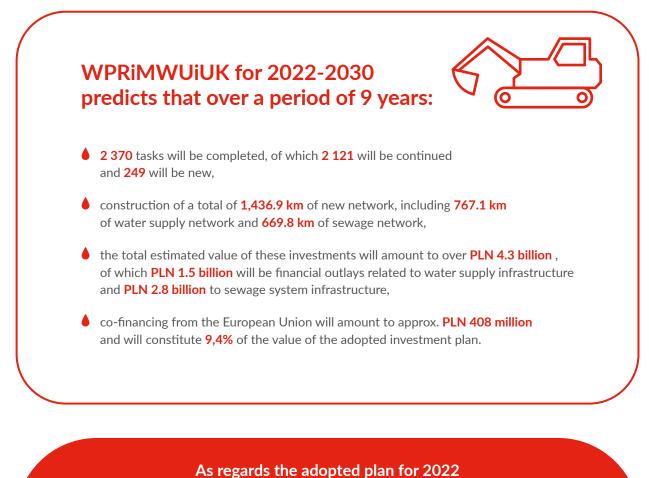
# Multiannual Development and Modernization Plan (2022-2023)

Multiannual Plan for the Development and Modernization of Water Supply and Sewerage Equipment (WPRiMWUiUK) for 2022-2030

102-11 Precautionary principle

307-1 Amount of significant fines and total number of non-financial sanctions for non-compliance with environmental laws and regulations

In March 2022 Council of Capital City of Warsaw approved the Multiannual Plan for the Development and Modernization of Water Supply and Sewerage Equipment (WPRiMWUiUK) for 2022-2030. The document includes key tasks for Warsaw, including investments in the sewage network, which will maximize the flawlessness of this network and are of significant importance for the environment.



we have built and modernized 68.4 km of water supply and sewage network. Financial outlays incurred in terms of water supply network equipment amounted to PLN 244.4 million, and in the field of sewage network equipment PLN 670.8 million.

#### The effects of our investments in the years (2007-2022)

Thanks to the effective use of EU funds and the implementation of the Project "Water supply and sewage treatment in Warsaw," we are constantly improving the quality of services provided and the comfort of life of the residents of the capital.

#### **Appropriations used**

#### Total: PLN 9.224 million, including EU funds: PLN 3.240 million (35%)

Water supply systems	of which EU funds	Sewarage equipment	of which EU funds
PLN 2.5bn	PLN 0.7bn	PLN 6.7bn	PLN 2.5bn

#### Length of network built or upgraded

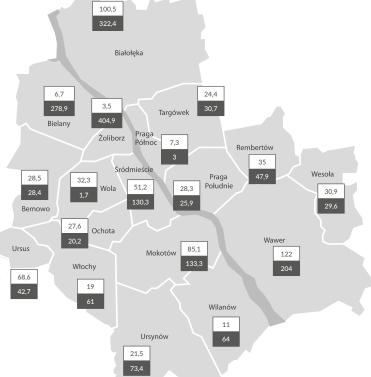
Water supply network	772.6 km		Sewarage network	591.8 km
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#### Total: 1,419.1 km of

#### Network investments in districts

Districts with the largest network investments (including water supply and sewarage systems):

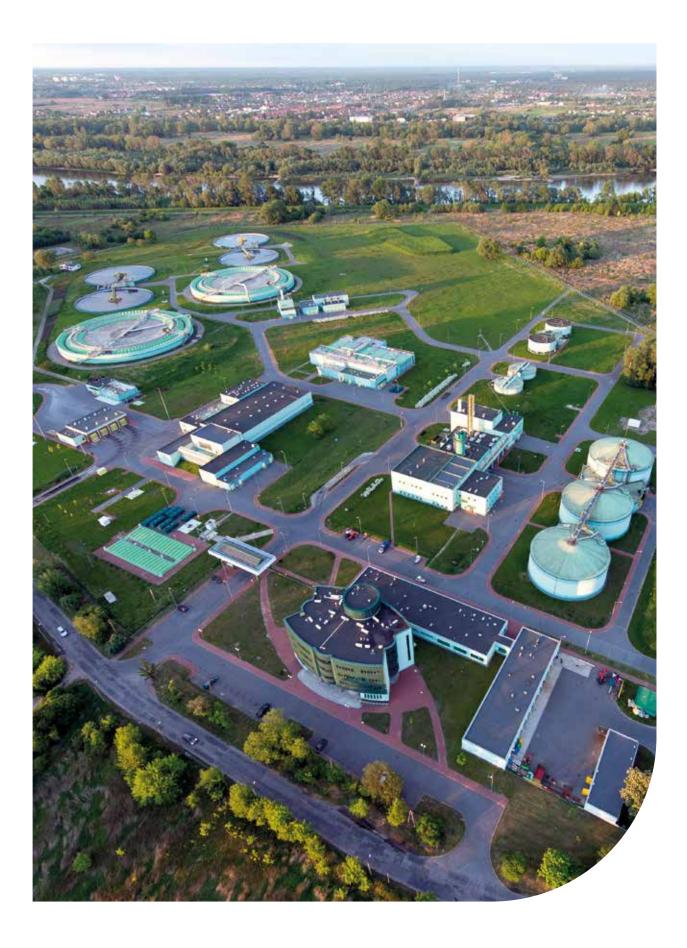
Białołęka	422.9 km
Żoliborz	408.4 km
Wawer	326 km
Bielany	285.6 km
Mokotów	218.4 km
Śródmieście	181.5 km



Water supply network in km Sewage network in km

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total km
Water supply network	41.9	60.0	70.9	76.6	45.6	36.0	40.7	49.1	38.3	45.8	43.3	56.5	59.7	64.7	43.5	772.6
Sewage network	51.5	15.9	30.7	31.1	39.8	52.8	38.8	69.3	49.8	35.6	41.6	30.3	36.0	43.7	24.9	591.8

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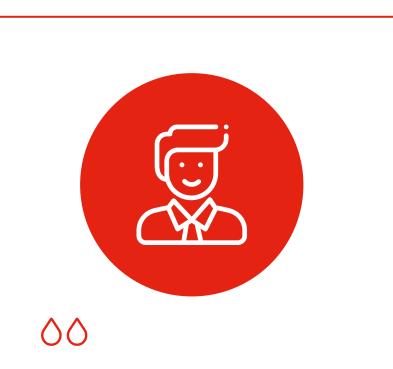
The most important tasks of the WPRiMUWiUK, apart from the construction of water supply and sewage infrastructure in individual districts of Warsaw, include also the continuation of activities related to the construction of a complementary sewage transmission system from the left-bank of Warsaw to the "Czajka" Plant. We divided this action into phases:

**Phase I** - construction of pipelines including drilling under the Vistula. Phase completed in 2021.

Phase II - construction of new pipelines in the coastal part (between the crossing carried out as part of Phase I and the overlaps: "Świderska" and "Farysa") and the construction of accompanying facilities, including technological chambers. In 2022, the contractor completed the major construction works under Phase II.

Phase III – works aimed at ensuring the possibility of temporary offloading of collectors in Modlińska Street by redirecting sewage from the transmission system to the "Nowodwory" and "Żerań" pumping stations.

- Construction of a sewage collector for "Żerań" pumping station and "Nowodwory" pumping station. In 2022, we continued to develop design and cost estimate documentation for the construction of new sewers from the Świderska Plant towards the Nowodwory pumping station and the Żerań pumping station. Currently, the Construction Design is being prepared,
- Modernization and reconstruction of the intake manifold to the "Żerań" pumping station.
   In July 2022, an agreement was concluded under the name of: Upgrading of sewage collector



To say that 2022 was difficult is like not saying anything. Especially from the point of view of the implementation of the Company's investment plan. The COVID-19 pandemic and the outbreak of war in Ukraine caused, among others, rapid price increases and significant restrictions on the availability of construction materials, specialized equipment used in the construction, modernization of networks or technological installations. Despite such difficult market conditions, we can boast of the implementation of the investment plan in the financial field at the level of 97%. This is undoubtedly one of the highest results in recent years, of which we are very proud today.

> Arkadiusz Małecki Director of the Development Division

between the transmission system chamber and the well on the sewer from the "Żerań" pumping station. The Contractor shall carry out design works.

Phase IV – repairing the pipelines in the tunnel under the Vistula River. In 2022, we completed the conceptual work and development of the Functional and Utility Design. In December, we announced a tender for the implementation of the task entitled: *Restoring the efficiency of the transmission system between the "Farysa" and "Świderska" plants in Warsaw using the existing tunnel under the Vistula*.

The company is implementing a six-stage project to expand water and sewage infrastructure in the agglomeration: Warsaw, Pruszkow and Serock, under the name "Water supply and sewage treatment in Warsaw."

The main goal of the project is to provide residents with high-quality drinking water and to treat all municipal wastewater before its discharge to the Vistula. Two final phases of the Project are currently underway.

**Phase V**<sup>\*</sup> – is a continuation of our activities carried out under Phases I-IV. As part of its implementation, we plan, among others:

- extension of sewerage system,
- modernization of sewage network and pumping station,
- construction and modernization of water supply network,

pumping station and water treatment station,

- construction and implementation of a central control system for the sewerage network,
- expansion of the GIS system and models of the water supply and sewerage system.

Phase VI\* – includes further development of the water supply and sewerage system, construction and modernization of the infrastructure of the combined sewage system, in order to adapt the system to the development of agglomerations and climate change and modernization of water treatment stations.



# Water supply and sewage system infrastructure

203-1 Development and impact of investments on infrastructure and services

We systematically develop water supply and sewage infrastructure to meet the needs of a dynamically developing agglomeration. The Multiannual Plan for 2022-2030 predicts the implementation of over 2,000 tasks in Warsaw and the subcapital municipalities, which will allow us to meet the expectations of residents in terms of access and quality of services provided by us.

Thanks to the use of state-ofthe-art construction methods, including trenchless technologies (e.g. microtuneling, relining, static cracking), the works we carry out are less burdensome for residents. Limiting the number of open excavations also minimizes traffic congestion.

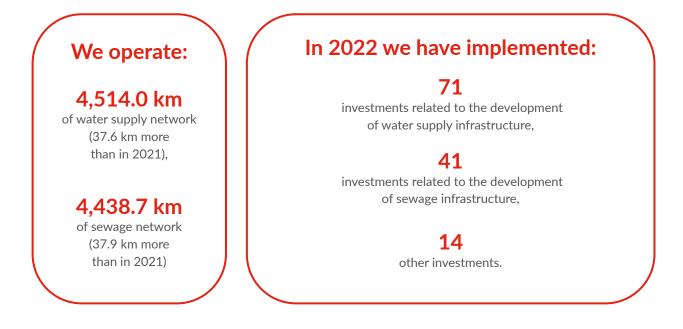




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Paul Reiter, water sector specialist, once said: Technology has become one of the most important tools we have to protect our water resources and to develop sustainably. We also know this at MPWiK, in the Research and New Technologies Office, where we are constantly looking for innovative solutions that allow us to effectively manage water and wastewater. It is also thanks to technology that we are able to provide residents of Warsaw with access to its clean resources, care about environmental protection and act in accordance with the principles of sustainable development.

> **Bartosz Zaborski** Head of the Research and New Technologies Office



Material performance of water supply and sewage system (built network) with division into selected locations [km] is presented in the table:

Location of water supply network (district/municipality)	Length of water supply network	Location of sewage network (district)	Length of sewage network
Białołęka	3.2	Białołęka	5.3
Wawer	2.5	Ursus	3.2
Wesoła	1.8	Wilanów	1.7
Ursus	1.4	Wawer	1.2
Rembertów	1.2	Rembertów	0.5
Włochy	0.8	Ursynów	0.2
Wilanów	0.5	Włochy	0.1
Ursynów	0.2	Bielany	0.1

In 2022, we built a total **of 24,1 km** of water supply and sewage network for over **PLN 458 million**.

#### The most important investments completed in 2022:

- design and construction of photovoltaic installations on the premises of the Company's facilities: "Dębe" Plant, Northern Plant, Nowodwory Pumping Station, Białołęka Zone Station, "Czajka" Plant and "Południe" Plant, \*
- modernization of the collector in the streets of Bacha, Sikorskiego, Witosa, \*
- reconstruction of Powiśle II sewage pumping station, including associated infrastructure, \*
- update and calibration of the mathematical model of the water supply network, the main works in the construction of an alternative transmission system. \*

## Investments in sewage network retention

#### Construction of the Mokotowski Bis sewer<sup>\*</sup>

In the second quarter of 2022, we started the construction of the Mokotowski Bis collector in Gagarina Street, which will perform a flow-retention function. Its task will be to relieve the existing Mokotowski sewer and ensure temporary retention and safe transport of the sewage and rainwater mixture during intense rainfall. The Mokotowski Bis collector will have a retention capacity of approx. 6,800 m<sup>3</sup>. A tram line will also be built over the new sewer. The construction of the Mokotowski Bis sewer is part of an important project involving the sealing and expansion of the capital's sewage network. Improved sewage transport and increased retention capacity of the system will reduce the risk of flooding during intense rainfall. In addition, it will improve the operational safety of sewage treatment plants.





#### Construction of the Vistula River collector\*

The "Wislany" Collector is the largest of the collectors we have built in 2022, its task is to increase the retention of sewage and rainwater in the city. The purpose of the "Wislany" Collector is to reduce the need to activate storm overflows during intense rainfall, by ensuring the collection and temporary retention of a mixture of rainwater and sewage. It will enable ad hoc storage of sewage flowing from the left-bank part of Warsaw, i.e.: Mokotów, Ochota, Wola, Śródmieście, Żoliborz and

Bielany. The sewage will then be directed to the "Czajka" sewage treatment plant. During the works, we used a trenchless method (the so-called microtunneling technology). Thanks to it, due to the small scope of open excavations, despite the location of the investment along one of the most important routes in Warsaw, traffic impediments accompanying the construction were limited to the necessary minimum. In the first half of 2022, we completed microtunneling work at the second stage of construction. In the fourth quarter of 2022, we started works under the third stage of the project.

#### Construction of Linde Bis collector\*

The task of the Linde Bis sewer will be to take over part of the sewage and rainwater flowing from Bemowo and Bielany, and thus relieve the existing sewage system in this area. As part of the task, a 4-kilometer sewer with accompanying infrastructure will be designed and built.



#### Coastal Collector Renovation

We have started the renovation of the Coastal Collector, as well as chambers and sewers on its route along Czerniakowska Street, on the section from the "Wolicka" Canal Pump Station to the intersection of Czerniakowska Street, as well as Walcząca Polska Avenue and Powiśle Pumping Station. The work is part of a larger project involving the sealing and expansion of the capital's sewage network. The sewer will improve the sewage transport and increase the system retention capacity, reduce the risk of flooding during intense rainfall and improve the operational safety of sewage treatment plants.







#### **C-Bis sewer**

Work continued on the construction of the C-Bis sewer, which will enable the development of areas in the area of the Pruszków main, in particular Piastów, Pruszków and the Ursus district. The new collector will improve the operation of the sewage network regardless of weather conditions. system will be able to respond to sudden atmospheric phenomena and properly control the flow of sewage (including rainwater) in the network and sewage facilities, as well as collect them in collectors and retention reservoirs, minimizing the risk of local flooding in a given area.

