MYTILINEOS Holdings S.A. - Water 2018

W0. Introduction

W0.1

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

As major business organisation operating in Greece and internationally, MYTILINEOS is active in the EPC and construction sectors through METKA, in the Metallurgy and Mining sector through Aluminium of Greece, and in the Energy sector through Protergia, with turnover (2017) over 1.5 billion EUR and more than 2,900 employees (direct & indirect). The Company's strong international presence in 30 countries establishes it as a global leader, as its exports to markets abroad account for more than 2% of total Greek exports, benefiting significantly the national economy and conveying a strong message to international investors for its commitment to continuous growth. The history of MYTLINEOS goes back to the early 20th century. MYTILINEOS Group was founded in Greece in 1990, having evolved from an old family-run metallurgy business operating already since 1908. In 1995, MYTILINEOS was listed in the Athens Exchange and its share is today a constituent of the FTSE/ATHEX Large Cap Index tracking the top 25 companies ranked by market capitalisation. In 2017, MYTILINEOS SA has absorbed its subsidiaries (Aluminum of Greece, METKA, PROTERGIA) into a new single business entity, aiming to enhance operational flexibility and to enhance further the financing and purchasing financing level. With the new corporate structure, MYTILINEOS implements a strategic step in the transition to the new era, shielding effectively itself from ever-changing circumstances and at the same time confirming prospects for further growth, against the increasing competition of international markets.

Faithful to the business strategy and to its vision for continuous evolution and development followed for more than three decades, MYTILINEOS today stands out for its unique and modern employment model, its active social profile, the innovative mechanisms it adopts for business growth, its strategic investments in state of the art solutions for the upgrading of its operations, and the successful consolidation of its presence in global markets.

At the same time, as a responsible corporate citizen, it constantly pursues continuous business excellence and the adoption of best practices, balancing business growth with social responsibility and the protection of the environment. For MYTILINEOS, Sustainable Development is synonymous to seeking business excellence with dedication to its vision and with respect for society, the environment, its people and its shareholders. The Company's sustainability policy is founded on the harmonious coexistence of its business activities with the needs of the local communities where its operations are based. In this framework, MYTILINEOS is actively supporting major initiatives based on the United Nations Sustainable Demvelopment Goals.

Business Sectors

- MYTILINEOS is a globally competitive player in the EPC (Engineering-Procurement-Construction) projects sector. With the trading name of METKA, the MYTILINEOS EPC & Infrastructure Business Unit undertakes and implements turn-key energy projects, providing a complete range of engineering, procurement and construction services and successfully penetrating developing markets abroad, with projects under way simultaneously in the markets of Europe, Turkey, the Middle East, Asia and North Africa, as one of Greece's major exporters.
- MYTILINEOS is also a leader in the Metallurgy sector, with the trading name Aluminium of Greece – the largest vertically integrated alumina and aluminium producer in the European Union and one of Greece's healthiest growing industrial companies. The company's international business activity, in cooperation with DELPHI-DISTOMON, is a driving force for the national economy as well as for the development of the Greek periphery.
- MYTILINEOS is also firmly established in the Electric Power market. The Power & Gas Business Unit, where the Company is active through Protergia, brings under the same roof the management of all MYTILINEOS energy assets and activities. The Company today is among the leaders of the private-sector initiative in the electric power market and is the largest independent electricity producer in Greece, with a portfolio of energy assets totalling more than 1,200 MWh of installed capacity, which accounts for over 13.5% of the licensed thermal plant production capacity operation in the country.The company's activity in the Energy sector is strengthened by the Natural Gas activity, which secures its supply with natural gas on competitive terms, thus enabling it to enhance the Company's energy profile and, at the same time, achieve remarkable organic growth. M&M Gas, a private joint business venture of MYTILINEOS and MOTOR OIL active in the supply and trading of natural gas, is the company that effectively launched the liberalised Greek natural gas market, delivering the very first private liquefied natural gas (LNG) cargo in Greece.

W-EU0.1a

(W-EU0.1a) Which activities in the electric utilities sector does your organization engage in?

Electricity generation

W-EU0.1b

(W-EU0.1b) For your electricity generation activities, provide details of your nameplate capacity and the generation for each power source.

	Nameplate capacity (MW)	% of total nameplate capacity	Gross generation (MWh)
Coal – hard			
Lignite			
Oil			
Gas	1215.08	100	5043689
Biomass			
Waste (non-biomass)			
Nuclear			
Geothermal			
Hydroelectric			
Wind			
Solar			
Other renewable			
Other non-renewable			
Total	1215.08	100	5043689

W-MM0.1a

(W-MM0.1a) Which activities in the metals and mining sector does your organization engage in?

Activity	Details of activity
Mining Processing metals	Aluminium Alumina Bauxite *Production of Alumina & Aluminium*

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 2017	December 31 2017

W0.3

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

Greece

W0.4

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

EUR

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 in which an equity share is held

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
RES plants (10 Wind Farms, 3 Photovoltaic Parks ; 4 Small Hydropower Plants).	RES pants are excluded from this response boundary due to the extremely small fraction of the Company's total water use with no exposure to water risk.

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	Vital	Not important at all	Direct use: In Metallurgy - Mining sector, especially in aluminium production process, the production of alumina (is the industrial product derived from bauxite ore and is used to produce primary cast aluminium) with method (Bayer) requires significant quantities of fresh water (groundwater from renewable sources). Continuous production at our alumina & aluminium facilities is dependent on our ability to maintain our water rights and the physical availability of the water supplies. Indirect use: no dependence of this type of water has been detected in our value chain upstream or downstream.
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Not important at all	Direct use: In Metallurgy - Mining sector we use brackish water for the casting's cooling system. This amount of water is obtained from 2 drills, owned by the MYTILINEOS' Metallurgy- Mining sector, in the wider region around its plant, in strict compliance with the provisions of the Water Resources Management Directorate of the Sterea Regional Administration. The use of brackish water for indirect use is considered as not very important in our value chain upstream or downstream.

