## **TAURON Polska Energia S.A. - Water Security 2021**



### W0. Introduction

#### W0.1

#### (W0.1) Give a general description of and introduction to your organization.

DISCLOSURE For the first time

TAURON Capital Group is a fully integrated energy group with its operations encompassing all elements of the electricity and heat value chain: from mining and procuring raw materials, through generation, distribution and supply to the final consumers.

The Group's business model overlaps with the value chain: from mining and procuring thermal fuel, through generation, electricity and heat trading and distribution, up to the supply to the final consumers. In response to the current and future challenges, the value chain has been expanded by adding the innovations ecosystem and the so-called new businesses that are set up at the interface between the innovations ecosystem and the core operations segments (lines of business).

TAURON Capital Group is Poland's largest electricity distributor. Using its more than 241 000 km long distribution grids, it delivers electricity to more than 5.7 million consumers, in the area that covers approx. 57 900 km2, which constitutes more than 18,5 percent of Poland's territory. TAURON's electricity distribution volume came in at 50.26 TWh in 2020. In terms of electricity supply to the final consumers TAURON Group is number two, with its supply volume of approximately 28.5 TWh per annum. On the other hand, in terms of production volume TAURON Group is the third largest electricity generator on the Polish market, with the annual net production of 11.4 TWh and installed capacity of 6.1 GW. To produce electricity the Group's conventional installations are using hard coal and biomass, renewable energy source units are utilizing the energy of wind and the kinetic energy of falling water. TAURON Capital Group is managing 9 wind power plants and 34 hydroelectric power plants, and it is operating 1 180 km of district heating networks. The construction of a 5 MW photovoltaic power plant on TAURON Group's post-industrial land in Jaworzno was completed in 2020 and the construction of solar farms with a total capacity of 6 MW in Choszczno is in the final stage.

Beside the important role of coal, water is an important natural resource for TAURON Group, as it is, among others, widely used in the electricity production processes. By using closed cooling water circuits at TAURON Group's power plants, the consumption of this resource is limited to the necessary minimum. TAURON Group has also taken steps to recover this resource through mine drainage processes and reuse the water recovered from the mines in its technological processes.

In addition to the conventional coal-fired generating units, TAURON Group also uses dropping water's energy to produce electricity.

Environment protection is a strictly controlled and regulated area in the energy and mining industry. Notwithstanding the applicable general provisions, TAURON Group, taking responsibility for the consequences of using natural resources and adopting in July 2017 a document entitled TAURON Group's Environmental Policy, and TAURON Group's Climate Policy in November 2019, emphasized that it was ready to take actions that went beyond legal obligations.

Following the principle of resource efficiency, TAURON Group is monitoring and optimizing also the consumption of water used for technological process purposes on an ongoing basis. This is done by closing the water circuits and by recirculating water with relatively good parameters to other production processes, with lesser requirements, for

The Group's energy production facilities with the highest generation efficiency (NJGT's 910 MW unit and TAURON Wytwarzanie's Łagisza Power Plant in Będzin) and the highest quality requirements for the steam and water (combined) cycles, were equipped with water conditioning (treatment) installations based on modern membrane techniques. This means the minimum use of chemicals in the treatment process, which makes the entire process safe for the natural environment. In some water treatment processes, electrolysis processes are used instead of chemicals.

TAURON Group is continuously optimizing waste water treatment processes. Wastewater treatment methods are also modernized to improve the efficiency of these processes. The quality and quantity of wastewater is subject to ongoing monitoring.

### W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	
Reporting year	January 1 2020	December 31 2020	

### W0.3

(W0.3) Select the countries/areas for which you will be supplying data.

Poland

#### W0.4

 $(W0.4) \ Select \ the \ currency \ used \ for \ all \ financial \ information \ disclosed \ throughout \ your \ response.$ 

PLN

## W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which financial control is exercised

## W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

Yes

## W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
we do not disclose aggregate data on water collected from	We focus on the main sources of consumption and use of water drawn from the environment. Due to the negligible size, we do not disclose
external suppliers for social purposes.	aggregate data on water collected from external suppliers for social purposes.