#### Construction of a central management system for combined sewage system<sup>\*</sup>

We continued work on the construction of a central system for managing the combined sewage network, which will enable the collection and real-time processing of current weather forecasts and data from the sewage network and its facilities. Based on the collected data, the



### **Other significant investments**

# Continuation of the modernization of the Northern Plant\*

The modernization of the Northern Plant will allow to achieve a fully compatible water treatment technology with that used in the Central Plant. In addition, thanks to the modernization of the pumping systems, we will ensure uninterrupted supply of high-quality Warsaw tap water to residents remaining both in the supply zone of the Northern Plant, as well as access to other areas of the city, supplied with water from other treatment stations. In 2022, as part of the second stage, we built:

- intermediate ozonation and activated carbon filtration building,
- photovoltaic installation on the premises of:
  - Water Treatment Station "Wieliszew",
  - The "Białołęka" Zone Station.

Modernization of rapid filters involves enriching the deposit with a layer made of anthracite, which will contribute to the improvement of the quality of treated water, including the taste and smell

of the Warsaw tap water. This will happen thanks to the use of the latest technologies, which translates into an improvement in the quality and physical and chemical stability of treated water delivered to the inhabitants of the Warsaw agglomeration. The water treatment process will eliminate chlorine gas, which will be replaced with chlorine dioxide. The new solutions will protect the treated water from the increase of organic pollution. The upgrade will increase the safety of the entire treatment process.





#### Continuation of the "Południe" plant modernization

The aim of the conducted works is to reduce the load of pollutants removed during wastewater treatment, increase the efficiency of the sediment part together with increase the energy efficiency of wastewater sludge treatment. Thanks to the investment, we implement automatic control processes in the field of biological wastewater treatment.

The new facilities are: a hydrolysis installation building (reducing the volume of sewage sludge and removing organic part from it, as well as increasing biogas production), a struvite removal installation building (removing phosphorus compounds from the effluent from the sediment part of the treatment plant, in order to reduce the load of pollutants to be removed) and a nitrogen removal installation, so-called deamonification (removing nitrogen compounds from the effluent from the sediment part of the treatment plant to reduce the load of pollutants to be removed).

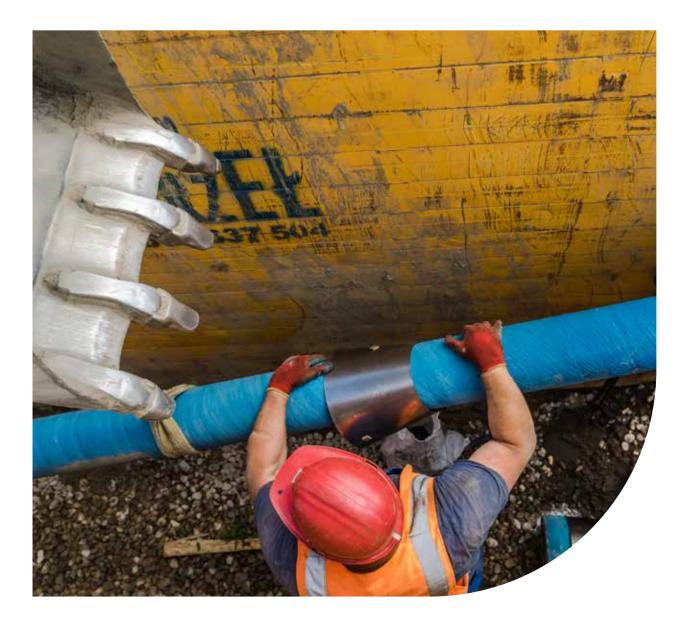
# New water main for the Pruszków Belt

In 2022, we continued the construction of new water mains for the Pruszków belt, which are an important element of the construction of the water supply continuity system. These investments are a priority both from the point of view of the residents of Pruszków and Warsaw districts, due to the creation of a second source of water supply for these regions. Currently, there is only one main that leads to Pruszków. Due to its age, this pipe poses a constant operational challenge. The expansion of the existing water supply network will also enable an increase in the reliability of network operation and translate into an improvement in water quality by maintaining the required pressure in the previously operated mains. The existing mains run through the cities of Piastów and Pruszków and through the following districts of Warsaw: Ursus, Bemowo, Włochy. As part of the task involving the construction of the main in Piastów and Pruszków, we have completed major construction works.

#### Work on a new infiltration water intake for Warsaw residents

In 2022, we continued the contract (signed in 2021) for the development of a technical expertise - stage I, aimed at, among others, confirming the correctness of the selection of the location of a new infiltration water intake, as well as the identification of administrative, formal and legal conditions for the project along with the development of a functional and utility program stage II.

Our planned investment in this area is the construction of a new well, working similarly to "Gruba Kaśka". It is assumed to be another infiltration shore intake with underground drainage, with a preestimated operational efficiency of 60,000-80,000 m<sup>3</sup> per day. Water shall be collected using 8-10 drains placed in the fan-shaped radius. Length of the perforated part of the drains is approx. 120 running meters, diameter 400-500 mm. The initially planned location of the new well is the left bank of the Vistula, between the Łazienkowski and Siekierkowski bridges.



# Protecting the environment

Sustainable development Water supply and sewage discharge masterplan Research and development activities Accredited MPWiK laboratories Water quality monitoring Environmental protection Compliance with environmental regulations Sewage sludge management Ecologically responsible







203-1 Development and impact of investments on infrastructure and services

# Sustainable development

One of our strategic goals in the area of environmental protection is to reduce and minimize pollution. At MPWiK, we care about the environment, as evidenced by subsequent "green" investments. We are constantly implementing modern technologies that will allow us to achieve environmental neutrality and we are investing in renewable energy sources, which are an important element of our energy efficiency program.

# Photovoltaic installations

The main projects aimed at improving energy efficiency in 2022 included the construction of photovoltaic installations on green areas in six locations of the Company. The total peak capacity of the installed installations is 6,7 MW.

## The two largest photovoltaic farms were built:

- at the "Południe" Sewage Treatment Plant – farm with a peak capacity of 2,43 MW,
- at the "Wieliszew" Water Treatment Station – a farm with a peak capacity of 2,25 MW.



The photovoltaic installations built in 2022 increased the existing electricity generation potential consisting of eight cogeneration units with a total capacity of 7.37MW powered by biogas and one 1.96MW turbogenerator using the energy of burnt sewage sludge. In 2022, the above-mentioned units located at the premises of three sewage treatment plants: "Czajka", "Południe" and "Pruszków", in combination with launched photovoltaic installations, produced a total of 49,4 GWh of electricity, which covered approx. 26% of the Company's total electricity consumption.





# Thermal treatment of sewage sludge

A Station for Thermal Sewage Sludge Utilization operates on the premises of "Czajka" Plant. It is the only facility of this kind in Poland that allows for the safe for the environment and residents burning of sewage sludge and the production of its own energy. The Station produces electricity, which in 2022 covered 44% of its electricity demand. Sewage sludge is mainly

incinerated, which is generated in all sewage treatment plants of the enterprise: "Czajka", "Południe", "Dębe" and "Pruszków".

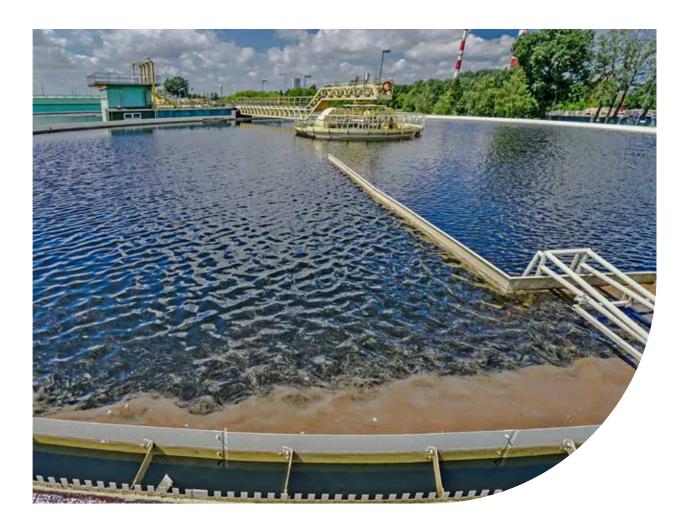
#### Circular Economy

In accordance with the European Union's circular economy policy, we implement activities taking into account the needs of the natural environment:

- we generate electricity from photovoltaic installations,
- we generate electricity by burning biogas and sewage sludge,
- we carry out work related to the reclassification of waste into by-products,

We use the treated sewage after disinfection as technical water for our own needs (e.g. for washing equipment, traffic routes).

We plan to use waste to increase the production of electricity and heat. Thanks to this approach, in 2022, the "Czajka" sewage treatment plant achieved energy self-sufficiency (in terms of electricity) of 58,5%, the "Południe" sewage treatment plant at 15,9%, and the "Pruszków" sewage treatment plant at 21,7%.







# Water supply and sewage discharge masterplan

Supporting the intensive development of Warsaw – with the approval of the Warsaw authorities by way of cooperation with them - we have started works related to the program and planning development, entitled Masterplan for Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji w mieście stołecznym Warszawie S.A. with an outlook to 2050 in the field of water supply and sewage systems. This action is dictated by dynamic climate changes and more and more frequent phenomena of hydrological drought or heavy rainfalls.

The main assumptions of the masterplan include:

- ensuring safe potential in terms of the amount of water abstracted, including increasing safety in the area of operation and maintaining infiltration intakes on the Vistula River in an appropriate manner, in the context of a changing climate,
- ensuring the safety and correctness of technical and technological solutions in the area of production of water intended for human consumption,
- ensuring the development of the water supply and sewage system in adaptation to demographic conditions and directions of spatial development of the Warsaw agglomeration, Pruszków agglomeration, Serock and



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For years, the MPWiK has been implementing solutions that take into account the needs of the residents of the constantly growing Warsaw agglomeration and the challenges resulting from ongoing climate change. Hence, our portfolio does not lack investments financed, among others, from the European Union funds, increasing the retention capacity of sewage networks. Their primary objective is to reduce the number of storm discharges from combined sewage system. The construction of a retention reservoir in the area of the "Czajka" sewage treatment plant, a network management system, as well as the construction of transit and retention collectors in the districts of Bielany, Śródmieście, Mokotów and Żoliborz are just a few of our investments carried out by the Company.

> **Ireneusz Majszczyk** Deputy Director of the Wastewater Division

municipalities of: Raszyn, Piaseczno, Brwinów, Stare Babice, Lesznowola and neighboring municipalities,

- counteracting the effects
   of weather phenomena by
   applying solutions limiting or
   slowing the inflow of rainwater
   and meltwater to wastewater
   treatment plants and
   developing and modernizing
   the sewage network in the
   context of a changing climate,
- ensuring the treatment of all collected wastewater to the parameters specified in the law and the management of technological wastes arising in the wastewater treatment process,
- environmental protection and rational resource management through the development of technologies focused on the Circular Economy and the development of renewable energy sources and striving for climate neutrality,
- increasing safety and improving the operating parameters of infrastructure and devices,
- ensuring the continuity of our Company's statutory services in the event of critical failures.

In 2023, we plan further work related to the implementation of Stage II Analysis of the existing state of the Company and implementation of Stage III Concept for the development of the Company. We plan to complete the concept in 2024.

# Research and development activities

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In 2022, as part of our research and development activities, we implemented the following strategic projects:

a new energy vision - its purpose is to reduce energy consumption in the Company's facilities from sources other than internal - reproducible or to achieve total energy self-sufficiency, e.g. sewage treatment plants. In 2022, we continued the activities undertaken in 2021 in this area and started new research projects to increase the energy self-sufficiency of the Czajka Plant.

#### As part of these activities, we implemented the following projects:

 $\circ$  investments in the area of Circular Economy (CE) at the "Czajka" sewage treatment plant - as part of this initiative, comprehensive technical documentation is created, describing the necessary scope of implementation, to be implemented as part of the sewage treatment plant's technological processes; the implementation of research is aimed at selecting solutions characterized by high efficiency and low electricity consumption. In 2022, work was completed on preparing a functional and utility program to increase energy efficiency, building a co-substrate reception point for the cofermentation process, optimizing the technological line and reducing odor nuisance,

- intensification of the fermentation process to increase biogas production, through two research projects:
  - Methane fermentation the aim of the project is to improve the efficiency of the sewage sludge fermentation process, which translates into an increase in the amount of biogas produced, and thus to increase the energy independence of our sewage treatment plants. The project is implemented by the Research and New Technologies Office in cooperation with the Warsaw University of Technology, as part of a cooperation agreement concluded on October 12th, 2021. In 2022, work on the project to build a pilot station was completed. The Research and New Technologies Office is simultaneously conducting research on a laboratory scale of potential co-substrates for co-fermentation using AMPTS technology,
- a second research project involving the dosing of air to sludge in Separate Fermentation Chambers in order to increase

the efficiency of the fermentation process by decomposing compounds difficult to decompose or indecomposable under anaerobic conditions under aerobic conditions; this project will allow to increase biogas production by 10%; in 2022 the installation of the plant was completed and research began,

#### cleaning up the water and sewage management in

**Pruszków** – the aim of the activities undertaken under this task is to prepare the sewage treatment plant in Pruszków for accepting and treating all sewage generated in Pruszków and the Ursus district, increasing the energy selfsufficiency of the facility and developing complete tender documentation, enabling the performance of construction works.

In 2022, technical dialogs were conducted with two potential contractors to develop a concept for the modernization of the plant,

#### building research and development potential in the

field of materials science – this project includes building research potential in the infrastructure of the Company in the field of materials science to meet a significant part of the needs related to the analysis of engineering materials used in water and sewage installations and enabling the expansion of competences and knowledge of the Company's employees in the field of acceptance activities, exploitation analyzes and prototype works. As part of the project, modernization works were carried out on the building at ul. Dobra Street, where the laboratory in the field of materials science will be located and the demand for all devices planned for assembly in the laboratory was submitted,

# construction of a model station for the purpose of quality and strength tests of materials used for the construction of sewage and water supply network (simulation of real operating conditions and parameters of the transported medium) - the aim of the project is to build model stations that will reflect

the conditions of water or

sewage (media) flow in pipes



used for the construction of water supply or sewage system. Due to their versatility, pilot stations will enable aging tests (mainly in terms of chemical resistance, in conditions similar to real and extreme), analysis of corrosion outbreaks and determination of optimal operating conditions, also in the simulation of failures. The tasks performed at the stations are to determine the suitability of pipes of a given type for the Company's future investments and to assess the existing installations in terms of their reliability and estimate the expected service life. In addition, the model stations will be one of the tools to determine the causes of possible failures. In 2022, design documentation for the installation was prepared,

#### the use of remote sensing methods for monitoring the condition of surface waters

- the aim of the activities is to identify the possibility of using remote sensing and photogrammetric methods in monitoring selected physicochemical parameters of the waters taken for treatment. The research was conducted by an expert from the Warsaw University of Technology and a scholarship holder of the Company's scholarship program as part of his master's thesis. The results of the conducted research indicate that there is a chance to use publicly available remote sensing methods to monitor the quality of surface waters in the Vistula basin, but they should be expanded







with other observation tools. The technical limitations of currently available satellite technologies were indicated, including the insufficient resolution of acquired images and their limited availability in free satellite databases. The research was completed in 2022,

monitoring wastewater for the presence of genetic material of the SARS-CoV-2 virus – is one of the tools to support the

crisis management process; as part of the initiative, we undertook to create a methodology and procedures for monitoring the presence of SARS CoV-2 genetic material in wastewater; for this purpose, we have started cooperation with the National Institute of Public Health the Department of Virology of the National Institute of Hygiene (NIZP-PZH). As part of it, we undertook to collect sewage samples from selected locations, according to a set algorithm and schedule, as well as to perform analyzes of the physico-chemical parameters of collected sewage samples, including the determination of: BOD5, COD, temperature, pH, dry matter, phenol, ionic and non-ionic surfactants. We continue the sewage research with AQUANET, and we submit the results to the Office of Health Policy of the City of Warsaw. We also publish the results of the research on our website.