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	100%	MYTILINEOS operates industrial plants in Metallurgy - Mining & Epc - Infrastructure Sectors as well as electricity generation facilities in Energy Sector operating thermal plants using natural gas. We monitor water withdrawals at the facility level. These data are collected monthly for our internal EHS departments control needs and reported annually to the local authorities (where it is recommended). Also we publicly report the relevant information within our annual sustainability report.
Water withdrawals – volumes from water stressed areas	Not relevant	We monitor water withdrawals at the facility level. These data are collected monthly for the internal control needs and reported annually to the local authorities (where it is recommended). The EHS departments in each business sector analyze facility locations to evaluate related water risks. There are no water withdrawals from water stressed areas.
Water withdrawals – volumes by source	100%	We monitor water withdrawals at the facility level. These data are collected monthly for the internal control needs and reported annually to the local authorities (where it is recommended). Our production plants in all sectors of activity are monitored for volumes of water withdrawals by sources. We publicly report the information for the entire Company in our annual sustainability report since 2010.
Produced water associated with your metals & mining sector activities - total volumes	Not relevant	There are no produced water volumes.
Produced water associated with your oil & gas sector activities - total volumes	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	We monitor water withdrawal quality in Metallurgy & Mining Sector. This refers to the quality of groundwater we drown into our boundary. These data are collected monthly for the Sector EHS department internal control needs and reported annually to the local authorities (where it is recommended).
Water discharges – total volumes	100%	We monitor water discharges at the facility level. These data are collected monthly for the internal control needs and reported annually to the local authorities (where it is recommended). Our production plants in all sectors of activity are monitored for volumes of water discharges by destination. We publicly report the information within our annual sustainability report since 2012.
Water discharges – volumes by destination	100%	We monitor water discharges at the facility level. These data are collected monthly for the internal control needs and reported annually to the local authorities (where it is recommended). Our production plants in all sectors of activity are monitored for volumes of water discharges by destination. We publicly report the information within our annual sustainability report since 2012.
Water discharges – volumes by treatment method	100%	In all our industrial and energy production plants we monitor the quality of our discharges. These data are collected monthly for the internal control needs and reported annually to the local authorities (where it is recommended). We publicly report the relevant information within our annual sustainability report since 2012.
Water discharge quality – by standard effluent parameters	100%	Data regarding to discharges quality (standards effluent parameters where needed) are collected monthly for the internal control needs and reported annually to the local authorities (where it is recommended). We publicly report the relevant information within our annual sustainability report since 2012.
Water discharge quality – temperature	100%	Data regarding to discharges quality (temperature where needed) are collected monthly for the internal control needs and reported annually to the local authorities (where it is recommended). We publicly report the relevant information within our annual sustainability report since 2012.
Water consumption – total volume	100%	We monitor the water consumption at facility level. These data are collected monthly for the Sectors EHS departments internal control needs and reported annually to the local authorities (where is recommended). We publicly report the relevant information within our annual sustainability report since 2010 .
Water recycled/reused	26-50	The reused water date refers mainly to Energy Sector. These data are collected monthly . We publicly report the relevant information within our annual sustainability report since 2012 .
The provision of fully-functioning, safely managed WASH services to all workers	100%	We provide WASH services in all plants . These data are collected monthly for internal use.

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)	Comparison with previous reporting year	Please explain
Total withdrawals	164418.99	Higher	The 97,7% of the total volume is related to seawater withdrawal for cooling purposes of our High Efficiency Combined Heat and Power (CHP) plant. The volume is much higher, in respect to the last year, because of the lack of the temporary stops for maintenance of the CHP plant, as happened in 2016.
Total discharges	158659.55	Higher	The 99,6% of the total volume is related to seawater for cooling purposes of our High Efficiency Combined Heat and Power (CHP) plant. Also, see the comment above.
Total consumption	5759.44	Lower	The decrease in water consumption is due primarily to improvements in installations as well as to small-scale water recycling practices, where this was feasible, in the framework of a large-scale “Black Belt” project implemented in the alumina and aluminium production processes with the aim of conserving water resources. As the project is currently in progress, more positive results are expected in the future. In this respect, it is interesting to note that the total quantity of water withdrawn from municipal water supplies and other public water utilities, as well as from the company’s network of drills, was the lowest in the last five years.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	7	About the same	Metallurgy - Mining Sector: Rainwater volume of 6-7 mega liters per year is collected directly in a special reservoir configured in the area of a disused mine, used by DELPHI-DISTOMON (subsidiary of MYTILINEOS S.A.).
Brackish surface water/seawater	Relevant	159367.22	Much higher	This figure shows the water intake in our industrial & energy plants for cooling purposes (brackish for cast house in aluminium production and seawater for the High Efficiency Combined Heat and Power plant). The limit on the volume of seawater withdrawn annually is determined by a Decision of the Water Resources Management Directorate of the Regional Administration of the Prefecture of Sterea Hellas. The use of the water is under permission by the local Authorities. Withdrawal of this kind of water has increased (by 28.5%) with respect to last year due to the lack of the temporary stops for maintenance purposes of the CHP plant, as happened in 2016.
Groundwater – renewable	Relevant	4801.5	Lower	Water withdrawal from this source has fallen from last year by 4.5%. The 79.5% of the specific water amount was used to meet the manufacturing / processing needs in Metallurgy & Mining sector, the 0.5% was used in our Gas-fired Combined Cycle Thermal Power Plant (CCGT) in Ag. Nikolaos (Viotia) and the rest 20% was used to cover the local communities water supply needs. The total volume of the water is obtained from a network of 17 drills, owned by Company's Metallurgy Sector, in the broader region around its plant, in strict compliance with the provisions of the relevant Decision of the Water Resources Management Directorate of the Regional Administration of the Prefecture of Sterea Hellas. The use of the water is under permission by the local Authorities. Also the source is characterized as renewable because the quantities of the water withdrawn can be replenished relatively quickly (according to our monthly measurements) and is located at shallow dept.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	We do not use non-renewable groundwater.
Produced water	Not relevant	<Not Applicable>	<Not Applicable>	We do not use produced water.
Third party sources	Relevant	243.18	Much lower	1. The 12% of this volume of water is coming from public water utilities, and is used to meet the needs of the buildings and primarily of MYTILINEOS’ industrial facilities. See also our response in Total consumption cell, above. 2. The rest 88% is seawater returned by another company (Motor Oil) and used in the desalination process of the Energy Sector.