## W1. Current state

## W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Not important at all	
Sufficient amounts of recycled, brackish and/or produced water available for use	Neutral	Not important at all	

## W1.2

## (W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	76-99	Legal requiament. Sustainable use of these resources is carried out in the energy industry, among others, based on the operational limits on the quantity of water taken directly from the environment (surface and groundwater intakes)
Water withdrawals – volumes by source	76-99	Legal requiament. Sustainable use of these resources is carried out in the energy industry, among others, based on the operational limits on the quantity of water taken directly from the environment (surface and groundwater intakes)
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<not applicable=""></not>	<not applicable=""></not>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<not applicable=""></not>	<not applicable=""></not>
Water withdrawals quality	76-99	Water withdrawals for drinking purposes = legal requirement. Water withdrawals for technical purposes = technological requirement related to the safe production.
Water discharges – total volumes	76-99	Legal requiament. It is strictly regulated. The limits for the discharge of wastewater into the environment are set in water permits. The limits from the permits are controlled and reported to the local authorities. Sewage discharges to the sewage system are also measured as they are the basis for billing water services.
Water discharges – volumes by destination	76-99	Legal requiament. It is strictly regulated. The place of waste discharge is specified precisely in the water permit. Especcialyy the place of the water discharge is described by geographic coordinates.
Water discharges – volumes by treatment method	76-99	The treatment methods are selected according to the requirements for the wastewater parameters. Quality of water discharge aspects are regularly measured and monitored.
Water discharge quality – by standard effluent parameters	76-99	Quality of water discharge aspects are regularly measured and monitored acording standard effluent parameters. Not less frequently than 1 in two months. Measurements are performed by a certified laboratory in accordance with the reference methods contained in the regulations,
Water discharge quality – temperature	76-99	Measurements are performed by a certified laboratory in accordance with the reference methods contained in the regulations, The temperature is measured continuously with legalized device.
Water consumption – total volume	76-99	Total volume of water consumption is regularly measured and reported to the local authorities and also published in non-financial report.
Water recycled/reused	1-25	Beside the important role of coal, water is an important natural resource for TAURON Group, as it is, among others, widely used in the electricity production processes. By using closed cooling water circuits at TAURON Group's power plants, the consumption of this resource is limited to the necessary minimum. TAURON Group has also taken steps to recover this resource through mine drainage processes and reuse the water recovered from the mines in its technological processes.
The provision of fully-functioning, safely managed WASH services to all workers	100%	It is strictly required and controlled under the Ordinance of the Minister of Labor and Social Policy on general health and safety regulations. All employees are provided with hygienic and sanitary rooms appropriate for their scope of work - this means changing rooms, washrooms, shower rooms, toilets, dining rooms, except for canteens, rest rooms, rooms for heating employees and rooms for washing, disinfecting, drying and dust removal from work clothing and footwear as well as personal protective equipment

## W1.2b

# (W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)		Please explain
Total withdrawals	184000	Lower	Following the principle of resource efficiency, TAURON Group is monitoring and optimizing also the consumption of water used for technological process purposes on an ongoing basis. This is done by closing the water circuits and by recirculating water with relatively good parameters to other production processes, with lesser requirements, for reuse. The Group's energy production facilities with the highest generation efficiency (NJGT's 910 MW unit and TAURON Wytwarzanie's Łagisza Power Plant in Będzin) and the highest quality requirements for the steam and water (combined) cycles, were equipped with water conditioning (treatment) installations based on modern membrane techniques. This means the minimum use of chemicals in the treatment process, which makes the entire process safe for the natural environment. In some water treatment processes, electrolysis processes are used instead of chemicals.
Total discharges	129000	Lower	TAURON Group is continuously optimizing waste water treatment processes. Wastewater treatment methods are also modernized to improve the efficiency of these processes. The quality and quantity of wastewater is subject to ongoing monitoring. The total volume of waste water generated as a result of TAURON Capital Group's operations in 2020, including its utilization method (destination) is reported in non-financial report. Total 2020 - 129 786 507 m3 Total 2019 - 167 163 649 m3
Total consumption	55000	This is our first year of measurement	

## W1.2d

## (W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress			Please explain
Row 1	No	<not applicable=""></not>		According to "WRI Aqueduct" water stress at the areas of the Group's operations are classified as: Low-medium (10-20%) (Southern Poland) and Low (<10%) (Eastern Poland - Stalowa Wola).