We have started to build our own facilities for virus testing. Due to the fact that research is conducted on the basis of the qPCR research methodology and the need to provide laboratory rooms independent and isolated from other rooms, we have modernized the "Wieliszew" laboratory - one of the Company's five laboratories, located on the premises of the Northern Plant. Employees of the biological analysis area of the "Wieliszew" Laboratory acquired the necessary knowledge and participated in training in the field of implemented research,

#### **the EKF Green Accelerator**

program - is a government program of the Kingdom of Denmark, which offers funding for activities in the field of reducing greenhouse gas emissions, using renewable energy sources and increasing

the efficiency of using natural resources such as water. We established cooperation with the Embassy of the Kingdom of Denmark in Warsaw, which resulted in granting us a grant for the development of a case study and implementation of a pilot in the field of available technologies supporting the management of the water supply network. In February 2023, we concluded an agreement with DHI Polska sp. z o.o., Kamstrup sp. z o.o., Leif Koch A/S and the Embassy of the Kingdom of Denmark to implement the grant,

 heat recovery from wastewater

 is a project implemented in cooperation with Veolia and
 PGNiG Termika. The purpose of the cooperation is, in particular, to determine the technical possibilities and potential for



the production/recovery of heat from the treatment plant: "Czajka", "Południe", "Pruszków" and sewage collectors. The information gathered will be collected in a feasibility study, which, in addition to technological and formal-legal solutions, will also include an economic analysis of the investment. An additional area of study work with PGNiG Termika will be the analysis of the possibility of using treated wastewater as technological water at the facilities owned by the Partner. In 2022. we signed a letter of intent regarding mutual cooperation between MPWiK and Veolia. We concluded a cooperation agreement with PGNiG Termika in the first quarter of 2023.

In 2022, we also continued the third stage of wastewater treatment, whose activities included:

modernization of model stations for the implementation of a project to remove micropollutants from wastewater in the process of ozone treatment and filtration on an activated carbon deposit. As part of this task, it is planned to adapt the model stations owned by the Company to the possibility of conducting pilot studies in terms of modern technologies, enabling, among others, water recovery from



treated wastewater for reuse. The studies were conducted using SPiD installations and summarized in a report. In 2023, the model station is expected to be expanded to increase the efficiency of the observed process,

- implementation of research and development projects aimed at selecting the optimal technology for removing micropollutants, including hormones, pharmaceuticals from wastewater and verification of technologies allowing for complete closing of the water cycle in the city space; thanks to winning the Interreg Baltic Sea competition, the Renutriwater project will receive financial support from EU subsidies; the implementation of the project began in the first quarter of 2023,
- analysis of PFAS compounds (per- and polyfluoroalkyl compounds) and microplastic. These activities are aimed at estimating the amount of micropollutants in water, sewage and sewage sludge as well as in produced and raw water. Based on the results of the tests, it was found that the substances examined do not currently pose a threat to the quality of the treated water. The research will be continued in 2023 for monitoring purposes, which will allow to assess the scale of occurrence of micropollutants and possibly indicate effective methods of their determination and removal.

# **Accredited MPWiK laboratories**

102-15 The most important influence an organization has on its environment, risks and opportunities

## The Company's Laboratories Division has:

- Certificate of the Polish Center for Accreditation (PCA) No.
   AB 811, which for 16 years confirms the high quality of tests and is a proof of operation in accordance with best laboratory practice,
- Decisions of the State District Sanitary Inspector approving the quality system of conducted tests of water intended for human consumption,
- In our laboratories, we provide services in the field of sampling and physicochemical and biological tests related to collective water supply and sewage discharge, both for the needs of the Company and external contractors.

The research includes water, sewage, sewage sludge and sewage waste as well as biogas as part of the ongoing processes of water treatment, water distribution, sewage treatment and quality control of sewage entering the sewage network and discharged to the environment, and resulting from the expansion and modernization of existing technologies in our plants.

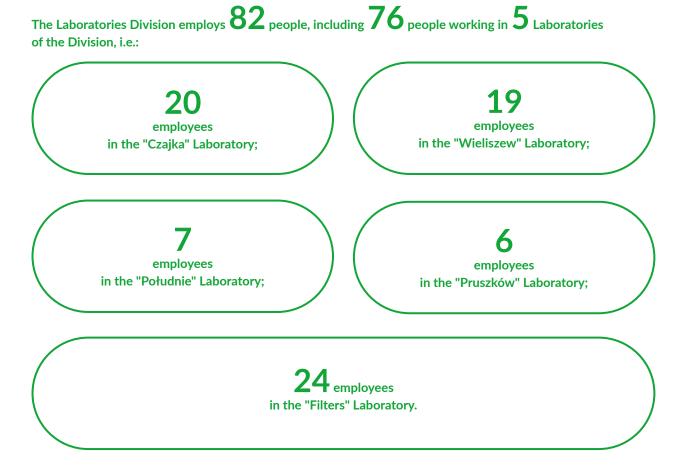
In 2022, we performed about half a million analyzes and other laboratory activities. Almost one and a half thousand studies were carried out at the request of external contractors.



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Our laboratories are highly specialized equipment and competent employees constantly improving their knowledge. Every year we perform over 400 thousand different tests: water, sewage, waste, sewage sludge, biogas and reactants. Every year we expand this offer in response to changing regulations and the needs of production plants. Our work is done at the highest level and we are proud of that.

> **Izabela Łukaszuk-Dziuba** Director of the Laboratories Division





# Water quality monitoring

In 2022, we performed a total of 17,552 water quality parameters determinations in the water supply network, including 15,555 in Warsaw and 1,997 determinations on the route of the Pruszków Belt.

We continuously monitor the quality of water taken (Vistula, Lake Zegrzyńskie), produced (at all stages of treatment) and delivered to customers, i.e. at the point of water entry to the water supply network and in the municipal water supply network.

Since 2002, so-called biomonitoring has been operating on water intakes (fish are the test organisms) in the flow system (on-line), which is the best system for controlling and warning about water pollution in the spring. In addition, at the "Gruba Kaśka" plant, there is a SYMBIO (online) biomonitoring system using mussels as indicator organisms for real-time monitoring of the quality of infiltration water taken from the Vistula River. The SYMBIO system, which is also operational in the Northern Plant, monitors the



quality of surface water abstracted from Lake Zegrzyńskie. In addition, in order to assess water in terms of safety, the Company's laboratories perform tests using the luminescent bacteria Alivibrio fischeri (DELTATOX) and Spirostomum, as well as Daphni (FLUOTOX) in the Central and Northern Plants. Information on the quality of water pumped into the municipal network from individual Water Treatment Stations and Pumping Stations was made available to the customers in the form of periodic press publications in Gazeta Wyborcza and on the Company's website, www.mpwik.com.pl. Publications included basic microbiological and physicochemical indicators of water quality, including tests for heavy metals and trihalomethane content in line of applicable legal requirements and World Health Organization (WHO) recommendations. Each time, they contained an opinion of the State District Sanitary Inspector in Warsaw, supervising the quality of water delivered to recipients.

Water quality tests in the water supply network are also conducted at 80 points of permanent water quality control: 72 points are located all over Warsaw and 8 points along the Pruszków Belt





(including Pruszków, Piastów and Michałowice). The location of control points on the network, their number and the scope and frequency of tests are agreed with the appropriate State District Sanitary Inspector.

We are continuing work on a centralized control system for the water supply network, based on IT systems, which will allow, among others, automatic control of the water distribution system, adjustment of the optimal pressure and amount of water introduced into the network, as well as prevention of failures of the water supply network, and in the event of a failure, its quick location.

In connection with the failures of the sewage transmission system

to the Czajka treatment plant, which took place in 2019 and 2020, accredited laboratories of the Warsaw Waterworks from the moment of the first failure until the second failure was removed, daily conducted extensive water quality tests in eight points of the Vistula and seven points outside the capital, up to Płock. Vistula water quality monitoring is carried out on an ongoing basis to this day.

The tests carried out by the Warsaw Water Supply Network after the failure were carried out in an extended scope. These included both physicochemical and microbiological studies. Their results allowed to conclude that the Vistula has the ability to selfpurify. As the discharge site moves downstream, the degree of mixing of the discharged effluent with the water in the Vistula increased, and thus the concentration of pollutants in the entire volume of water flowing decreased.

Moreover, the discharge of sewage did not affect the quality of water, not only in the Warsaw section of the Vistula, but also below Warsaw, as confirmed by research conducted on the section of the river to Płock. The obtained results of microbiological, as well as physicochemical, clearly indicated the local nature of pollution, which did not affect the quality of water in further sections of the river. The discharge of sewage into the Vistula in Warsaw also had no impact on the quality of water at the mouth of the Vistula and the Bay of Gdańsk, as confirmed by

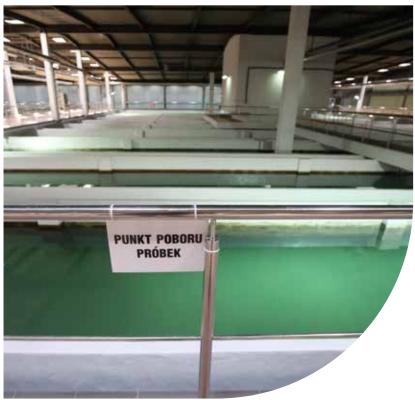


research conducted by the Medical University of Gdańsk – both after the first and second failure.

It is worth noticing that a year after the second accident, independent experts also noted an improvement in the ecological condition of the Vistula River, which is synonymous with the fact that the failures did not have a negative impact on the ecological condition of the river in the long term.







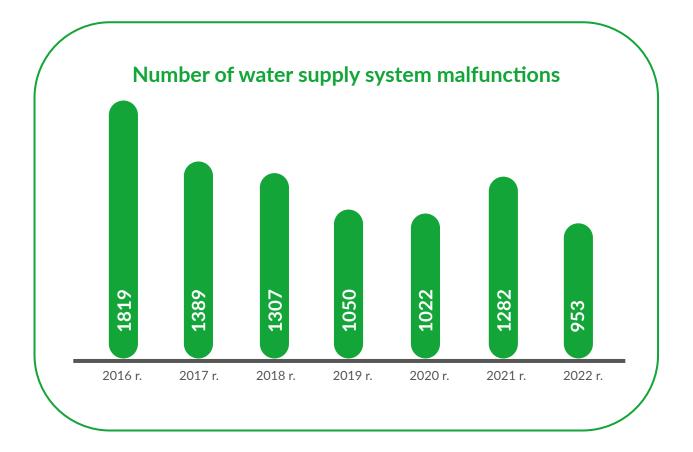
One of the features of large rivers, such as the Vistula, is the ability to buffer the inflow of large amounts of pollution. In the case of the Vistula River, characterized by an unregulated course, this resistance seems even higher than in the case of heavily canalized rivers. It is worth noticing that the quality of the river environment, especially in urban sections, is regulated not only by human activity, but also by natural factors. Our services, supported by external contractors, are working with commitment and diligence to remove existing water supply failures. We are committed to restoring the water supply as soon as possible, and our employees are doing their best to ensure that arising supply disruptions last as short as possible.

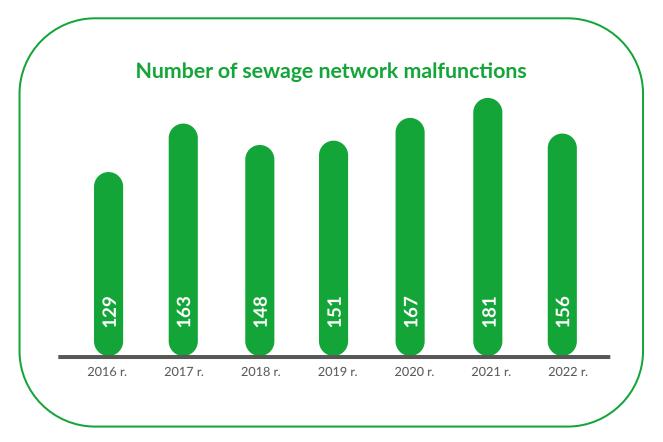
We conduct on-line pressure inspections and analyzes within

the water supply network, we expand the water supply network monitoring system in terms of measuring hydraulic parameters, i.e. pressure and flow. The main objective for the current construction of water supply network monitoring points is to divide this network into monitoring zones, i.e. separated network areas in which the inflow and outflow of water from a given zone is monitored. Dividing the network into monitoring zones will enable control of balancing the water volume in a given zone – the actual volume of water used in the zone in relation to the recorded water withdrawals at customers. Furthermore, we systematically perform network and component inspections.



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# **Environmental protection**

We care about the natural environment and its resources. In our activities, we strive to constantly reduce the negative impact on them by investing in projects related to its protection, as well as resource efficiency and the implementation of projects that build social ecological awareness.

We operate in accordance with applicable regulations and use best practices and rules of conduct, while constantly analyzing the possibilities offered by new technologies in this respect. Therefore, in 2022, we took a number of formal measures related to environmental protection. The most important include:

- obtaining the decision following an administrative proceedings in which the State Water
   Company Wody Polskie granted the Company water permits.
   Permits concern the discharge:
- sewage from the Nowodwory storm overflow into the Vistula River;
- treated municipal sewage from the sewage treatment plant "Dębe" to the surface waters of Narew River;
- technological sewage,





rainwater and meltwater, water from drainage of the area nad emergency clean water discharges form the "Wieliszew" Water Treatnent Station to Canal K1 (and further to the Komornicki Canal), Lake Zegrzyńskie, Bródnowski Canal and drain B (and further to the Bródnowski Canal);

- verification of 306 information and decisions in which the State Water Company Wody Polskie determined the amount of fees for the use of water services in the scope of water intake, sewage and rainwater discharge and gravel intake for the Company;
- submitting a notification and obtaining confirmation of acceptance of the instalation notification from which gases

and dust are introduced into the air for:

- sewage pumping station operated by Zakład "Dębe" – P22 and P22-2 located at ul. Kościelna in Łajski, in the municipality of Wieliszew;
- sewage pumping stations
  operated by the Sewage
  Network Plant, i.e.: "Chlubna",
  "Jutrzenki", "Kopalniana",
  "Paderewskiego", "Rosoła",
  "Żywiecka" and "Saska Kępa
  I" located in the Capital City
  of Warsaw. Warsaw.

In 2022, MPWiK did not change or update the waste production permit number 177/13/PS.O of 20 December 2013, as amended.