W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Not relevant	<Not Applicable>	<Not Applicable>	We do not discharge water in lakes, rivers or streams.
Brackish surface water/seawater	Relevant	158555.68	Much higher	Discharge to the sea (determined by legislation). Breakdown: 1. The 99,97% is seawater from the cooling process of the Combined Heat and Power (CHP). This amount of water discharge has increased with respect to last year due to the lack of the temporary stops for maintenance purposes of the CHP plant, as happened in 2016. 2. The rest 0,03% concerns waste water, including rainwater, measured at the point of exit from the primary treatment facilities.
Groundwater	Relevant	47.72	About the same	Discharge to the subsoil. Includes a) waste water from the mining process, b) Waste water from mining sites and c) Water used for road wetting, Watering –Environmental restoration
Third-party destinations	Relevant	56.15	About the same	Industrial service water in the power generation process. Breakdown: a) 52.5%: Disposal to a Motor Oil liquid waste treatment plant. b) 47.5%: Disposal by closed pipeline to the liquid waste treatment plant of the Metallurgy Unit.

W1.2j

(W1.2j) What proportion of your total water use do you recycle or reuse?

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	2-10	About the same	The quantity of water recycled/reused in another company unit prior to being discharged, stood at 5,151 mega liters. Of this total quantity, 99.8% concerns water reused by the Energy Sector and more specifically to: (a) the use of 5,106 megaliters of seawater, from the cooling system network of the Metallurgy's Combined Heat and Power (CHP) plant, by the Ag. Nikolaos thermal power plant and (b) the recycling of 26.8 mega liters of liquid waste from the Heat Recovery Boiler of the combined-cycle thermal power plant in Ag. Theodoroi, Korinthia.

W-MM1.2j

(W-MM1.2j) For your metals and mining operations, provide details of the volume of water recycled or reused by your organization and the proportion of total water use this represents.

	Volume of water recycled or reused by your organization (megaliters/year)	% of total water use recycled or reused	Please explain
Row 1	8.6	Less than 1%	Recycled amount of water in the mining activity for obtaining raw materials.

W-EU1.3

(W-EU1.3) Do you calculate water intensity for your electricity generation activities?

Yes

W-EU1.3a

(W-EU1.3a) Provide the following intensity information associated with your electricity generation activities.

Water intensity value	Numerator: water aspect	Denominator: unit of production	Comparison with previous reporting year	Please explain
0.01	Other, please specify (Waste Water in m3)	MWh	Lower	This intensity value refers to High Efficiency Combined Heat and Power Plant owned by MYTILINEOS, located in the Energy Complex of Ag. Nikolaos (Viotia): Waste Water to MYTILINEOS Metallurgy Sector 2017: 29.460 m3 Net Production 2017: 2.011.271 mwh Waste Water intensity factor 2017: 0,015 (2016:0,020)
0.01	Other, please specify (Waste Water in m3)	MWh	About the same	This intensity value refers to Gas-fired Combined Cycle Thermal Power Plant (CCGT) owned by KORINTHOS POWER SA, a subsidiary of MYTILINEOS located in Ag. Theodoroi (Korinthia).): Waste Water to Motor Oil company 2017: 29.460 m3 Net Production 2017: 2.011.271 mwh Waste Water intensity factor 2017: 0,015 (2016:0,014)

W-MM1.3

(W-MM1.3) Do you calculate water intensity information for your metals and mining activities?

Yes

W-MM1.3a

(W-MM1.3a) For your top 5 products by revenue, provide the following intensity information associated with your metals and mining activities.

Product	Numerator: Water aspect	Denominator: Unit of production	Comparison with previous reporting year	Please explain
Bauxite	Total water consumption	Ton of final product	About the same	2017: 0.000067 mega liters 2016: 0.000066 mega liters
Alumina	Total water consumption	Ton of final product	Lower	2017: 0.00581127 mega liters 2016: 0.00630827 mega liters
Aluminium	Total water consumption	Ton of final product	Lower	2017: 0.02626782 mega liters 2016: 0.02857699 mega liters

W2. Business impacts

W2.1

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

No

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?

No

W3. Procedures

W-EU3.1

(W-EU3.1) How does your organization identify and classify potential water pollutants associated with your business activities in the electric utilities sector that could have a detrimental impact on water ecosystems or human health?

All the company's Business Sectors apply an ISO 14001 certified Environmental Management System, supported by specific environmental policies. 2017 saw the launch, in all the company's Business Sectors, of the revision of their environmental management systems in accordance with the new specifications laid down by the ISO 14001:2015 international standard. In parallel, the systematic application of Best Available Techniques (BATs) in the production process are significant factors that contribute to the company's business growth and drive its commitment to the protection of the environment and to ensuring the sustainable management of natural resources.

In the identification of potential water pollutants all sectors follow the Company's overall Measures & Principles for the protection of the natural environment, such as: a) Adherence to the agreements and commitments that the Company's Sector has undertaken over and above its statutory obligations, b) Organisation of regular internal and external inspections to assess the performance of the Environmental Management System, the achievement of the targets set and the application of regulations and principles, c)Prevention of all risks of pollution, including by accident, or of other large-scale accidents (development, testing and application of emergency response procedures), d) Assessment of the impacts of the company's activities on the environment, identification and assessment of potential risks, adoption of the necessary preventive measures, conduct of regular inspections and drills in order to confirm their implementation and evaluate their efficiency, e) Control and continuous reduction of liquid waste and f) Correction of all deviations identified, by introducing and implementing improvement / restoration plans and preventive action plans.