## W1.2h

#### (W1.2h) Provide total water withdrawal data by source.

	Relevance		Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	117000	Lower	Total water withdrawal data by source is reported in non-financial report. Surface water from rivers in 2020: 117 712 190 m3 2019: 143 447 469.
Brackish surface water/Seawater	Not relevant	<not applicable=""></not>	<not applicable=""></not>	Salty surface water / sea water is not used becouse of our localization.
Groundwater – renewable	Relevant	46000	Lower	Total water withdrawal data by source is reported in non-financial report. Renewable groundwater withdrow: 2020: 46 458 181 m3 2019: 45 969 125 m3.
Groundwater – non-renewable	Not relevant	<not applicable=""></not>	<not applicable=""></not>	
Produced/Entrained water	Please select	<not applicable=""></not>	<not applicable=""></not>	
Third party sources	Relevant	3000	Lower	Water from the city network in 2020: 3 613 660 m3 in 2019 : 5 359 483 m3.

#### W2. Business impacts

#### W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

Yes

#### W2.1a

(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.

#### Country/Area & River basin

Pola	land	Oder River

## Type of impact driver & Primary impact driver

### **Primary impact**

Reduction or disruption in production capacity

## **Description of impact**

At TAURON Ekoenergia, the hydrological drought and uneven precipitation, resulting in longer periods with no rainfall, intermittent abrupt precipitation (torrential rains) periodically lead to the inability to generate electricity. The number of days on which the electricity production at TAURON Ekoenergia did not take place due to the low water level in the rivers.

## **Primary response**

Engage with regulators/policymakers

## **Total financial impact**

## **Description of response**

Total financial impact it is difficult to estimate directly. We measure and reported in non-financial report the number of days on which the electricity production at TAURON Ekoenergia did not take place in 2020 due to the low water levels in the rivers. Due to generating electricity in hydropower plants, the RES Line of Business is highly exposed to the risk of outages or reduction of production as a result of prolonged droughts, which translate into a decrease in surface water resources in river basins, where hydropower plants are located. TAURON Ekoenergia is monitoring such developments on an ongoing basis and has an inventory listing of assets most exposed to such restrictions.

### W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

### W3. Procedures

## W3.3

Yes, water-related risks are assessed

#### W3.3a

## (W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

#### **Direct operations**

#### Coverage

Full

#### Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

#### Frequency of assessment

More than once a year

#### How far into the future are risks considered?

1 to 3 years

## Type of tools and methods used

Enterprise Risk Management

#### Tools and methods used

Other, please specify (Internal company methods)

#### Comment

TAURON Capital Group's risk management: 1. It is based on the risk management process that provides comprehensive and consistent rules for identifying, measuring and responding to risk. 2. Covers all elements of the value chain. 3. Provides centralized risk measurement, monitoring and control function, and also ability to evaluate the full risk profile in the organization and consistent risk management principles. 4. Ensures independence of the risk taking function from its control and monitoring. 5. Ensures a clear split of competences and responsibilities, in particular by introducing the risk ownership function. 6. Is an active process, focused on an appropriately early identification of threats, allowing for taking preventive measures. 7. Is a systematic and continuously improved process which allows for aligning it on an ongoing basis to TAURON Capital Group's specifics and organizational structure, as well as to the changing environment. 8. Places a strong emphasis on developing awareness, training and encouraging personnel to use the knowledge of risks in daily activities. 9. Co-creates TAURON Capital Group's internal audit system, constituting, along with the compliance and security management functions, an element of the Three Line Defense Model.

#### Supply chain

#### Coverage

None

#### Risk assessment procedure

<Not Applicable>

## Frequency of assessment

<Not Applicable>

### How far into the future are risks considered?

<Not Applicable>

## Type of tools and methods used

<Not Applicable>

## Tools and methods used

<Not Applicable>

#### Comment

TAURON Capital Group is a fully integrated energy group with its operations encompassing all elements of the electricity and heat value chain: from mining and procuring raw materials, through generation, distribution and supply to the final consumers. The Group's business model overlaps with the value chain: from mining and procuring thermal fuel, through generation, electricity and heat trading and distribution, up to the supply to the final consumers. In response to the current and future challenges, the value chain has been expanded by adding the innovations ecosystem and the so-called new businesses that are set up at the interface between the innovations ecosystem and the core operations segments (lines of business). They also cover the gradual transition from the operations linear cycle to the closed cycle (circle) operations, which contributes to implementation of the circular economy assumptions.