# **Compliance with environmental regulations**

Our activities are carried out on the basis of appropriate permits, authorizing the use of environmental resources in terms of water intake, sewage disposal, sand extraction, waste generation and emissions to the air. Among the installations in operation, in addition to the treatment plants described earlier, there are also storm overflows of the combined sewage system. Overflows protect the municipal sewage system from overloading associated with heavy rainfall, which can lead to local flooding and disrupt the safety of wastewater treatment plant operations. Overflows operate periodically – discharge of sewage, which is a mixture with rainwater, usually occurs only in emergency situations, i.e. when the network's retention capacity is exhausted, in particular due to intense weather phenomena. We have 16 storm overflows, 10 of which are located on the left bank of the Vistula River and 6 on the right bank. In order to meet the challenges that result from ongoing climate change, we have been implementing solutions for years to increase channel retention and reduce the number of storm discharges.



# Sewage sludge management

Thanks to the optimization of the combustion process and high availability of both combustion lines, 174,459 Mg of sewage sludge was thermally converted in 2022.

Sewage sludge is a by-product of the sewage treatment process and is not classified as environmentally hazardous waste (as referred to in the Regulation of the Minister of Climate of 2 January 2020 on the waste catalog). Sewage sludge produced at the Company's treatment plants is incinerated at the Sewage Sludge Thermal Utilization Station (STUOŚ) located at the "Czajka" Plant, which was put into operation on 31 December 2012. Due to this technology, we produce "green" energy for the needs of wastewater treatment plants.

STUOS is the largest facility in Poland for thermal processing of municipal sewage sludge and wastewater scraps - waste generated in the wastewater treatment process. STUOS as the only sewage sludge incineration plant in the country was equipped with a steam turbine with an electricity generator. The heat energy contained in steam is recovered in the process of drying sewage sludge, and the excess is converted into electricity. Energy efficiency of STUOS amounted to 44% on average in 2022.

Commission Implementing Decision (EU) 2019/2010 of 12.11.2019 (Directive 2010/75/ EU of the European Parliament and of the Council; OJ. EU L 312, 3.12.2019, p. 55) imposed on incineration plants an obligation to adapt the above installations to the so-called BAT conclusions,



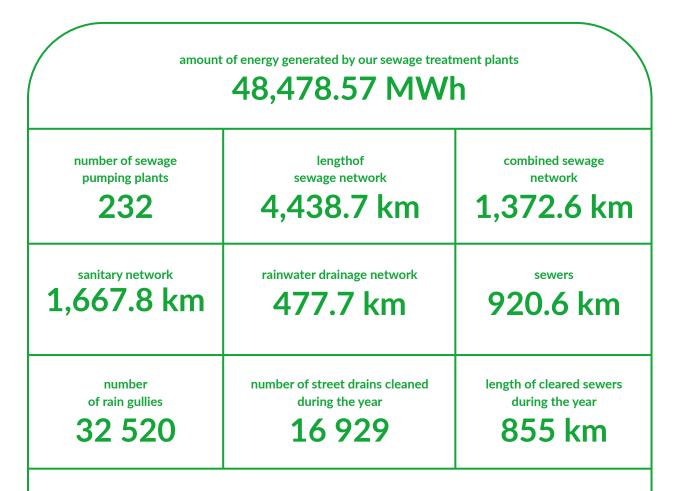
which set out the best available techniques for the incineration of waste.

5 August 2021 the Marshal of the Mazowieckie Voivodeship issued an integrated permit decision for STUOŚ, where the areas in which we should adapt the installation to the requirements of the abovementioned regulations were indicated. Most of the installation has the best available techniques, as defined in BAT conclusions, but several changes need to be implemented within 4 years of the publication of the Implementing Decision in the Official Journal of the European Union, i.e. by 3 December 2023. In 2022, the following expert opinions were delivered: "Development of a concept defining the possibility of using the method of catalytic oxidation of NH3. in order to reduce the emission of ammonia

compounds in waste gases resulting from the thermal transformation of waste into STUOŚ", aimed at determining the possibility of using the abovementioned technology to reduce ammonia emissions and an expert opinion on the impact of individual noise emission sources from installations located on the Czajka Plant on noise levels outside the plant. In a long-term perspective, investment tasks are planned: "Design and construction of sound absorbing barriers for 12 roof fans in STUOŚ" and "Design and construction of acoustic baffles along the wall or on the retaining wall of the warehouse square from ul. Chlubna".



#### Company's sewage infrastructure



weight of technological waste (with codes 190805 – sediments and 190801 – screenings) generated in the process of sewage treatment during the year

# 180,204.12 tonnes, including:

# 174,459 tonnes

of sewage sludge were incinerated in STUOŚ, where a total of 14,652.84 tonnes were accepted from other treatment plants

### 184.6 tonnes

of screenings have been incinerated at STUOŚ

# 2,319.38 tonnes

of sewage sludge generated in the process of sewers cleaning have been sent to external facilities

# 3,241.14 tonnes

of screenings have been sent to external facilities

# **Ecologically responsible**

In our daily work for the benefit of residents, as well as in the implementation of investment tasks, we pay particular attention to activities that reduce the negative impact on the natural environment. Our strategic goal is to prevent environmental pollution, reduce water losses, reduce energy consumption and reduce carbon dioxide emissions to the air.

In 2022, we continued a number of previously undertaken ecological projects. Here they are:

Apiaries - since 2020, we have eight hives with Carnidan bees on the premises of the Northern Plant in Wieliszew. Honey harvest allowed to obtain the following honeys: willow, acacia, multiflower and goldenrod, which gave a total of 165 kg of honey. In 2022, we installed a second apiary on the "Filtry" Station, consisting of four hives with two Carnidan and Caucasian mothers each.

















- Flower meadows on the premises of our plants: The Central, Northern and "Czajka" meadows are tended by flowers composed of dozens of flower seeds and field herbs. Their total area is 10 780 m<sup>2</sup>.
- Conservation of swifts is a project implemented in 2021 and continued now, the aim of which is to protect useful animal species. As part of it, we installed nesting booths for swifts at the "Południe" Plant and the "Praga" Water

Treatment Station. In Poland, these birds are under total protection of species. They play an important ecological role, eliminating huge amounts of insects, including mosquitoes. One swifter can catch up to 20,000 of them a day. We have prepared 5 breeding booths for these useful birds at "Południe" Plant and 12 breeding booths at the "Praga" WTS.

Protection of hedgehogs – the largest of the insectivorous mammals in Poland are subject



to strict protection, but also require active protection. As a result of human activity, their natural environment is shrinking, making it increasingly difficult for animals to find winter shelters. That's why we decided to build wooden houses for hedgehogs. At the "Filtry" WTS, "Praga"WTS, River Pump Station and "Czajka" Plant we take care of 20 "micro apartments" for hedgehogs.

 Green roof of the "Ozon"
 building - this place was created 13 years ago, in 2010, on the roof of the "Ozon" building, on the "Filtry" WTS. It retains rainwater, purifies air and improves aesthetics. In 2022, we renovated greenery there and made new plantings.





# We care about employees

Good employer Conditions of employment Employer branding activities Professional development Safety and health of employees Communication and internal actions Counteracting discrimination and mobbing Cooperation with trade unions Company Social Benefit Fund Employee volunteering Sport





# **Good employer**

As a professional employer, we create a friendly work culture. We set real challenges and goals for our employees. We support them in their individual development and encourage them to share their knowledge. We take care of good working conditions, wages and social facilities. We strike a balance between work environment and private life.

# **Conditions of employment**

#### 102-8 Information about employees

The effective operation of enterprises depends on many factors, but the foundation of a properly functioning organization is people. That is why we care for our employees, providing them with comprehensive care, safety and the opportunity to improve their qualifications and guaranteeing stable employment conditions by:

- an employment contract,
- a bonus system based on management by objectives and employee evaluations,
- professional development and improvement of qualifications, thanks to the possibility of participating in numerous courses and trainings,
- a package of benefits from the Company Social Benefit Fund,
- co-financing of education, including supplementing secondary or higher education - engineering, master's, postgraduate and PhD studies,
- medical care,

- group life insurance,
- jubilee awards,
- learning foreign languages through the eTutor application,
- benefits in the form of co-financed sports cards,
- possibility to join sports sections and company teams.

Thanks to this, we can count on the effective performance of tasks by our employees, raising their competences and qualifications, participation in building a high organizational culture and involvement in the affairs of the Company and the Warsaw municipality, of which we are a municipal service.

Employees	Total	Females	Males
Number	2459	702	1757
Percentage	100%	28.5%	71.5%

# **Employer branding activities**

Our Company successfully undertakes activities that make it perceived on the market as a good and desirable employer. The implemented employer branding activities have a real impact on increasing our recognition and increasing the commitment of both employees and future employees.

- Since the first quarter of 2022, as part of the support for Ukrainian citizens, all recruitment announcements have been marked with the "openness to employing people from Ukraine" clause,
- We took part in Job Fairs at the Polish-Japanese Academy of Information Technology and other job fairs and exchanges organized by Warsaw Labor Offices,
- We have implemented another campaign entitled: Join us, which aimed to build a positive image of MPWiK as an employer. The radio spots were also joined by a campaign carried out in public transport: trams, buses and the metro.
- We continued our cooperation with Warsaw secondary schools, in particular under the concluded agreements.







# Other activities for employees in 2022:

From 1 January 2022, in consultation with representatives of the Company's Trade Union Organizations, we updated the three most important regulations for employees:

- Work Regulations,
- Remuneration Regulations,
- Regulations For Managing The Company Social Benefits Fund.

The Employee Appraisal System has also been changed, as has the bonus system. As part of it, we have harmonized the rules for evaluating employees, by introducing the same weight for assessing their competences and for achieving their goals. We have also increased the threshold of presence at work, qualifying for quarterly assessment, and thus also for bonuses. We have consulted the changes to the rules of the Employee Assessment System with the Company Trade Union Organizations operating in the Company.

In 2022, we continued the project on job evaluation. For this purpose, we have established the Job Valuation Commission, which has evaluated over 1,000 positions currently existing or potentially occurring in our Company, taking into account the diversity in terms of areas of operation, specialization, as well as levels of career paths. All positions were valued according to the same set of over one hundred detailed criteria, including qualification requirements, value of performed tasks and working conditions. Our goal is to establish a new system of remuneration with transparent pay and promotion rules.

# **Professional development**

In 2022, we supported employees in deepening their specialist, technical and technological knowledge, as well as in developing the competences needed to perform their professional duties.

1414	Number of employees who took part in specialist training.	
169	Number of employees who participated in specialist forums.	
1210	Number of employees who benefited from the e-learning training offered.	
743	Number of employees who underwent anti-corruption training at the CBA on the online platform.	
1188	Number of employees who took part in safety, security and fire protection training.	
935	Number of professional qualifications obtained.	



#### **Employee training**

Our employees had the opportunity to take part in a number of training projects, including:

customer service that we have been providing since 2011. The aim of the training is to develop the ability to build relationships with clients, their professional service, cope with difficult situations, and learn assertiveness. The trainings are provided to all our employees who have contact with external customers, institutions, residents of Warsaw, as well as with our internal customers. In 2022, 98 employees participated in the training,

#### development of soft

competences in line with the Company's Competence Model. As part of them, we organized trainings: on the power of feedback, public speaking and presentation, communication and cooperation in the team, effective communication and conflict resolution. In 2022, we trained 394 of our employees in these areas,

#### in e-learning courses on:

 prevention of mobbing and discrimination in employment, the aim of which was to build a friendly workplace based on respect and kindness, as well as developing the ability to recognize the first negative symptoms of mobbing



# $\Diamond \Diamond$

The MPWiK's strength lies in its employees. That is why we try to be a good employer not only at the level of declarations, but also in action. Stable employment and safe working conditions are the basis for them, but equally important for us are an atmosphere based on mutual respect and professional development - possible thanks to numerous individual and group trainings. We operate as a team not only during working hours - we have, among others, a dozen sports sections (e.g. athletics or squash), which meet and strengthen ties also in private time. We believe that a good atmosphere and respectful relationships affect the quality of the tasks performed and the well-being of our employees.

> **Grażyna Rypeść** Director of Staff Affairs Division

or discrimination. 789 employees took part in the training,

- GDPR in HR aimed at increasing the level of knowledge of our employees in the field of personal data protection. The training covered a total of 90 employees,
- principles of providing and accepting feedback – a total of 95 employees were trained,
- interim evaluation of the employee - a total of 147 employees were trained,
- information security and protection – 47 employees took part in the training,
- stress management a total of 42 employees were trained.

A total of 1,210 Company employees benefited from e-learning training.

learning foreign languages through access to English, German and Spanish courses on the eTutor platform. In 2022, 858 users benefited from this form of learning.

in the field of compliance on the compliance management system in place at MPWiK, in particular regarding the impact of employees' attitudes on shaping the Company's image and the employer's expectations towards the employee with regard to the system's functioning. In 2022, 327 employees took part in training in this area,

improvement of professional qualifications through education in schools and studies. In 2022, one of the staff continued his PhD studies, 43 at tertiary and postgraduate studies (all with co-financing of tuition fees by the employer). New contracts were also signed with 19 employees wishing to improve their professional qualifications.

In addition, in connection with the commencement of the project

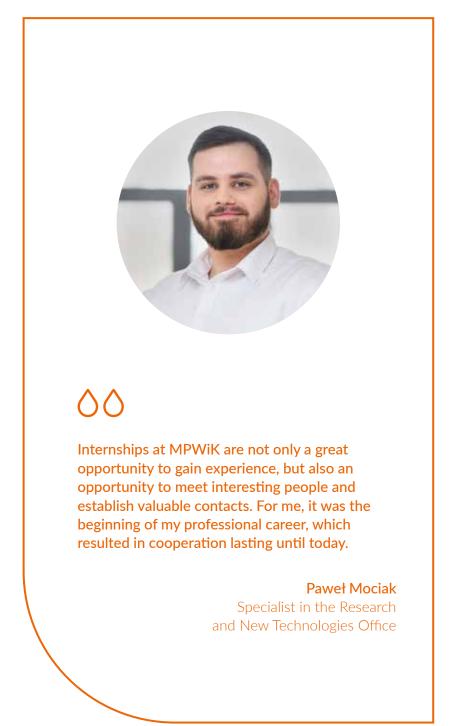
of valuing workplaces in the Company, in 2022 we trained 113 people in managerial positions participating in the project. The trainings took into account the importance of job descriptions, the methodology of their creation and the role of employees in their development.

In addition, due to the geopolitical situation, our employees took part in defense training (446 employees), shooting training (522 employees) and anti-terrorism training in the field of handling potentially dangerous shipments (64 employees), as well as first aid training (84 employees).



#### Organization of internships

As part of this area, we organized student internships for a total of 12 secondary school students under cooperation agreements with the Electronic and Secondary School Complex in Warsaw, School Complex No. 39 named after Edmund Jankowski in Warsaw, Technical School No. 7 named after Eng. Stanisław Wysocki in Warsaw's ex "Kolejówka".



In addition, in 2022, the Company's Management Board adopted a resolution on the organization of paid student and graduate internships, the amount of cash benefits for this type of work and the amount of remuneration for intern supervisors. After analyzing the needs of individual units in this area, we published relevant recruitment announcements, as a result of which agreements were signed with 30 apprentices (10 graduate agreements, 20 student agreements). After the internship, we signed employment contracts with 7 apprentices.