W-EU3.1a

(W-EU3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants associated with your activities in the electric utilities sector on water ecosystems or human health.

Potential water pollutant	Description of water pollutant and potential impacts	Management procedures	Please explain
No potential water pollutants identified	<Not Applicable>	<Not Applicable>	According to the evaluation tools available, no source of water was affected by MYTILINEOS' Electric power Sector activity in 2017.

W-MM3.2

(W-MM3.2) By river basin, what number of active and inactive tailings dams are within your control?

Country/Region
Greece

River basin
Other, please specify (Municipal water (Mornos River))

Number of tailings dams in operation
0

Number of inactive tailings dams
0

Comment
We do not use tailings dams.

W-MM3.2a

(W-MM3.2a) To manage the potential impacts to human health or water ecosystems associated with the tailings dams in your control, what procedures are in place for all of your dams?

Procedure	Detail of the procedure	Please explain
No management procedure applies to all tailings dams	<Not Applicable>	We do not use tailings dams.

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?
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
Partial

Risk assessment procedure
Water risks are assessed as a standalone issue

Frequency of assessment
Every two years

How far into the future are risks considered?
6 to 10 years

Type of tools and methods used
Other

Tools and methods used
Internal company methods
External consultants
Other, please specify (ISO 14001)

Comment
This refers to Company's direct operations, in Metallurgy - Mining sector. We measure the water consumption and monitor the natural sources situation in order to meet the permit’s rules and criteria. In case of a new product or any production change, we re-estimate the water needs and amend the permits if it would be accepted by the authorities. Our CSR team (in Metallurgy Sector) maintains a standing agenda item on environmental topics (including water) as part of its monthly meetings.

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
The Company has scheduled to initiate an assessment procedure towards its significant suppliers concerning environmental issues (including water impacts) within 2018.

Other stages of the value chain

Coverage
Partial

Risk assessment procedure
Water risks are assessed as a standalone issue

Frequency of assessment
Every two years

How far into the future are risks considered?
6 to 10 years

Type of tools and methods used
Other

Tools and methods used
Internal company methods
External consultants
Other, please specify (ISO 14001)

Comment
Water risk assessment is taking place in Metallurgy - Mining sector and particularly in the alumina & aluminium production facilities including the High Efficiency Combined Heat And Power Plant which is used for the steam production. These facilities represent more than the 99% of the Group's direct industrial operations water needs. Our facilities are certified under ISO14001 and evaluate water aspects in order to prevent, minimize and control potential impacts generated.

W3.3b

(W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Water which is used primarily to meet the manufacturing / processing, energy and water supply needs of the MYTILINEOS' industrial facilities in Metallurgy - Mining sector, is obtained from a network of 17 drills, which the company operates in the broader region around its plant, in strict compliance with the provisions of the relevant Decision of the Water Resources Management Directorate of the Sterea Hellas Regional Administration. Concerning seawater is by its nature not subject to scarcity while, wastewater discharges comply with national and local regulations and permit authorization. Company's alumina and aluminium production plants have access to sufficient water supplies to support present and future operational demands. Also we are conducting scenario planning of potential events that could affect mining operations such as storms that produce excess water. Moreover, at operations where water availability is important, we consider future changes in water availability in our assessments using internal company knowledge. This may take the form of supply continuity risk which involve liaison with regulators on permitted withdrawal volumes.
Water quality at a basin/catchment level	Relevant, always included	Water which is used primarily to meet the manufacturing / processing, energy and water supply needs of the MYTILINEOS' industrial facilities in Metallurgy - Mining sector, is obtained from a network of 17 drills, which the company operates in the broader region around its plant, in strict compliance with the provisions of the relevant Decision of the Water Resources Management Directorate of the Sterea Hellas Regional Administration. Concerning seawater is by its nature not subject to scarcity while, wastewater discharges comply with national and local regulations and permit authorization.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Where appropriate, we will always consider stakeholder conflicts when assessing water resources and our requirements, at a local level. There were no such conflicts as the MYTILINEOS' Metallurgy Sector is the water supplier of the local communities in the area of its operation. We consider early and effective engagement with our Stakeholders which strengthen the Company's process for the identification of conflicts in connection with sustainability issues. This Engagement mechanism consists of the following approaches: a) Official Stakeholder Engagement Procedure on environmental issues, b) open door policy with employees and local citizens, c) close cooperation with the Hellenic Federation of Enterprises (SEV) and the Greek Mining Enterprises Association (SME), in terms of significant environmental issues (including water).
Implications of water on your key commodities/raw materials	Relevant, always included	In case of a new product or any production change, we re-estimate the water needs and amend the permits if it would be accepted by the authorities. In Metallurgy - Mining sector, the production of alumina (is the industrial product derived from bauxite ore and is used to produce primary cast aluminium) with method (Bayer) requires significant quantities of fresh water which comes from groundwater renewable sources. MYTILINEOS' Metallurgy Sector has evaluated the possibility of using sea water after desalination treatment to cover a big part of its needs.
Water-related regulatory frameworks	Relevant, always included	We use water in strict compliance with the provisions of the relevant Decision of the Water Resources Management Directorate of the Regional Administration of the Prefecture of Sterea Hellas, and are under permission by the local Authorities. Possible future changes in the limits of the water withdrawals may effect negatively our operations in terms of business expansion. To identify and evaluate the future potential of regulatory changes of sustainability issues including water, we engage in constant dialogue with our stakeholders including the competent authorities.
Status of ecosystems and habitats	Relevant, always included	The areas used for water withdrawal by the MYTILINEOS' activity sectors, especially the Metallurgy - Mining Sector, do not contain water volumes regarded, by scientific groups or Public Authorities as particularly sensitive, due to their relative size, operation or status as a rare, endangered or threatened ecosystem (or because they support a specific threatened plant or animal species). Also they are not located in any other area designated as a protected area. Although, regarding the seawater used in the cooling systems of the Combined Heat and Power (CH) plant of ALUMINIUM OF GREECE, in addition to the strict compliance with the relevant provisions of the laws determining the framework for preventing any environmental impact, the company appoints, on an annual basis, an authoritative organisation (Hellenic Centre for Marine Research - HCMR) to conduct of a research study to monitor the status of living organisms (benthic biocoenoses, with emphasis on thermophilic species) on the Antikyra Gulf seabed.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	We are providing access to water, sanitation and hygiene at the workplace at an appropriate level of standard for all employees.
Other contextual issues, please specify	Relevant, always included	Regulatory changes at a local level: The Group's activities are in conformity with the laws and regulations that are relevant to the environmental protection. The compliance cost with such regulations involves, among others, either investments or the significant spending for actions relating to the safe management of industrial wastes and measures for remediating environmental damages. Environmental issues within our responsibility might arise in the future in relation to our current facilities, facilities that we owned in the past or facilities where we conducted our operations even if the Management has not been or could not be aware of such issues up to date or these issues have not been present yet.