#### Other stages of the value chain

#### Coverage

None

#### Risk assessment procedure

<Not Applicable>

#### Frequency of assessment

<Not Applicable>

#### How far into the future are risks considered?

<Not Applicable>

#### Type of tools and methods used

<Not Applicable>

#### Tools and methods used

<Not Applicable>

#### Comment

TAURON Capital Group is a fully integrated energy group with its operations encompassing all elements of the electricity and heat value chain: from mining and procuring raw materials, through generation, distribution and supply to the final consumers, The Group's business model overlaps with the value chain: from mining and procuring thermal fuel, through generation, electricity and heat trading and distribution, up to the supply to the final consumers.

## W4. Risks and opportunities

#### W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business? Yes, only within our direct operations

## W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	exposed to	% company- wide facilities this represents	
Row 1		1-25	13 from 34 hydroelectric power plants are directly exposed to water risks. Due to generating electricity in hydropower plants, the RES Line of Business is highly exposed to the risk of outages or reduction of production as a result of prolonged droughts, which translate into a decrease in surface water resources in river basins, where hydropower plants are located. TAURON Ekoenergia is monitoring such developments on an ongoing basis and has an inventory listing of assets most exposed to such restrictions.

### W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?

### W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

## W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities but are unable to realize them

## W4.3b

#### (W4.3b) Why does your organization not consider itself to have water-related opportunities?

	Primary reason	Please explain
Row	Opportunities exist, but none with potential to have a	We identify opportunities related to underground water from mines. Due to the quality of the water, it would be advisable to invest in water treatment.
1	substantive financial or strategic impact on business	Considering the planned transformation of the mine lifetime sector, it may be shortened, therefore such investments are not justified.

#### W6. Governance

#### W6.1

#### (W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

#### W6.1a

#### (W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Company-wide	Company water targets and goals	
		Commitments beyond regulatory compliance	
		Commitment to water-related innovation	
		Commitment to stakeholder awareness and education	
		Commitment to water stewardship and/or collective action	
		Recognition of environmental linkages, for example, due to climate change	
		Other, please specify (Water matters are included in Environmental Policy)	

#### W6.2

## (W6.2) Is there board level oversight of water-related issues within your organization?

Yes

## W6.3

### (W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

### Name of the position(s) and/or committee(s)

Other C-Suite Officer, please specify (Vice-President of the Management Board for Asset Management)

### Responsibility

Other, please specify (Supervision over the implementation of the provisions of Environmental Policy is exercised by the Vice-President of the Management Board for Asset Management)

## Frequency of reporting to the board on water-related issues

More frequently than quarterly

#### Please explain

TAURON Group monitors the main aspects of direct and indirect environmental impact of its operating activities on an ongoing basis. Each Business Area defines measurable goals and determines the method and frequency of their monitoring. The monitoring results are monthly presented to the relevant corporate bodies of TAURON Group companies. The TAURON Group establishes indicators and reporting systems that will allow for the objective identification and comparison of the environmental impact of various activities of the TAURON Group, enabling their use to make management decisions in the TAURON Group's business areas. Appropriate units in the organizational structures of TAURON Group companies ensure the collection and transfer of complete and reliable information about the environment in a timely manner, in order to meet reporting requirements, support compliance with legal requirements and to support management decision-making.

### W6.4

## (W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	It concerns TAURON Ekoenergia, which conducted hydroelectric power plants of the total capacity of 133 MW, located in the south of Poland.