### **Employee safety and health**

403-2 Hazard identification, risk assessment and accident investigation

In 2022, we implemented an information campaign in the field of OHS under the slogan "Share safety". Promote good OSH practices. In the in-house monthly magazine Wodociągowiec Warszawski, we published articles related to health and safety issues and work ergonomics. We also announced occupational health and safety competitions for employees and published materials on first aid.

We have been providing employees with the most important information on occupational health and safety through the *Wodnik intranet platform* and the regularly published newsletter. As part of strengthening culture and increasing awareness in the area of occupational health and safety, we also organized a number of thematic meetings for employees in working positions, the so-called Minute for Safety. As a preventive measure, we have developed an information brochure for new employees entitled 'Stop accidents at work' and organized a competition with awards for employees as part of this campaign. We have published articles on occupational health and safety and ergonomics for our employees, and conducted a series of regular thematic meetings aimed at increasing the level of employee awareness in the area of occupational health and safety, under the slogan "Moment for safety".

Identification of hazards and assessment of occupational risk were carried out in accordance with the requirements of the PN-N-18002:2011 standard. The whole process was described in internal documents and its quality was confirmed by systematic external and internal audits as well as inspections carried out by OHS staff.

We translated the results of the risk assessment into corrective programs, which, through the use of technical, organizational or personal protection measures, have influenced the improvement of working conditions. We have also taken these results into account in regular management reviews.



## **Communication and internal actions**

## Internal communication

Our employees have the opportunity to regularly learn about the current activities and events in the Company's life from such information sources as the monthly magazine *Wodociagowiec Warszawski*, the intranet platform *Wodnik*, information boards and TV monitors placed in the Company's headquarters and the newsletter with the most important news about the MPWiK's activities.

## Selected activities and campaigns

As part of the activities addressed to employees in 2022, we organized:

- Fat Thursday donuts for all employees,
- Children's Day for employees' children – distribution of family tickets to the Illusion Museum in Warsaw,
- Waterworks Employee of the Year Award 2021 – the title is awarded to the most popular, most liked and valued employee of the Company, for whom colleagues vote, in 2022 it was Mr. Jerzy Górecki,
- Waterworks Day celebration

   a ceremony of awarding to meritorious employees company badges of the Meritorious Employee of







the Municipal Water Supply and Sewerage Company and industry badges awarded by the "Construction" Trade Union,

 Christmas Eve meal for employees working on December 24<sup>th</sup> on the second shift.

**Energy saving** – 2022 was the time when saving energy became a necessity. With the Energy Saving Campaign, we called for smart use of electrical appliances.

With you, it is worth – we distributed posters on benefits for employees, as well as posters and information leaflets under the slogan With you, it is worth distributing on the Company's valuation project.



Vaccination point - in January 2022, we organized a COVID-19 vaccination point for employees. We also carried out an information campaign on the promotion of these vaccinations (posters, rollups, stumblers) and an information campaign on prevention during the epidemic threat (posters). Additionally, in the fourth quarter of 2022, flu vaccinations were organized for all those interested.

## **Counteracting discrimination and mobbing**

In 2022, we continued the campaign against Hate Speech launched in previous years. Through information posters, we reminded them about the principles we follow in our daily work:

#### 1. I don't hate,

#### 2. I respect,

#### 3. I React/Report.

Acting in accordance with the compliance management system, we oppose all manifestations of hate speech. During numerous training sessions on the compliance management system, we shape appropriate attitudes among our employees, in line with the values of the Company's Code of Ethics. We are not indifferent and we know how to recognize and respond to hateful comments and statements. We react in advance to any signals about undesirable behavior. During numerous training meetings or information campaigns, employees are informed that there is no place for hate speech in the Company, and any difficulties encountered at work can be overcome by clarifying matters while respecting the interlocutor's opinion.



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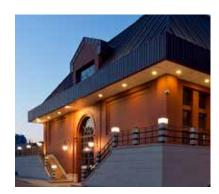
## **Cooperation with trade unions**

As a responsible employer, we cooperate with trade union representatives. There are 6 such organizations in our Company:

- Trade Union of Engineers and Technicians,
- Free Trade Union of Employees in Water Management and Environmental Protection Industries Warsaw Branch
- Trade Union of Employees in Continuous Process Industries "MPWiK"
- Independent Self-Governing Trade Union "Solidarność 80"
- Independent Self-Governing Trade Union "Solidarność"
- Nationwide Employee Trade Union "Konfederacja Pracy"

We make every effort to ensure that important issues concerning employees are taken up in cooperation with the Trade Unions operating in the Company.

Throughout 2022, as part of the ongoing project of job evaluation, cooperation with representatives of trade union organizations took place. The social side was informed about the emerging products of the project and planned next activities. Representatives of the trade unions were invited to participate in the work of the Commission evaluating jobs on equal terms as members of the Commission appointed by the Management Board of the Company. The Commission reached all its findings through constructive discussion and consensus building, taking into account the views of each member.





## **Company Social Benefit Fund**

In 2022, we granted 4,520 benefits under the Company Social Benefit Fund in the total amount of PLN 5,975,678. Within this amount, our employees benefited from the following benefits:

- subsidies for self-arranged holidays, so-called. "Holidays under the pear tree" or subsidies for organized holidays for children and young people, allocating the amount of subsidies for self-arranged holidays to the child's holiday,
- subsidies of rehabilitation and holiday stays for children with a certified degree of disability,
- non-repayable in-kind or financial assistance (financial assistance),
- school aid for children and adolescents aged 3 to 20,

- housing assistance in the form of loans for:
  - renovation of apartments/ single-family houses,
  - construction or purchase of a single-family house or flat,
  - covering the costs of purchase of premises for ownership,
  - adjustment of flat/singlefamily house to the needs of a person with disabilities,
- a Christmas and New Year gift for eligible children, which, as in

previous years, was made in the form of a gift card.

In 2022, the Company Social Fund was also used by retirees and disability pensioners as part of benefits:

- non-repayable in-kind or financial assistance (allowances) for pensioners,
- special aid for workers and pensioners.

### **Employee volunteering**

Helping gives us joy! Therefore, in 2022, we continued our charitable activities in the following areas:

Waterworks Run – 7. The Family Waterworks Run for children from orphanages took place on October 15 at the "Filtry" Station. The event was attended by 123 participants, who ran a total of 637,9 km; the result was the best in the history of this event. Thanks to the kilometers collected, the amount of PLN 15,947.50 was given to the children.



Let's help animals survive the winter – this is an annual collection of gifts for homeless animals. In 2022, we donated gifts and caps collected by our employees to shelters in Józefów and Nowy Dwór Mazowiecki. During the year, we also handed over newspapers to the Paluch shelter and the Jokot Foundation. Winding-off screws - the action of collecting caps is one of the popular forms of helping others. It also encourages attention to appropriate waste segregation or recycling. It additionally encourages employees to get involved in social initiative. We donated the collected nuts to the shelter for homeless dogs in Nowy Dwór Mazowiecki. The funds from the sale were used to improve the living conditions of animals living in the shelter (warming of buildings, treatment, etc.).

Blue Santa – again, our employees became Santa Claus for 76 children from three orphanages. Children found their dream gifts, sweets, cosmetics and gift vouchers under the Christmas trees. We have also donated cleaning products and other things that make their daily lives easier.

**The Great Orchestra of Christmas Charity** - for several years we have been participating in fundraising for the Great Orchestra of Christmas Charity. At 30. We



donated the WOŚP finale to two cruises on the Vistula River with the "Kleń" boat - one of the newest vessels of our Company for special tasks. We managed to collect PLN 7,898.52.



## Sport

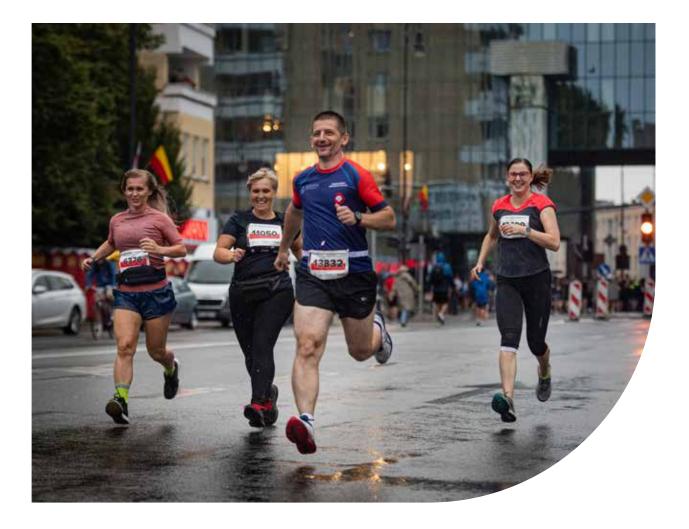
MPWiK has 9 sections offering the opportunity to develop employees' sports passions and take care of their health. These are the sections: volleyball, football, basketball, cycling, athletics, table tennis, tennis, squash and badminton.

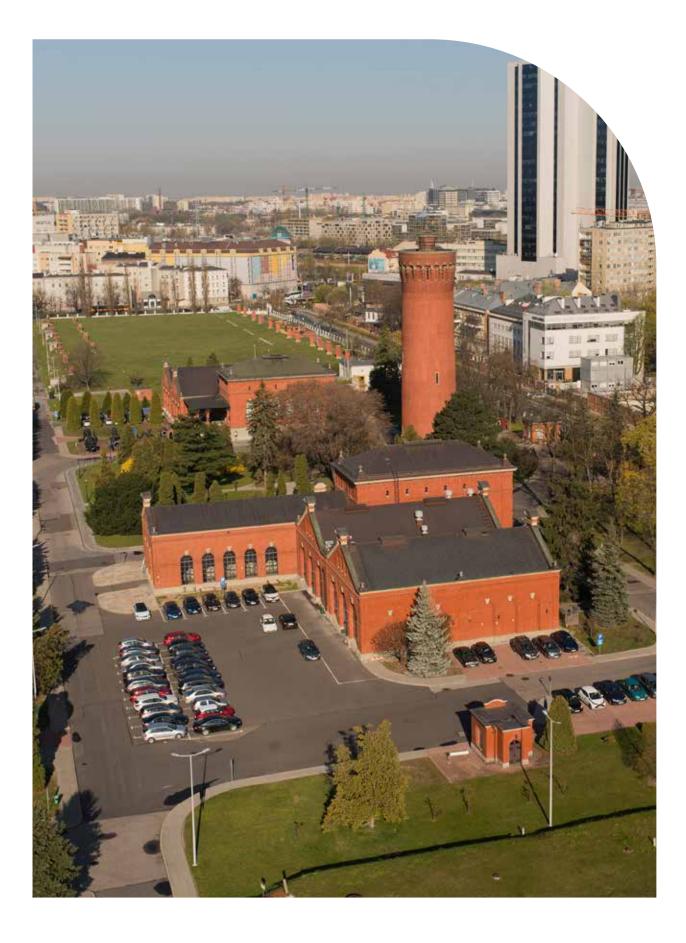
In 2022, our employees took part in numerous sports events:

- tournaments: Let's Go Volleyball, Legia Biznes Cup, Basketball Business League, Sunday Squash League, Lotto Poland Bike, Table Tennis Tournament Grand Prix Cohesion Warsaw,
- urban runs: Thyme Run, May 3<sup>rd</sup> Run, Forest Triad, 31<sup>st</sup> Warsaw Uprising Run, 32<sup>nd</sup> Independence Run,
- 30<sup>th</sup> Spartaciade of Water Supply and Sewerage Employees. Tadeusz Jakubowski

   in Malta, Poznań, for two
   August days, 76 employees
   competed in 24 competitions.

In the general classification, the Warsaw team took 1<sup>st</sup> place, and teams from Krakow and Wrocław also took the podium. We won several medals: a gold medal in canoeing, a silver medal in Nordic walking, a silver medal in climbing wall and a silver medal in volleyball.





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## Corporate Governance

Compliance system Anti-corruption policy Personal Data Protection Integrated management system Risk management system





At MPWiK, we care about values, respect the intellectual capital of our employees and appreciate their diversity. We respect employee rights, i.e. freedom of expression or freedom of association. We care about the continuous development of our organization, professionalism and quality of the services provided. By systematizing corporate governance and implementing compliance rules, we minimize risks in the functioning of the company.

## **Compliance system**

102-16 Values, principles, standards and norms of behavior in the organization

Taking care of the highest standards of services provided and the implementation of entrusted tasks, we are guided by the compliance management system. It is a comprehensive solution designed to support changes in the Company's organizational culture, strengthen and develop management standards, and as a result – influence its effectiveness.

The compliance management system operates on the basis of seven regulations that support the principles of transparency and social responsibility:

- Compliance system,
- Code of Ethics for Employees of MPWiK,
- Principles of sponsorship and charity activities (CSR element),
- Rules for giving gifts (CSR element),
- Rules for accepting gifts (CSR element),
- Anti-corruption policy
- Rules of whistleblower protection and conduct in the event of reporting non-compliance.

In 2022, we continued to improve the compliance management system, under which:

 we have trained our employees on the applicable principles of the compliance management system and on shaping



appropriate attitudes based on the values of the implemented Code of Ethics. The meetings took the form of workshops and group and individual meetings,

- we carried out work updating the adopted solutions of the compliance management system to the requirements of the EU Directive 1937/2019 on the protection of persons reporting breaches of EU law and in accordance with the requirements of the legislator, following the published draft laws on the protection of persons reporting breaches of law on an ongoing basis,
- we have fulfilled our obligations and fulfilled the tasks arising from the adopted documents of the compliance management system,

 We have published a series of articles in an internal monthly magazine devoted to common values that create a positive work environment in our Company on a daily basis, based on universal values adopted in society.

We continue to promote ethical behavior, equal treatment and counteracting hate on the web by placing posters in corridors in the Company's office and operating buildings.

We are also working on the implementation of changes to the Company's internal regulations on the basis of drafts of the Act on the protection of persons reporting violations of law successively published by the legislator.

## **Anti-corruption policy**

205-2 Percentage of employees trained in anti-corruption policies and procedures

MPWiK has introduced an Anti-Corruption Policy, which provides a number of guidelines on how to effectively prevent corruption. Our employees will familiarize themselves with it during trainings on the compliance management system.

In 2022, these training courses were in the form of e-learning and concerned such areas as:

- corruption in public administration,
- corruption in business,
- Counteracting corruption

## **Personal Data Protection**

We attach great importance to the security and protection of personal data created, processed and stored in the Company. Our security measures are designed to maintain their confidentiality, integrity and availability.

To this end:

- we carry out inspections of the security status of personal data and the implementation of the provisions resulting from the GDPR and the principles indicated in internal regulations, such as, among others: Personal data security policy,
- we have implemented the Personal Data Protection (PDP) module of the SecureVisio

system, which allows for effective management of personal data security in the organization and maintaining compliance with the GDPR,

- raise employees' awareness of compliance with personal data regulations by organizing numerous training courses in this area and launching training on the GDPR e-learning platform,
- in place in our Company since 2020. The Data Protection Oversight Team is constantly working on updating information about internal processes related to the processing of personal data and their assessment in terms of compliance with the requirements of the GDPR.