W3.3c

(W3.3c) Which of the following stakeholders are considered in your organization’s water-related risk assessments?

	Relevance & inclusion	Please explain
Customers	Relevant, sometimes included	There are no request information concerning water use or management by our customers. The trust of customers/consumers is essential for our success, that's why customers are factored into our assessments to ensure continuity of our business.
Employees	Relevant, always included	Our water risk assessment takes into consideration our employees behaviour and awareness concerning water consumption.
Investors	Relevant, always included	Investors are factored into our assessment because any disruption to planned operations or change in future risk exposure, has the potential to impact negatively on revenue and profitability alongside shareholder perception towards the company. Although there are no requests for information concerning water use and management by our shareholders we report the relevant data in our Sustainability reports as well as in our Global Compact CoP (Advanced Level) to give them the opportunity to assess their potential investment and to send any feedback. We are in close dialog with the capital market and rating agencies. We conduct roadshows to meet with socially responsible investors (SRI). At these events, we discuss various sustainability topics including water.
Local communities	Relevant, always included	The MYTILINEOS' Metallurgy - Mining sector is the water supplier of the local communities in the area it operates. Local communities are a primary stakeholder group for the company whose input is evaluated through our annual engagement process at local level. At present we do not face any issues with local communities, but if such issues were to arise, they could jeopardize business continuity. Thus we strive to maintain dialogue with local communities and to always consider their circumstances when assessing water risk.
NGOs	Relevant, always included	A fixed component of our sustainability management is the continuous exchange with our stakeholders including NGOs. NGO positions on our activities, especially where a facility withdraws or discharges significant volumes of water, are materially important to us and where applicable, we will engage directly with the NGOs and factor their views and insights into our risk assessments.
Other water users at a basin/catchment level	Not considered	There are no other water users at a local level.
Regulators	Relevant, always included	We operate facilities which are subject to water-related permits or licenses. The relevant regulators are always factored into our assessments as their evaluation of our operational performance is important to the continuity of our business. Regular inspections are carried out by Environmental Regulators and routine reports are submitted to them.
River basin management authorities	Not relevant, explanation provided	There are no river basin management authorities.
Statutory special interest groups at a local level	Not relevant, included	Included in local communities concern. At present the Group does not face any issues or conflict with such groups.
Suppliers	Not relevant, explanation provided	The suppliers’ water use, risks and management are considered as an issue not related to our production because of the raw materials (bauxite, pet coke etc) nature. On the other hand, we recognize the need to identify supplier-side water risk and examine suppliers’ circumstances in respect of such risk, and always consider such issues when assessing water risk.
Water utilities at a local level	Not relevant, explanation provided	There are no water utilities/suppliers at local level.
Other stakeholder, please specify	Relevant, sometimes included	Sustainable Development & Corporate Social Responsibility institutions in Greece in which MYTILINEOS participates, in the context of its broader Environmental Policy.

W3.3d

(W3.3d) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

Please advise our Disclosure Management Approach within our Sustainable Development Report 2017 (page 26) in the following address: www.mytilineos.gr/Uploads/ETHSIA_DELTIA/csr_reports/MYTILINEOS_SUSTAINABLE_REPORT_2017_WEB_EN.pdf

Our aim is to avoid risks that pose a threat to MYTILINEOS operations continued existence and to make improved managerial decisions to create lasting value. We understand risk to be any event that can negatively impact the achievement of our short-term operational or long-term strategic goals. More specifically, in Metallurgy and Mining sector a substantive risk includes the change of the limits of the water use permission issued by local authorities. This could include increased capital expenditure and operational maintenance costs associated with development of alternate water supplies. In order to effectively measure and manage identified opportunities and risks, we quantify these in terms of probability and economic impact in the event they occur. If a risk is identified that could have a significant impact on earnings, it must be immediately reported to the Board of Executive Directors. Also, we measure the water consumption and monitor the natural sources situation in order to meet the permit's rules and criteria. In case of a new product or any production change, we re-estimate the water needs and amend the permits if it would be accepted by the authorities. Our stakeholder engagement process aims to promote open exchange between citizens and our site management with the goal of strengthening trust in our activities. Moreover, water discharges parameters are always considered as a risk factor. In respect of water consumption, our facilities monitor their water use and implement risk minimization strategies if necessary. In addition, we specify stakeholders appropriately and use ISO26000 to ensure we have not missed any perspectives or matters that should be included in the due diligence process.