## W7. Business strategy

## (W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long- term time horizon (years)	Please explain
Long- term business objectives	No, water-related issues were reviewed but not considered as strategically relevant/significant	5-10	In accordance with the current Strategy in place and the Update of the Strategic Directions adopted, the increase in the value of the Group will be based primarily on • regulated and stable Distribution segment, • development of low and zero emission sources in terms of greenhouse gas emissions, • conventional generation assets eligible for support, • sales of energy and energy related products and services tailored to customer need.
long-term	No, water-related issues were reviewed but not considered as strategically relevant/significant	5-10	In accordance with the Strategy TAURON Group is and will be investing in the development of low emission and zero emission power generation, primarily through investments in renewable energy sources and grid infrastructure. By 2025 the Group is planning to invest in on-shore wind farms, photovoltaic farms and commence the process of engaging in the construction of off-shore wind farms. With respect to conventional power generation, permanent decommissioning of the highest emitting 120 MW units and, after 2025 – the 200 MW units, is planned. As of the end of 2020, all 120 MW power generating units were shut down, except for the two units at the Stalowa Wola Branch, whose shutdown date was postponed until February 1, 2021 (970 MW in total)., TAURON Group will have installed capacity of approx. 5.7 GW in 2025, of which approx. 28% will be low and zero-emission sources (onshore wind approx. 1.1 GW; PV approx. 0.3 GW; hydro approx. 0.1 GW). 5 wind farms with a total installed capacity of 180 MW were acquired in 2019, and as a consequence TAURON Group doubled its installed capacity in wind technology. Further investments will allow the Group to achieve an approx. 66% share of low and zero-emission capacity by 2030 (additional 1.2 GW in offshore wind and 200 MW in PV). Thus, at the end of 2030, TAURON Group will have a capacity of approx. 4.6 GW, with nearly 2.3 GW in wind technologies and 0.5 GW in PV.
Financial planning	No, water-related issues were reviewed but not considered as strategically relevant/significant		As a principle, TAURON does not take on targeted financing, with funds dedicated directly to the given investment task, as it obtains funds that enable financing of TAURON Group's corporate and investment activities. Pursuant to the terms of some of the agreements, TAURON is obliged to implement the indicated investment projects, comply with specific sustainable development indicators, as well as act in accordance with the principles of environmental and social policy, the implementation of which is confirmed by relevant reports submitted to the financial institutions. Additionally, in some financing agreements, TAURON undertakes not to allocate funds from the given financing to finance activities related to the operations of the generation and mining lines of business

## W8. Targets

## W8.1

## (W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	targets and/or	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row	Company-	Targets are	The TAURON Group establishes indicators and reporting systems that will allow for the objective identification and comparison of the environmental impact of various activities of the
1	wide	monitored	TAURON Group, enabling their use to make management decisions in the TAURON Group's business areas. Appropriate units in the organizational structures of TAURON Group
	targets	at the	companies ensure the collection and transfer of complete and reliable information about the environment in a timely manner, in order to meet reporting requirements, support
	and goals	corporate	compliance with legal requirements and to support management decision-making. Operating limits with regard to selected indicators of the Company are reported to TAURON Polska
	Business	level	Energia SA.
	level	Goals are	
	specific	monitored	
	targets	at the	
	and/or	corporate	
	goals	level	
	Site/facility		
	specific		
	targets		
	and/or		
	goals		

## W8.1a

## (W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

#### Target reference number

Target 1

#### Category of target

Water withdrawals

#### Level

Site/facility

#### **Primary motivation**

Reduced environmental impact

## **Description of target**

Maximum daily limits for direct water intake from the environment.

#### **Quantitative metric**

Absolute reduction in total water withdrawals

#### Baseline year

2019

#### Start year

2020

#### **Target year**

## % of target achieved

100

## Please explain

The energy sector is controlled by using operational limits stemming from the legal mechanisms, e.g. water law permits specifying limits for the use of water resources. Maximum daily limits for direct water intake from the environment are established in admistrative decisions.

## Target reference number

Target 2

## Category of target

Water discharge

#### Level

Business activity

#### **Primary motivation**

Reduced environmental impact

## **Description of target**

Limits for volume of direct water discharge to the environment.

### Quantitative metric

Other, please specify (Waste water volume [m3])

### Baseline year

2019

## Start year

2020

## Target year

### % of target achieved

100

## Please explain

The energy sector is controlled by using operational limits stemming from the legal mechanisms, e.g. water law permits specifying limits forwater discharge . Limits for direct water discharge to the environment are established in admistrative decisions.

## W8.1b

## (W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

#### Goal

Engagement with public policy makers to advance sustainable water management and policies

#### Level

Company-wide

#### Motivation

Other, please specify (Corporation with the Ministry of Inland Navigation)

#### **Description of goal**

Participation and support in the waterway program.

## Baseline year

#### Start year

2017

#### **End** year

2050

## **Progress**

The program is in the concept phase.

## W10. Sign off

#### W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

#### W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Environmental team manager in TAURON POLSKA ENERGIA S.A. /the parent company of the holding company/	Environment/Sustainability manager

## Submit your response

## In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

## Please confirm below

I have read and accept the applicable Terms