### Integrated management system

#### 403-1 Occupational health and safety management system

In 2022, an independent certifying company, after conducting external audits, confirmed the effectiveness of the Integrated Management System implemented in the Company, including:

- PN-EN ISO 9001:2015
   Quality management systems,
- PN-EN ISO 14001:2015

   Environmental management systems,
- PN-ISO 45001:2018

   Occupational health and safety management systems,
- PN-EN ISO/IEC 27001:2017
   Information security management systems.

The certificate obtained as a result of the audits confirms that we meet the requirements of the implemented management systems.

We place particular emphasis on the development and improvement of processes related to customer service and the quality of services offered. At the same time, we pay special attention to the safety of people, the environment and the information processed. In 2022, the security of critical infrastructure and ensuring the continuity of related processes became one of the key issues. In the second quarter of 2022, we adopted a Water Safety Plan, and in the fourth quarter of 2022, we implemented a Business Continuity Management System according to PN-EN ISO 22301:2020-04.



#### Water Safety Plan

The water safety plan is a multibarrier system recommended by the World Health Organization (WHO) to minimize potential threats to water quality, based on risk management in accordance with the PN-EN 15975-2:2013-12 standard - Safety of drinking water supply. Its development and implementation has an impact on increasing the health security and reliability of water supplies. This is particularly important due to the progress of civilization and the related development of many industries (construction, chemical and pharmaceutical industry, intensification of agriculture, etc.) and environmental changes. These factors contribute to the increase in water pollution levels and force us to counteract threats already known and not yet observed. In addition, enhancing the security of water supply contributes to the development of cities and regions, including by preventing the emergence of outbreaks of water-related diseases.

#### **Business Continuity Management**

With the support of an external consultant, we have developed regulations that systematize and unify the existing procedures constituting the continuity of operation of the basic and most important processes taking place in the Company. These include:

#### Business continuity management system – its

purpose is to regulate the principles of maintaining the Company's ability to continuously provide water supply and sewage discharge and treatment services, and in the event of a crisis situation, to continue operations at a defined, acceptable level minimizing the negative impact on our operations,

#### Business impact analysis

- to assess and document the potential negative effects of interrupting the implementation of individual processes (key from the point of view of providing our services),

#### Business continuity strategy

strategy - defines the scope of application, structure of response to potential disruptions and indicates guidelines for steps that we will take in the event of a threat of interruption of business continuity of critical processes. The strategy includes solutions depending on the specification and affiliation of the critical process, defines the direction and guidelines for dealing with situations that may adversely affect the identified critical processes that occur in the environment.

#### Business Continuity Plan

- defines how to respond to a business continuity incident, resuming and restoring the implementation of critical processes and processes supporting critical processes to a pre-determined level in the required time,

Business continuity procedures
 in the energy area - their
 task is to determine the
 manner and procedure of
 proceeding in the event of
 electricity disappearance in
 the Company's key facilities.
 We constantly undertake
 systemic solutions to maintain
 the continuity of electricity

supply in the short and long term to our facilities. The aim of these activities is to reduce the occurrence of interruptions in the supply of electricity to technical infrastructure and to minimize the effects resulting from them, generating interruptions in the operation of technological facilities. Continuous supply of electricity to our plants is crucial for our services.



## **Risk management system**

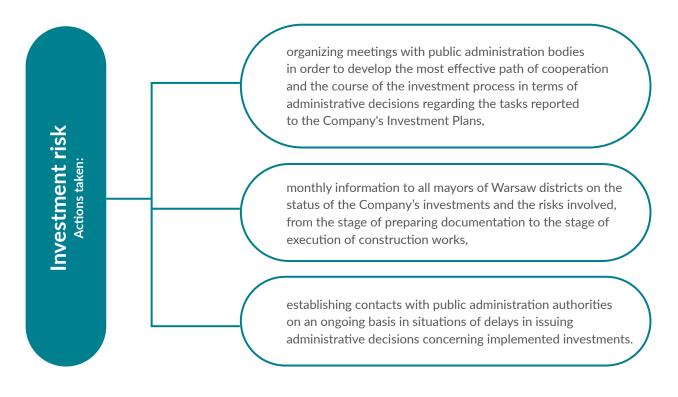
102-15 The most important influence an organization has on its environment, risks and opportunities

Risk management is one of the key management tools in any modern organization. At MPWiK, this system has been in place for many years, supporting the achievement of objectives and real determination of risks and methods of their mitigation. This, in turn, is essential for the security and continuity of our services. The risk management system works by:

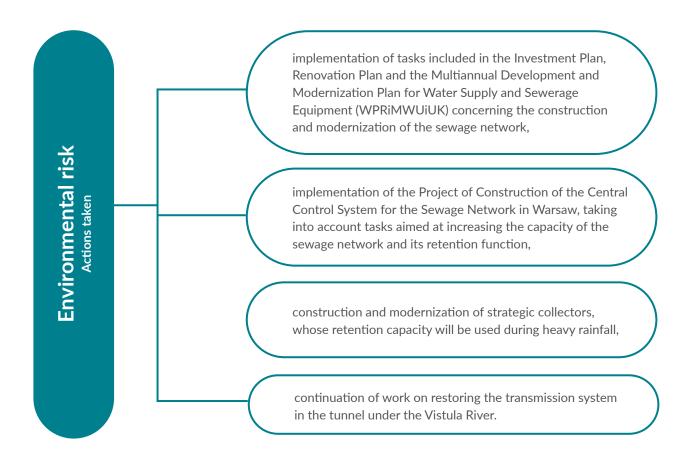
- introduction of uniform rules for identifying and assessing risk,
- defining the principles of risk monitoring and evaluation of the risk management system,
- using of appropriate functional control mechanisms,
- obtaining information on threats to the achievement of the set goals and tasks,
- taking actions to ensure the continuity of processes.

We regularly update the identified risks as part of the Company's Risk Register. For 2023, they concern the areas of: investment, environmental protection, current operations, financial liquidity and water quality maintenance. The graph below, on the other hand, presents the activities undertaken by MPWiK to minimize their chances of occurrence.

Investment risk caused, among others, by untimely obtaining of administrative decisions from public administration bodies in the process of investment preparation and long time of obtaining legal titles to real estate from landowners.

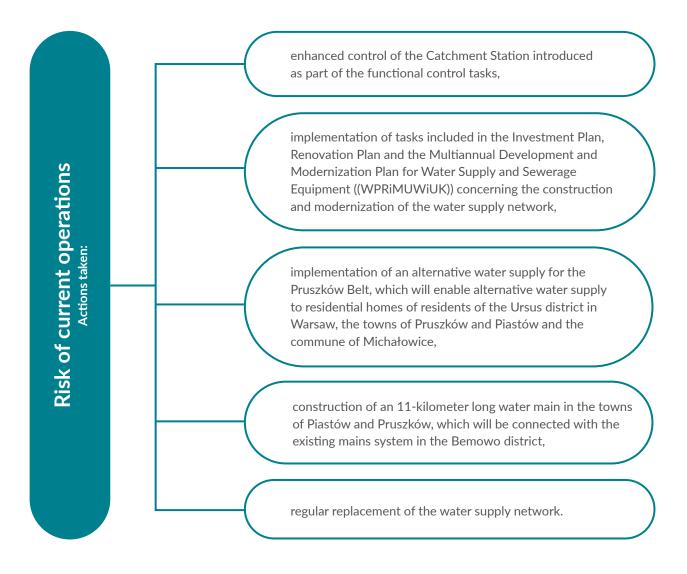


Environmental risk related to discharges of sewage from storm overflow into the Vistula river caused by climate change, causing storm surges and malfunctions of the sewage network.





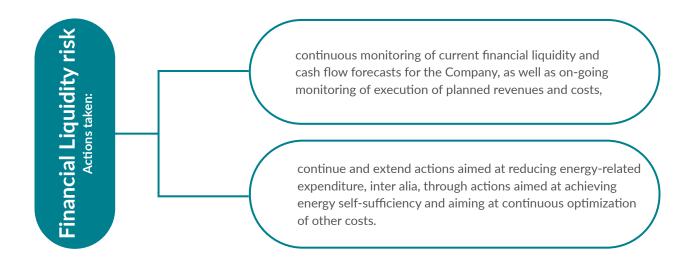
Risk of failure of water supply networks, resulting in property demage to third parties, interruptions in water supply, costs of repairs and lost sales, and risk of inability of the "Dębe" Plant to accept waste water as a result of blockage or failure of the Catchment Station installation, resulting in a decrease in the Company's revenues.



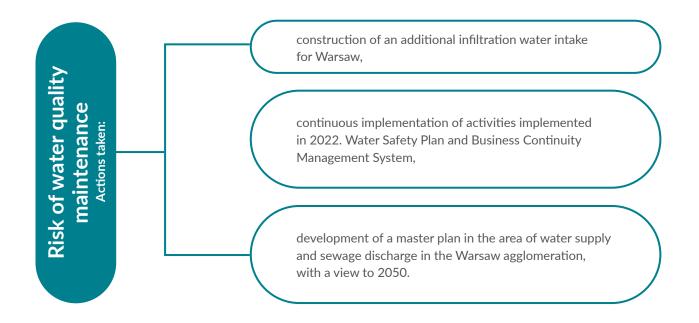




Risk associated with an increase in the Company's operating and investment expenses or a decrease in revenues due to unfavorable business conditions, which adversely affect the Company's financial liquidity.



Risk of water quality deterioration due to a decrease in the efficiency of intakes caused by periods of hydrological drought and high temperatures and low water level in the Vistula river, related to the maximum load of infiltration intakes.



## Potential benefits and opportunities of the Company resulting from SWOT analysis:

- conducting activities aimed at further strengthening the comprehensive security of critical infrastructure,
- improving the energy balance as a result of using modern technologies and increasing energy efficiency,
- sorting out the issue of managing the rainwater drainage infrastructure in close cooperation with the Municipal Office of Warsaw in formal, legal and substantive terms,
- providing an alternative, independent transport of sewage from the left-bank of Warsaw to the "Czajka" sewage treatment plant by building additional transport pipelines under the bottom of the Vistula River,
- taking effective measures at the level of the European Union and the Member States to minimize the risks associated with the risk of disruption of raw material/product supply chains and to limit the economic crisis,
- systemic solutions for the security of property and people,
- solutions resulting from being an operator of a key service,
- a well-functioning cybersecurity system,

- human capital with various competencies and specializations,
- implementation of a Multi-Annual Plan for the Development and Modernization of Water Supply and Sewerage Equipment, strengthening the water supply and sewage disposal system,
- modern technological solutions,
- participation of the Company in international projects, e.g. benchmarking, and in industry organizations, providing opportunities to influence the creation of legal regulations in Poland, participation in bodies responsible for the implementation of EU funds and exchange of knowledge and experience between companies from the water supply and sewage industry,
- continuation of financing investments with preferential and non-repayable funds from domestic and foreign sources,
- development potential of the Company (increase in the number of residents of Warsaw and neighboring municipalities),
- further development of the CSR area,
- continuing the development of the compliance management system and promoting activities aimed at counteracting corruption,
- use of modern tools for

customer relationship management,

- use of mathematical model of water supply and sewage system in making strategic decisions concerning planned directions of network expansion or modernization,
- development of the main assumptions (target map) for a sustainable circular economy development model,
- implemented management systems: quality, occupational health and safety, information safety, environment, goal-based management, risk management and compliance management system based on normative solutions,
- implementation of the project of the Company's zero-emission vehicle fleet electrically powered and adaptation of the infrastructure to their charging,
- increasing the security of water supply in the conditions of progressing climate changes, by, among others, the construction of an additional infiltration intake and hydraulic fluffers in order to optimize the efficiency of the operation of infiltration wells, abstracting water from the Vistula River; preparing a masterplan.

#### **Potential risks:**

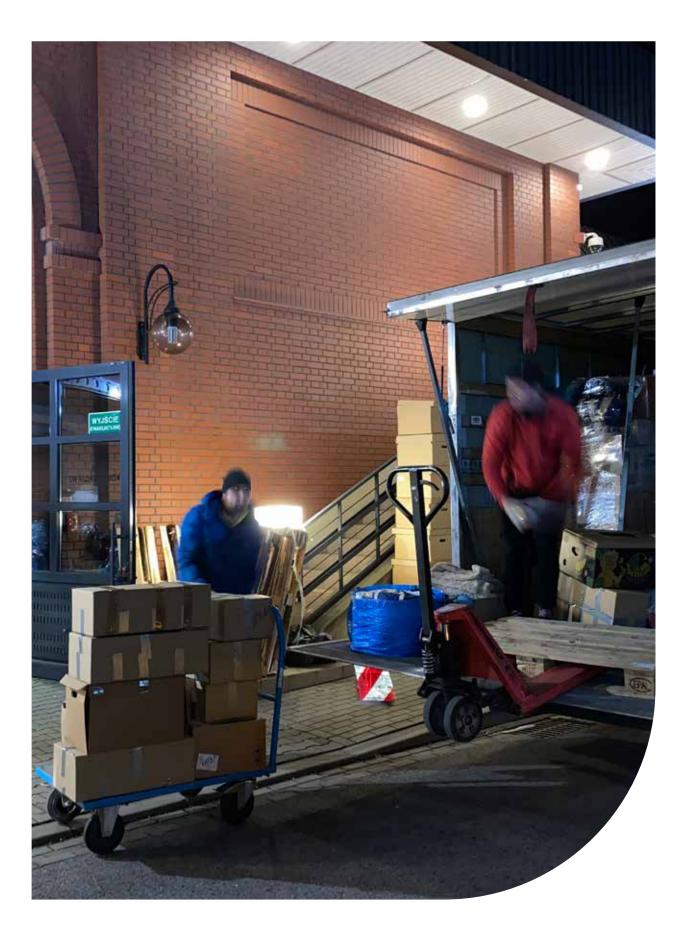
- climate change resulting in an increase in the intensity of atmospheric phenomena, including heavy and shortduration rainfall, as well as periods of prolonged drought,
- the risk of armed conflicts in Europe and their consequences for critical infrastructure, in the form of active participation in defense activities,
- persistent threats in the area of security, including cybersecurity,
- global and domestic economic crisis, manifested, among others, by rising inflation, rising prices of energy, services and construction works, raw materials and materials, and an increase in the financial burden of debt service, as a result of the increase in interest rates,
- insufficient tariff level for water and sewage - not covering the costs of maintaining the company and investment activities in the context of the growing crisis,

- network failures related to the progressive exploitation of the systems and at the same time the lack of possibility of restoring the infrastructure in a short time, due to the length of the network, the amount of financial outlays and collisions with other investments/urban renovations,
- lack of a Special Act for Water and Sewage Companies regarding quick access to land for investment purposes,
- delays in the implementation of investments caused by untimely obtaining of administrative decisions (as a result of delays on the part of public administration) and prolonged arrangements with external entities, the ongoing state of epidemic or delays resulting from the conditions of dynamically increasing costs,
- lengthy deadlines for the implementation of investments in the sewage and water supply network in districts, caused by the results of contract awarding

procedures, withdrawals from contracts by contractors or delays in the performance of works,

- the high average age of employees in blue-collar jobs and the growing number of employees over 60 in positions requiring physical fitness,
- high level of competition from other employers in terms of attracting and rewarding employees, resulting in the lack of availability of candidates for work and outflow of personnel caused by limited possibilities to regulate salaries.