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

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

There are no operational, financial or strategic effects that undermine our business, in the context of a water-related risk. Generally our aim is to avoid risks that pose a threat to MYTILINEOS operations continued existence and to make improved managerial decisions to create lasting value. We understand risk to be any event that can negatively impact the achievement of our short-term operational or long-term strategic goals. For example, in Metallurgy and Mining sector, water is used to produce the steam required in the digestion process; in the preparation of aqueous caustic soda, flocculants and lime; to wash the ore, residues and recycled caustic and for dust mitigation. There are also uses such as vehicle washing, sanitation and provision of drinking water which occur at a refinery. The amount of water used in refineries is dependent on a variety of factors – bauxite quality, the design of the process facility, the extent to which water is recycled and the demand for non-process applications as well as the location of the facility. A substantive risk in this sector can include the change of the limits of the water use permission issued by local authorities. This could include increased capital expenditure and operational maintenance costs associated with development of alternate water supplies. In order to effectively measure and manage identified opportunities and risks, we quantify these in terms of probability and economic impact in the event they occur. If a risk is identified that could have a significant impact on earnings, it must be immediately reported to the Board of Executive Directors. Recognising that water is a precious resource, we are investing in sustainable water management programmes, including increased use of recycled water, although non-recycled resources are still essential for some stages of the refining process in Metallurgy and Mining sector.

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?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	2	26-50	As mentioned above, although water related risks are less material for our business we report two facilities that use the 99,8% of the total amount of the company's water withdrawal and could have potential substantive impact in the future: 1) High Efficiency Combined Heat and Power Plant, in Ag. Nikolaos (Viotia), exposed to seawater risks in terms of the limits of the water use permission issued by local authorities. This facility also used by Metallurgy - Mining sector for the steam production as a basic stage in alumina production process. 2) Alumina and Aluminium production Plant in Ag. Nikolaos (Viotia), which uses industrial water for its operation, is exposed to groundwater and municipal supply sources risks concerning to the limits of the water use permission issued by local authorities.

W4.1c

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

Country/Region
Greece

River basin
Other, please specify (Sea Golf of Antikira)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities

% company's annual electricity generation that could be affected by these facilities
1-25

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
26-50

Comment
Sea water, is by its nature, not subject to scarcity. There are no clear financial water risks, deriving from the operation of the High Efficiency Combined Heat and Power Plant. Our Combined Heat and Power (CHP) plant requires specific quantity of seawater for use in its cooling system. This facility is used by Metallurgy and Mining sector for the steam production as a basic stage in alumina production process. The limit on the volume of seawater, withdrawn annually for this purpose, is determined by a Decision of the Water Resources Management Directorate of the Prefecture of Sterea Ellada. Any change on this volume may affect our operation increasing costs, forcing us to find alternative ways of water supply or forcing premature closures.

Country/Region
Greece

River basin
Other, please specify (Groundwater sources & Mornos River)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities

% company's annual electricity generation that could be affected by these facilities
Less than 1%

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
Less than 1%

Comment
Alumina and Aluminium production Plant which uses industrial water for its operation, is exposed to groundwater and municipal supply sources risks concerning to the limits of the water use permission issued by local authorities. In case of the change of current limits of groundwater withdrawal, it has been estimated that if we have to meet all our the water needs of these specific facilities through the municipal supply (the Athens Water Supply and Sewerage Company - EYDAP) then it will affect less than 1% the price of aluminium products according to the current pricing policy of EYDAP.

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.

Country/Region
Greece

River basin
Other, please specify (Sea Golf of Antikira)

Type of risk
Regulatory

Primary risk driver
Statutory water withdrawal limits/changes to water allocation

Also physical ecosystem vulnerability.

Primary potential impact
Reduction or disruption in production capacity

Also water supply disruption or stop of plant operation.

Company-specific description
Our Combined Heat and Power (CHP) plant requires specific quantity of seawater for use in its cooling system. The limit on the volume of seawater, withdrawn annually for this purpose, is determined by a Decision of the Water Resources Management Directorate of the Prefecture of Sterea Ellada. Any change on this volume may affect our operation increasing costs, forcing us to find alternative ways of water supply or forcing premature closures. Also, the volume of the sea water which returns back to the sea after the cooling process may affect the status of living organisms (benthic biocoenoses, with emphasis on thermophile species) on the Antikira Gulf seabed in terms of its ph and temperature.

Timeframe
Unknown

Magnitude of potential impact
Unknown

Likelihood
Unknown

Potential financial impact
0

Explanation of financial impact
As this water risk is not material to our business, there is no need of calculation of its potential financial impact. We do not see financial impact for the next 5 years.

Primary response to risk
Engage with regulators/policymakers

Description of response
Engagement with public policy makers - Strengthen links with local community - Cooperation with governmental research organisations. Our strategy is applied on an annual basis and consists of the following elements: 1) Compliance with the environmental legislation (including water management) is a core priority of MYTILINEOS. This view, which also serves as the foundation of the company's environmental policy, aims to drive the continuous improvement of its environmental footprint and is based, first and foremost, on the principle of adherence to the provisions of the law, as well as to the agreements concluded and the voluntary commitments. 2) Metallurgy and Mining Sector has close cooperation with the responsible services of the Ministry of the Environment and of the Region of Sterea Hellas, which are responsible for controlling its activity and environmental performance. 3) Company's Stakeholder Engagement process expresses, in a systematic way, the long-standing principle to engage in a consistent and honest open dialogue with its Stakeholders. In this context, thematic consultations on Environmental issues take place giving the opportunity to our social partners to raise its concerns or expectations 4) Finally, the Metallurgy and Mining Sector appoints, on an annual basis, an authoritative organization Hellenic Centre for Marine Research - HCMR) to conduct of a research study to monitor the status of living organisms, on the he Antikyra Gulf seabed.

Cost of response
8207000

Explanation of cost of response
There is no separated cost to managing the water risks. The total planned expenditures for the implementation of the company's environmental policy in Metallurgy and Mining Sector (which includes water issues) reaches the number of €8-10 million in annual

basis. Also, the respective social expenditures which improve the relationships with the local communities reached 0.5 million.

Country/Region
Greece

River basin
Other, please specify (Groundwater sources & Mornos River)

Type of risk
Regulatory

Primary risk driver
Statutory water withdrawal limits/changes to water allocation

Primary potential impact
Increased operating costs

Higher Operating costs and Plant/production disruption leading to reduced output

Company-specific description
Volume of industrial service and drinking water, used primarily to meet the manufacturing / processing, and water supply needs of the company's industrial facilities, in Metallurgy & Mining Sector. It is obtained from a network of 17 drills, owned by Metallurgy sector, in the broader region around its plant, in strict compliance with the provisions of the relevant Decision of the Water Resources Management Directorate of the Sterea Regional Administration which has set specific limits on water withdrawal. Any change on these limits may force us to municipal supply source affecting our operational costs and as a consequence to have a production disruption.

Timeframe
Unknown

Magnitude of potential impact
Unknown

Likelihood
Very unlikely

Potential financial impact
0

Explanation of financial impact
As we use groundwater from renewable resources and the specific water risk is not material to our business, there is no need of calculation of its potential financial impact. We do not see financial impact for the next 5 years.

Primary response to risk
Engage with regulators/policymakers

Also establish site-specific targets.

Description of response
The MYTILINEOS Metallurgy Mining Sector has close cooperation with the responsible services of the Ministry of the Environment and of the Region of Sterea Hellas, which are responsible for controlling its activity and environmental performance. Also the sector has set specific water target: Total groundwater withdrawal 12.95 megaliters per day.

Cost of response
8207000

Explanation of cost of response
There is no separated cost to managing the water risks. The total planned expenditures for the implementation of the company's environmental policy in Metallurgy and Mining Sector (which includes water issues) reaches the number of €8-10 million in annual basis. Also, the respective social expenditures which improve the relationships with the local communities reached 0.5 million.

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated *In 2018, MYTILINEOS has scheduled to execute its first official assessment to its significant suppliers concerning its Suppliers Code of Conduct. This evaluation will be focused on Employment, Social and Environmental impacts of suppliers operation and the results will be used for the planning of specific actions, where needed.*	In Metallurgy - Mining sector, mining is at the base of the value chain and therefore we directly evaluate water use, risk and management as a core component of our own business. The suppliers' water use, risks and management are considered as an issue not related to our production because of the raw materials (bauxite, pet coke etc) nature. Also the company's power plants are located near the coast line and all internal water needs can be covered by sea water. Gas-fired Combined Cycle Thermal Power Plant (CCGT), in Agioi Theodoroi, uses sea water for its desalination plant. The sea water is provided by the Refinery plant that lies next to the plant and the quantity and quality is guaranteed with contracts. Moreover sea water is by its nature not subject to scarcity. We have reviewed public disclosures of our key suppliers and from that review we have not identified any water-related risks that could materially impact our business.

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, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity

Other

Primary water-related opportunity

Other, please specify (Cost savings & community relations)

Company-specific description & strategy to realize opportunity

The power plants of MYTILINEOS Group are located near the coast line and use sea water. The Metallurgy and Mining Sector covers its local communities water needs. Also, it operates three wastewater treatment plants for the needs of the plant and local communities.The selected locations for the operation of MYTILINEOS Group facilities, in Metallurgy & Mining and Energy sectors, have a strategic importance. The use of seawater and groundwater provides cost savings for all plants. Also the Metallurgy and Mining Sector through its network of 17 drills covers the water needs of its local communities, maintaining good community relations and its social license to operate.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Unknown

Potential financial impact

Explanation of financial impact

There is no such calculation of its potential financial impact.

W5. Facility-level water accounting

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, total water accounting data and comparisons with the previous reporting year.

Facility reference number
Facility 1

Facility name (optional)
High Efficiency Combined Heat and Power Plant

Country/Region
Greece

River basin
Other, please specify (Sea Golf of Antikira)

Latitude
38.358016

Longitude
22.689508

Primary power generation source for your electricity generation at this facility
Gas

Natural Gas

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
159367

Comparison of withdrawals with previous reporting year
Higher

Total water discharges at this facility (megaliters/year)
158086

Comparison of discharges with previous reporting year
Higher

Total water consumption at this facility (megaliters/year)
1281

Comparison of consumption with previous reporting year
About the same

Please explain
Seawater for the cooling systems of the CHPP facility. The limit on the volume of seawater withdrawn annually is determined by a Decision of the Water Resources Management Directorate of the Sterea Regional Administration. The water withdrawal and discharge volumes are higher with respect to last year due to the lack of temporary halting of operation of the facility for maintenance purposes, as happened in 2016. On the contrary the amount of water consumption was stable.

Facility reference number
Facility 2

Facility name (optional)
Alumina and Aluminum production Plant

Country/Region
Greece

River basin
Other, please specify (Groundwater sources & Mornos River)

Latitude
38.360912

Longitude
22.688575

Primary power generation source for your electricity generation at this facility
Not applicable

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
4771

Comparison of withdrawals with previous reporting year
Lower

Total water discharges at this facility (megaliters/year)
468.7

Comparison of discharges with previous reporting year
Lower

Total water consumption at this facility (megaliters/year)
4302

Comparison of consumption with previous reporting year
Lower

Please explain
With respect to last year: Water withdrawal decrease by 7.8% - Water discharge decrease by 13% - Water consumption decrease by 7.2%. The decrease in water consumption is due primarily to improvements in installations as well as to small-scale water recycling practices, where this was feasible, in the framework of a large-scale “Black Belt” project implemented in the alumina and aluminum production processes with the aim of conserving water resources.

W5.1a

(W5.1a) For each facility referenced in W5.1, provide withdrawal data by water source.

Facility reference number
Facility 1

Facility name
High Efficiency Combined Heat and Power Plant

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Brackish surface water/seawater
159367

Groundwater - renewable
0

Groundwater - non-renewable
0

Produced water
0

Third party sources
0

Comment
Seawater is used for the cooling systems of the High Efficiency Combined Heat and Power (CHP) Plant. The limit on the volume of seawater withdrawal annually is determined by a Decision of the Water Resources Management Directorate of the Sterea Hellas Regional Administration.