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## **MPWiK to help Ukraine**

In the face of the war that broke out in Ukraine on February 24, 2022, we could not remain indifferent. Since the first days of the conflict, we have been involved in helping, in cooperation with the President of Warsaw, we have taken action for the benefit of Ukrainian men and women who have reached Poland in search of shelter.

The first initiatives were aimed at meeting the basic needs of refugees, i.e. access to hot coffee and tea and water at the consultation points at the Railway Stations: Eastern, Central and Western in Warsaw. For this purpose, we have made available diggers and water carts with Warsaw tap water.

A collection, handling and distribution point for gifts for Ukraine has been set up at the "Filters" Water Treatment Station as part of an aid campaign initiated by the President of Warsaw, as well as other cities from Poland





and abroad. Our employees supervised the handling of goods that were further directed to Ukraine. We loaded some of them onto the Company's vehicles in order to deliver them to the Warsaw railway station and further transport Ukrainian carriers by trains. The rest went directly to aid centers established by the Municipal Office of Warsaw. In 2022, we distributed a total of over 4,500 pallets for this purpose.

In support of Ukraine, we also joined a fundraiser organized by the President of Warsaw, donating industrial items (including blankets, sleeping bags, pillows, towels).

We provided support in the form of donations. We conducted two fundraising campaigns for Ukraine: for Polish entrepreneurs, initiated by the Employers of the Republic of Poland, and for the water and sewage industry, organized by the Chamber of Commerce "Polish Waterworks". We could not remain indifferent to the needs of our colleagues who work for the water supply systems in Kiev and Horishnya Pławnia. We have made in-kind donations to them and to the Kharkiv City Council and the Shakhtar Social Charity Organization, inter alia in the form of power generators.

Our company supported refugee stays in the process of assembly of tap water dispensers, through free analyzes of water quality in places of temporary or permanent residence of refugees; distribution of posters and leaflets in Polish and Ukrainian was also organized up to 12 points of stay for refugees.



## **Company operations during the pandemic**

2022 was another year of the Company's operations in extraordinary circumstances, when it was necessary to maintain the uninterrupted operation of our plants and continuity of services. In order to ensure the maximum possible protection of the health of our employees, customers and stakeholders, we have applied internal procedures aimed at counteracting the spread of coronavirus and the rules of conduct in the event of the occurrence of infections. We continued our operations in accordance with the previously introduced regulations regarding changes in the organization of work, the obligation to maintain a sanitary regime and effective communication.

### We have carried out the following activities:

organizational

- on an ongoing basis, we monitored the epidemic situation as part of the Company's permanent Crisis Management Team in terms of incidence among employees, including contact records,
- We cooperated with the Office of Security and Crisis Management of the City of Warsaw (currently the Capital Security Center) and the Government Center for Security, including personnel reporting,
- we applied procedures in the Company in the event of suspected infection with the SARS-CoV-2 coronavirus,
- we have limited the entrance of external people to the Company's facilities,

- we performed mandatory temperature measurements at the entrances to the Company's facilities,
- we maintained telephone and e-mail contact dedicated to reports of cases or suspicions of SARS-CoV-2 infection,
- we continued the organization of remote and rotational work for office employees,
- we organized internal meetings in an on-line formula, using modern ICT tools,

#### increasing sanitary safety

- we offered employees and their family members the opportunity to be vaccinated with a third dose against the SARS-CoV-2 coronavirus,
- we provided employees and visitors with access

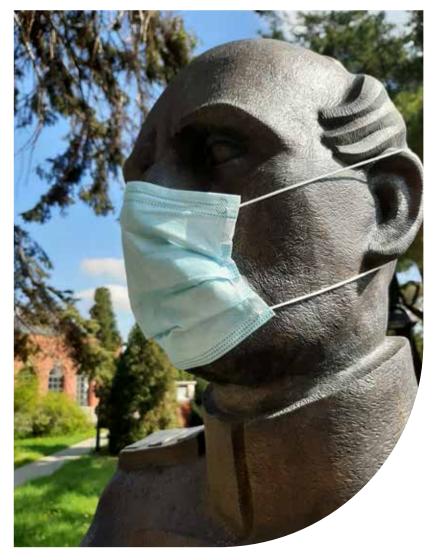
to personal protective equipment (masks, disinfectants, disposable gloves) and informed about the obligations and ways of using them,

- we have guaranteed the possibility of testing employees for the SARS-CoV-2 coronavirus as part of additional health care provided by the employer,
- We have increased the frequency of cleaning and continued cyclical disinfection of rooms and technological, office and social facilities, traffic routes, as well as vehicle ozone treatment.

#### • communication

• We informed our employees about the government restrictions introduced, as well as about the actions taken in this regard by our Company through internal electronic communicators and updates of information boards, as well as information posters of sanitary services, i.e. MZ, GI,

• We informed our clients and contractors on an ongoing basis about the continuity of the services provided by the Company, the safety of Warsaw tap water in the context of the COVID-19 pandemic, as well as new preventive measures related to changing the rules of contact between clients and the Company.



## Tables with GRI numerical indicators

### **Direct economic value**

201-1 Direct economic value generated and distributed

		thousand PLN
	2021	2022
A. Total revenues, including:	1,298,695	1,319,419
Net sales revenue (i.e. gross sales revenue of products and services minus refunds, rebates and discounts)	1,100,062	1,091,854
Revenue from financial investment (i.e. cash received in respect of interest on financial loans and advances, dividends on equity participations, royalties and direct income generated on assets, e.g. rental of real estate)	1,553	1,604
Revenue from the sale of assets (i.e. tangible assets such as real estate, infrastructure and equipment, and intangible assets such as intellectual property rights, projects and brands)	534	396
B. Operating costs	396,463*	456,956
B. Employee salaries and benefits	242,785	241,959
B. Payments to investors (dividend)	0	0
B. Payments to the State (taxes)	235,154	237,499
B. Social investment (donations and investments for the benefit of society)	222	389
ECONOMIC VALUE RETAINED (B-A)	424,071	382,616

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\* Cash operating expenses (without amortisation)

### **Balance sheet**

		thousand PLN
ASSETS	2021-12-31	2022-12-31
A. Fixed assets	8,430,219	9,097,780
I. Intangible fixed assets	15,240	15,242
1. Costs of completed development works	0	0
2. Goodwill	0	0
3. Other intangible assets	15,240	15,242
4. Advances on intangible assets	0	0
II. Tangible fixed assets	8,389,543	9,047,275
1. Fixed assets	7,442,852	7,587,930
a) Land (including perpetual usufruct right to land)	696,870	689,728
(b) Buildings, premises, rights to premises and civil engineering works	6,009,965	6,152,119
c) Technical equipment and machinery	65,8350	670,962
(d) Means of transport	65,806	59,849
e) Other fixed assets	11,861	15,272
2. Fixed assets under construction	93,7954	1,457,277
3. Advances on fixed assets under construction	6,737	2,068
III. Long-term receivables:	3,378	4,545
1. From related entities	0	0
2. From other entities in which the entity has a holding in equity	0	0
3. From other units	3,378	4,545
IV. Long-term investments	0	0
1. Real Estate	0	0
2. Intangible fixed assets	0	0
3. Long-term financial assets	0	0
a) in related entities	0	0

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- other long-term financial assets	0	0
b) in other entities in which the entity has an equity interest:	0	0
- other long-term financial assets	0	0
c) in other units	0	0
- shares or stocks	0	0
- other securities	0	0
- loans granted	0	0
- other long-term financial assets	0	0
4. Other long-term investments	0	0
V. Long-term prepayments	22,059	30,718
1. Deferred tax assets	21,624	23,216
2. Other accruals	435	7,503
B. Current assets:	496,876	331,512
I. Stocks	23,995	28,871
1. Materials	23,975	28,821
2. Semi-finished products and work in progress	0	0
3. Finished products	0	0
4. Goods	0	0
5. Advances on supplies and services	20	50
II. Short-term receivables	223,625	175,208
1. Receivables from related entities	0	0
(a) in respect of supplies and services, with a repayment term of:	0	0
- up to 12 months	0	0
- over 12 months	0	0
(b) other	0	0
2. Receivables from other entities in which the entity has an equity interest	0	0
(a) in respect of supplies and services, with a repayment term	0	0

- over 12 months	0	0
(b) other	0	0
3. Receivables from other entities	223,625	175,208
(a) in respect of supplies and services, with a repayment term	176,708	82,372
- up to 12 months	176,708	82,372
- over 12 months	0	0
(b) in respect of taxes, subsidies, customs duties, social and health insurance and other benefits	35,571	72,294
(c) other	11,347	20,542
(d) judicial proceedings	0	0
III. Short-term investments	185,773	66,728
1. Short-term financial assets	101,466	62,652
a) in related entities	0	0
b) in other units	0	0
- shares or stocks	0	0
- other securities	0	0
- loans granted	0	0
- other short-term financial assets	0	0
(c) cash and other monetary assets	101,466	62,652
- cash in hand and cash in accounts	101,466	37,504
- other cash	0	25,148
- other monetary assets	0	0
2. Other short-term investments	84,308	4,077
IV. Short-term prepayments	63,483	60,705
C. Payments due to the core capital (fund)	0	0
D. Own shares (stocks)	0	0
TOTAL ASSETS (+A+B+C+D)	8,927,096	9,429,293

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LIABILITIES	2021-12-31	2022-12-31
A. Capital (fund) in the own stock	4660402	4,621,149
I. Core capital (fund)	2734575	2734575
of which registered as at 31 December	0	0
II. Supplementary capital (fund)	1891413	1,925,788
III. Revaluation reserve (fund)	0	0
IV. Other reserves (funds)	39	39
V. Earnings (losses) from previous years	0	0
VI. Net profit (loss)	34375	-39253
VII. Write-offs from net profit during the financial year	0	0
B. Obligations and reserves for obligations	4,266,693	4,808,144
I. Provisions for liabilities	438621	413442
1. Deferred tax liabilities	272126	278409
2. Provision for retirement and similar benefits:	12518	8629
- long-term	7739	3433
- short-term	4779	5196
3. Other provisions	153978	126403
- long-term	0	0
- short-term	153978	126403
II. Long-term liabilities	548008	645244
1. Towards related parties	0	0
2. Towards other entities	548008	645244
a) loans and advances	483622	581517
(b) in respect of the issue of debt securities	60151	60857
(c) other financial liabilities	0	0

4235

2871

thousand PLN

(d) other

III. Short-term liabilities	339407	591469
1. Towards related parties	0	0
2. Towards other entities	334490	586520
a) loans and advances	70397	186072
(b) in respect of the issue of debt securities	0	0
(c) other financial liabilities	0	0
d) in respect of supplies and services, with maturity	68996	88602
- up to 12 months	68996	88602
- over 12 months	0	0
(e) advances received on deliveries	0	0
(f) bill of exchange liabilities	0	0
g) taxes, customs duties, social and health insurance and other public-law titles	20149	19146
h) remuneration	18056	18127
(i) other	156893	274574
3. Special funds of the Company Social Benefit Fund	4916	4949
IV. Accruals and prepayments	2,940,657	3,157,989
1. Negative goodwill	0	0
2. Other accruals	2940657	3,157,989
- long-term	2,842,023	3,059,010
- short-term	98634	98979
TOTAL LIABILITIES (A+B)	8927096	9,429,293

# Profit and loss account (comparative version)

thousand PLN Specification 2021-12-31 2022-12-31 A. Net sales revenue and equalization thereof, including: 1,135,961 1,118,366 0 - from affiliated entities 0 I. Net revenues from sales of products 1,109,715 1,091,854 II. Change in products increase positive value, decrease 0 0 negative III. Cost of products for own use 24,896 24,599 IV. Net revenues from sales of goods and materials 1,349 1,913 1,181,338 1,250,734 B. Operating expenses: I. Depreciation 305,883 312,646 II. Consumption of materials and energy 133,978 174,082 **III. External services** 240,198 229,357 234,726 237,499 IV. Taxes and charges, including: - excise duty 1,058 1,039 V. Remuneration 202,557 201,613 VI. Social insurance and other benefits, including: 48,192 52,679 - retirement 19,164 19,775 VII. Other costs by type 27,470 30,403 VIII. Value of goods and materials sold 1,175 1,613 C. Profit (loss) on sales (A-B) -47,377 -132,368 D. Other operating income 198,869 135,385 I. Gains on the use of non-financial non-current assets 534 396 II. Grants 91,270 87,197 III. Revaluation of non-financial assets 4,893 13,672

IV. Other operating income	38,687	97,604
E. Other operating expenses	40,830	49,036
I. Loss on use of non-financial non-current assets	0	0
II. Revaluation of non-financial assets	9,161	35,870
III. Other operating costs	31,668	13,166
F. Operating profit (loss) (C+D-E)	47,178	17,465
G. Financial income	37,232	2,184
I. Dividends and profit shares, including:	0	0
- from affiliated entities	0	0
II. Interest, including:	1,553	1,827
- from affiliated entities	0	0
III. Profit on uses of financial assets	0	0
IV. Revaluation of financial assets	35,446	0
V. Other	233	357
H. Financial costs	13,184	54,210
I. Interest, including:	9095	28,384
- for affiliated entities	0	0
II. Loss on financial assets	0	18,764
III. Revaluation of financial assets	3,791	6,963
IV. Other	298	99
I. Gross profit (loss) (I+/-J)	71,226	-34,561
J. Income tax, including:	36,850	4,692
- deferred tax	31,250	4,692
K. Other obligatory profit reductions (increase of loss)	0	0
L. Net profit (loss) (K-L-M)	34,375	39,253

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## **Cash flow statement (indirect method)**

		thousand PLN
Engraftment and slaughter	2021-12-31	2022-12-31
A. Cash flow from operating activities		
I. Net profit (loss)	34,375	-39,253
II. Total adjustments	132,995	295,491
1. Depreciation	305,883	312,646
2. Foreign exchange gains (losses)	0	0
3. Interest and profit participation (dividends)	11,274	31,012
4. Profit (loss) on investing activities	-7,964	20,823
5. Change in provisions	23,360	-25,180
6. Change in inventories	-2,899	-4,875
7. Change in receivables	-76,459	53,835
8. Change in current liabilities except for loans and borrowings	-8,256	20,914
9. Change in accruals	-101,979	-104,883
10. Other adjustments	-9,964	-8,801
III. Net cash flows from operating activities (I $\pm$ II)	167,370	256,238
B. Cash flow from investing activities		
I. Influence	554	69,487
1. Disposal of intangible assets and property, plant and equipment	554	400
2. Disposal of real estate investments and intangible assets	0	0
3. Financial assets, including:	0	69,087
a) in related entities	0	0
b) in other units	0	69,087
disposal of financial assets	0	0
Dividends and profit shares	0	0
repayment of long-term loans granted	0	0

interest	0	0
other proceeds from financial assets	0	69,087
4. Other investment inflows	0	0
II. Expenditures	-795,772	-846,949
1. Acquisition of intangible assets and property, plant and equipment	-795,772	-846,949
2. Investments in real estate and intangible fixed assets	0	0
3. On financial assets, including:	0	0
a) in related entities	0	0
b) in other units	0	0
acquisition of financial assets	0	0
long-term loans granted	0	0
4. Other capital expenditure	0	0
III. Net cash flows from investing activities (I ± II)	-795,218	-777,462
C. Cash flows from financing activities		
I. Influence	477,978	597,630
1. Net proceeds from issuing shares (share issues) and other equity instruments and capital contributions	0	0
2. Loans and advances	176,145	278,818
3. Debt securities issued	0	0
4. Other financial receipts	301,833	318,812
II. Expenditures	-77,729	-115,220
1. Purchase of own shares (stocks)	0	0
2. Dividends and other payments to owners	0	0
3. Other than distributions to owners, profit-sharing expenses	0	0
4. Repayment of loans and borrowings	-63,738	-70,504
5. Redemption of debt securities	0	0
6. Due to other financial liabilities	0	0
7. Payment of liabilities under finance lease agreements	0	0

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8. Interest and commissions	-9,851	-42,237
9. Other financial expenses	-4,140	-2,479
III. Net cash flows from financing activities (I ± II)	400,249	482,410
D. Total net cash flows (A.III ± B.III ± C.III)	-227,599	-38,814
E. Balance sheet change in cash, including:	-227,599	-38,814
change in cash due to exchange differences	0	0
F. Cash at the beginning of the period	329,065	101,466
G. Cash at the end of the period (F ± D), including:	101,466	62,652
with limited disposability	15,017	19,014

## Statement of changes in equity (fund)

		thousand PLN
	2021-12-31.	2022-12-31
I. Own capital (fund) at the beginning of the period (BO)	4,626,027	4,660,402
corrections of basic errors	0	0
merger adjustments	0	0
I.a. Equity (fund) at the beginning of the period (BO), after adjustments	4,626,027	4,660,402
1. Initial capital (fund)	2,734,575	2,734,575
1.1. Changes in core capital (fund):		
a) increase	0	0
issue of shares (issue of shares)	0	0
b) reduction (on account of)	0	0
redemption of shares (stocks)	0	0

1.2. Share capital (fund) at the end of the period	2,734,575	2,734,575
of which registered	2,734,575	2,734,575
2. Initial reserve capital (fund)	187,5535	1,891,413
2.1. Changes in supplementary capital (fund)	15,878	34,375
a) increase (on account of)	15,878	34,375
issue of shares above their nominal value	0	0
from profit distribution (statutory)	15,878	34,375
from a merger with SMEs	0	0
Other increases	0	0
b) reduction (on account of)	0	0
allocation to share capital	0	0
loss coverage	0	0
2.2. Closing balance of supplementary capital (fund)	1,891,413	1,925,788
3. Revaluation reserve (fund) at the beginning of the period	0	0
3.1. Changes in capital (fund) on revaluation	0	0
a) increase	0	0
(b) reduction	0	0
3.2. Revaluation reserve (fund) at end of period	0	0
4. Other reserves (funds) at the beginning of the period	39	39
4.1. Changes in other reserves (funds)	0	0
a) increase, report, connection	0	0
b) reduction (on account of)	0	0
4.2. Other reserves (funds) at the end of the period	39	39
5. Earnings (losses) from prior years at the beginning of the period	0	0
5.1. Earnings from prior years at the beginning of the period	0	0
corrections - merger with SMEs	0	0
5.2. Earnings from prior years at the beginning of the period, after adjustments	0	0
a) increase (on account of)	15,878	34,375

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III. Equity (fund), after taking into account the proposed distribution of profit (coverage of loss)	4,660,402	4,621,149
II. Equity (fund) at the end of the period (BZ)	4,660,402	4,621,149
c) write-offs from profit	0	0
(b) net loss	0	39,254
(a) net profit	34,375	0
6. Net result	34,375	-39,254
5.7. Profit (loss) from prior years at the end of the period	0	0
5.6. Loss from prior years at the end of the period	0	0
other reductions	0	0
loss coverage	0	0
b) reductions (on account of)	0	0
loss carry-forward	0	0
a) increase (on account of)	0	0
5.5. Change in losses from previous years	0	0
corrections of basic errors	0	0
5.4. Previous years' loss at the beginning of the period	0	0
5.3. Profit from prior years at the end of the period	0	0
reserve capital	15,878	34,375
b) reduction (on account of)	15,878	34,375

### **Energy consumption in the organization**

302-1 Energy consumption within the organization

Total consumption of energy from non-renewable sources (purchased and own - produced as part of the organization's own activities) and types of fuels used	Consumption in 2021 [GJ]	Consumption in 2022 [GJ]
natural gas	158,577.44	135,676.66
electricity	518,250.34	521,722.50
thermal energy	70,022.00	67,755.00
liquid fuels	50,592.27	57,402.55
Total energy consumption	797,442.05	782,556.71

Total consumption of energy from renewable sources	Consumption in 2021 [GJ]	Consumption in 2022 [GJ]
photovoltaic energy	68.15	6,338.72
biogas from wastewater treatment plant	598,011.00	578,733.14
Total energy consumption	598,079.15	585,071.86

Total size	Consumption in 2021 [GJ]	Consumption in 2022 [GJ]
electricity sold	228.68	1074.58
heat sold	2,324.80	126.90
Total	2,553.48	1,201.48

Total energy consumption within the organization	1,392,967.72	1,366,427.09
	1,072,707.72	2,000,127.07

#### **Greenhouse gas emissions**

305-1 Direct greenhouse gas emissions

	202	1	202	2
Substance	Emission volume [kg]	Emission volume [tEgCO <sub>2</sub> ]	Emission volume [kg]	Emission volume [tEgCO <sub>2</sub> ]
CO <sub>2</sub>		102,148.21		105 ,350.48
CH <sub>4</sub>		32,082.84		66,519.78
N <sub>2</sub> O		15,136.51		12,969.49
HFC 407C		56,240		51.45
HFC 410A		145,990		125.07
HF C134A		14,300		-

#### Drainage of sewage and rinsing water\*

306-1 Total volume of waste water by quality and destination

		l volume ed** [m ³]	-	anned blume*** [m ³]
	2021	2022	2021	2022
Receiver				
Groundwater	-	-	-	-
Surface water		191,383,828	9,937,509	2,410,774
Sewage systems leading to rivers, oceans, lakes, wetlands	-	-	-	-
Sewage systems leading to waste water treatment plants	-	-	-	-
Other location	-	8,247	-	-
TOTAL VOLUME	-	191,392,075	9,937,509	2,410,774

\* rinsing-water - water remaining after the water treatment process\*\* wastewater treated from a treatment plant and rinsing-water from a water treatment station\*\*\* discharges during storm water, after the capacity of the network is exhausted

	Planned volume discharged** [m ³]		Unplanned discharged volume ***			wastewater ment
Wastewater treatment site	2021	2022	2021	2022		
"Czajka" Plant	149415070	148002827	-	-	technology	nical-biological with enhanced iogene removal
"Południe" Plant	23155423	21654083	-	-	Mechanical-biologica technology with enhanced biogene remova	
"Dębe" Plant	1838774	2414502	-	-	Biological technology wit enhanced biogene remov	
"Pruszków" Plant	17410928	14966873	-	-	Mechanical-biological technology with enhanced biogene removal	
Storm overflow name	2021	2022	2021	2022	2021	2022
Emergency overflow at the "Pruszków" Plant	-	-	-		-	-
"3 <sup>rd</sup> of May" avenue	-	-	322913			81147
"Bielański"	-	-	568318			85896
"Boleść"	-	-	3033			63
"Farysa"	-	-	3222386			1,792,442
Golędzin	-	-				-
"Karowa""(gravity)	-	-	540			-
"Kościelna"	-	-	58473			20941
Krasińskiego Street	-	-	650236			165787

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Pelcowizna	-	-	134767			9804
"Płyta Desantowa"	-	-	404298			80551
"Powiśle I (Karowa pressing plant)"	-	-	1995805			26002
"Ratuszowa"	-	-	374			-
"Saska Kępa"	-	-	2525486			148037
"Wenedów"	-	-	16030			104
"Żerań"	-	-	-			-
"Nowodwory"			34850			-
Place of outflow of water	2021	2022	2021	2022	2021	2022
Northern Plant - Białołęka Zone Station	13043	13065	-	-	mechanical treatment (sedimentation)	
Northern Plant - rinsing water	447449	570397	-	-	mecha	nical treatment
Northern Plant - infiltration waters	3806450	3,755,641	-	-		
Northern Plant - clean water reservoir	0	0	-	-		
Water Treatment Station "Stara Miłosna"	6231	6146		-	clarifier	sedimentation
Water Treatment Station - "Falenica"	8357	8247		-	settling tank, infiltration into the ground through a sedimentation bec	

 $^{\ast\ast}$  wastewater treated from wastewater treatment plants and wash water from water treatment plants  $^{\ast\ast\ast}$  discharged during storm water, after the capacity of the network is exhausted



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# Quality of discharged wastewater and wash water

		Planned DischargedUnplanned DiscQuantity [kg/year]Quantity [kg/		
Parameters	2021	2022	2021	2022
Biological oxygen demand (BOD5)	1,017,785	1,177,841	1,264,024	415466
Total suspension	1,456,683	1,826,422	1,955,826	702031
Chemical oxygen demand (COD)	6,516,809	6,837,585	3,224,185	1,076,936
Total nitrogen	1,393,456	1,247,757	235706	67624
Total phosphorus	67669	84455	19192	6933



#### Micronutrient content of tap water in individual plants [mg/l]

Indicator, name of substance	Permissible content*	Central Plant, "Filtry" WTS			l Plant a WTS	Northe	rn Plant
		average	max	average	max	average	max
Magnesium	7-125 <sup>(1)</sup>	14.5	18.0	14.6	18.2	10.1	14.0
Soda	200	83.3	101	82.0	96.0	17.5	18.0
Calcium		72.1	94.0	69.8	87.0	89.0	108

Indicator, name of substance	Content admissible*	"Radość" WTS	"Falenica" WTS
Magnesium	7-125 (1)	7.5	7.5
Soda	200	6.9	39
Calcium	(2)	60	76

Indicator, name of substance	Permissible content*	"Wola Grzybowska" WTS	"Stara Miłosna" WTS
Magnesium	7-125 (1)	9.4	14
Soda	200	41	46
Calcium	(2)	136	118

Indicator, name of substance	Unit	Permissible content*	OSP "Centrum" Pumping Station
Magnesium	mg/l	7-125 (1)	13
Soda	mg/l	200	20
Calcium	mg/l	(2)	106

\* Regulation of the Minister of Health of 7 December 2017 on the quality of water intended for human consumption (<sup>1</sup>) - not more than 30 mg/l of magnesium if the sulfate concentration is equal to or greater than 250 mg/l. With a lower sulfate content, the permissible concentration of magnesium is 125 mg/l; the health-based recommended value means that it is desirable for human health, but does not impose an obligation for the water and sewage company to supplement the minimum content. (<sup>2</sup>) - no specified allowable ranges of values.

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#### **Employment in the Company**

401-1 Employment and rotation of new employees

Total number of employees by type of contract, type of employment and gender	Total	Females	Males
Definite time	287	114	173
Indefinite time	2172	588	1584
Full-time	2450	695	1755
Part-time	9	7	2
Total staff	2459	702	1757
Total number of new employees by gender and age	Total	Females	Males
Under 30 years	78	26	52
From 30 to 50 years	135	57	78
Over 50 years	37	13	24
Total	250	96	154
Employment rate	10%	14%	9%
Number of employees	2459	702	1757
Total number of employee departures by gender and age	Total	Females	Males
Under 30 years	46	17	29
From 30 to 50 years	152	63	89
Over 50 years	81	20	61
Total	279	100	179
Rotation rate	11%	14%	10%
Total staff	2459	702	1757
Employment structure - positions	Total	Females	Males
Number of members of the Management Board	4	2	2
Number of persons employed in senior management	49	20	29
Number of middle managers	183	80	103
Number of other employees	2227	602	1625

405-1 Diversity of employees and management bodies

Structure and age breakdown	Total	Females	Males
Senior management			
Under 30 years	0	0	0
From 30 to 50 years	24	11	13
Over 50 years	25	9	16
Total	49	20	29
Middle management			
Under 30 years	1	0	1
From 30 to 50 years	119	54	65
Over 50 years	63	26	37
Total	183	80	103
Other staff			
Under 30 years	218	76	142
From 30 to 50 years	1108	389	718
Over 50 years	901	137	764
Total	2227	603	1625

Percentage of employees in the following categories	Total	Females	Males
Senior management			
Under 30 years	0%	0%	0%
From 30 to 50 years	0%	40%	60%
Over 50 years	100%	40%	60%
Total	100%	40%	60%
Middle management			
Under 30 years	100%	0%	100%
From 30 to 50 years	100%	50.4%	49.6%
Over 50 years	100%	38.9%	61.1%
Total	100%	46.4%	53.6%

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Other staff			
Under 30 years	100%	35.9%	64.1%
From 30 to 50 years	100%	33.3%	66.7%
Over 50 years	100%	14.4%	85.6%
Total	100%	26.7%	73.3%

202-2 Percentage of persons coming from the local community in senior management positions in the main business locations

The management staff as of the current state consists of 232 people, of whom:		
People who work and live in Warsaw	135	
People who work in Warsaw and live outside of Warsaw	84	
People who work in Warsaw and live outside of Warsaw	2	
People who work and live outside of Warsaw	11	

#### Trainings

404-1Average number of training hours per year per employee

Number of training hours*	Total	Females	Males
Division by the type of position			
Senior Management	19212	10728	8484
Middle Management	16716	6282	10434
Other staff	127110	13920	113190
Total training hours	163038	30930	132108
Division by area of activity			
Administration	8316	2586	5730
Safety	2388	990	1398
IT	1788	48	1740

Control, Finance	8346	7080	1266
Logistics	16470	672	15798
Organization	6714	6084	630
Legal	1044	870	174
Production	98760	2598	96162
Sales	4956	3624	1332
Union	8838	5496	3342
Procurement	5418	882	4536
Total training hours	163038	30930	132108

\*(1 hour = 60 minutes)

Average number of training hours* by gender	
Total number of employees	2478
Average number of training hours per employee	66
Women	708
Average number of training hours per woman	17
Men	1770
Average number of training hours per man	43

\*(1 hour = 60 minutes)

Average number of training hours* by gender and job category	Total	Females	Males
Senior Management	20	15	5
Middle Management	15	9	6
Other staff	84	20	64

\*(1 hour = 60 minutes)

#### List of GRI standards indicators

102-55 GRI Content Index

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## **Report Information**

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This is our fifth Corporate Social Responsibility Report. It has been developed in accordance with GRI Standards at the cor (basic) level. The report covers the calendar year from 1<sup>st</sup> January to 31<sup>st</sup> December 2022. We plan to publish the next report in 2024.

Our reports are available at: www.mpwik.com.pl in the tab CSR Reports.

Before the publication of the Company's Corporate Social Responsibility Reports, we published Annual Reports, which are available at: www.mpwik.com.pl in the Yearly Reports tab.

102-53 Contact regarding the report

**Do you have any questions about the report?** Contact us.

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102-3 Location of the headquarters of the organization

Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji w m.st. Warszawie S.A. pl. Starynkiewicza 5, 02-015 Warsaw

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#### Notes



#### Notes