Facility reference number
Facility 2

Facility name
Alumina and Aluminum production Plant

Fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Brackish surface water/seawater
0

Groundwater - renewable
4761

Groundwater - non-renewable
0

Produced water
0

Third party sources
10.1

Comment
The amount of groundwater is used to meet the manufacturing / processing needs of the facility as well as to cover the local communities water supply needs. Also the source is characterized as renewable because the quantities of the water withdrawn can be replenished relatively quickly (according to our monthly measurements) and is located at shallow depth. Third party sources refers to the amount of Municipal water used to support the needs of the facility.

W5.1b

(W5.1b) For each facility referenced in W5.1, provide discharge data by destination.

Facility reference number
Facility 1

Facility name
High Efficiency Combined Heat and Power Plant

Fresh surface water
0

Brackish surface water/Seawater
158086

Groundwater
0

Third party destinations
0

Comment
Discharge to the sea (determined by legislation).

Facility reference number
Facility 2

Facility name
Alumina and Aluminum production Plant

Fresh surface water
0

Brackish surface water/Seawater
468.7

Groundwater
0

Third party destinations
0

Comment
Discharge to the sea (determined by legislation).

W5.1c

(W5.1c) For each facility referenced in W5.1, provide the proportion of your total water use that is recycled or reused, and give the comparison with the previous reporting year.

Facility reference number
Facility 1

Facility name
High Efficiency Combined Heat and Power Plant

% recycled or reused
2-10%

Comparison with previous reporting year
Lower

Please explain
This amount refers to seawater that is reused in another facility prior to being discharged. It concerns the use of 5,114 mega liters that come from the cooling system network of the High Efficiency Combined Heat and Power Plant (prior to being discharged), to the Gas-fired Combined Cycle Thermal Power Plant (located at the same Energy Complex of Ag. Nikolaos) for cooling purposes. This amount is corresponding to 3.1% of the company's total water withdrawal.

Facility reference number
Facility 2

Facility name
Alumina and Aluminum production Plant

% recycled or reused
Less than 1%

Comparison with previous reporting year
About the same

Please explain
Concerns very small amounts of recycle water in the production process due to improvements in installations as well as to small-scale water recycling practices, where this was feasible, in the framework of a large-scale “Black Belt” project implemented in the alumina and aluminums production processes with the aim of conserving water resources. As the project is currently in progress, more positive results are expected in the future.

W5.1d

(W5.1d) For the facilities referenced in W5.1, what proportion of water accounting data has been externally verified?

Water withdrawals – total volumes

% verified
Not verified

What standard and methodology was used?
Audited by the authorities under permits’ rules and terms (quantities measurement control etc.)

Water withdrawals – volume by source

% verified
Not verified

What standard and methodology was used?
Audited by the authorities under permits’ rules and terms (quantities measurement control etc.)

Water withdrawals – quality

% verified
Not verified

What standard and methodology was used?
Audited by the authorities under permits’ rules and terms (quantities measurement control etc.)

Water discharges – total volumes

% verified
Not verified

What standard and methodology was used?
Audited by the authorities under permits' rules and terms (quantities measurement control etc.)

Water discharges – volume by destination

% verified
Not verified

What standard and methodology was used?
Audited by the authorities under permits' rules and terms (quantities measurement control etc.)

Water discharges – volume by treatment method

% verified
Not verified

What standard and methodology was used?
Audited by the authorities under permits' rules and terms (quantities measurement control etc.)

Water discharge quality – quality by standard effluent parameters

% verified
Not verified

What standard and methodology was used?
Audited by the authorities under permits' rules and terms (quantities measurement control etc.)

Water discharge quality – temperature

% verified
Not verified

What standard and methodology was used?
Audited by the authorities under permits' rules and terms (quantities measurement control etc.)

Water consumption – total volume

% verified
Not verified

What standard and methodology was used?

Water recycled/reused

% verified
Not verified

What standard and methodology was used?

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?
No

W6.2

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

No

W6.2c

(W6.2c) Why is there no board-level oversight of water-related issues and what are your plans to change this in the future?

	Primary reason	Board level oversight of water-related issues will be introduced in the next two years	Please explain
Row 1	Water is not one of our top material issues.	No	According to the results of our Materiality analysis process, water is not one of the top of environmental issues that have significant impact to our operations as well as to our stakeholders view.

W6.3

(W6.3) Below board level, provide the highest-level management position(s) or committee(s) with responsibility for water-related issues.

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

Environmental health and safety manager

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Not reported to board

Please explain

The persons with the direct responsibility for matters relating to water issues within the Company's activity sectors are: a) In Metallurgy & Mining Sector the Environment, Health &Safety and Continuous Improvement Director, b) In Energy Sector the Plant Manager of Agios Nikolaos and Agioi Theodoroi CCGT power plants and the Head of Section Environment, Management Systems & Compliance. Also, the Plant Managers and the Operation Managers of the power plants are responsible for reporting in a monthly basis to the competent local authority.

W-FB6.4/W-CH6.4/W-EU6.4/W-OG6.4/W-MM6.4

(W-FB6.4/W-CH6.4/W-EU6.4/W-OG6.4/W-MM6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

No, and we do not plan to introduce them in the next two years

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

No

W7. Business strategy

W7.1

(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	Yes, water-related issues are integrated	5-10	We do not expect any change in the near future, since we are operating under the relevant environmental legislation and the conformity to the water use permission issued by local authorities. This, in turn, enables possible risks to be effectively managed thus enhancing our business resilience and protecting our operation licenses.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Although water is not a material issue, it is necessary for specific processes of MYTILINEOS activities. That's why we focus at risk factors in terms of quantity and quality of water. Also the environmental impact of the company is explored through the implementation of new ISO 14001 -2015 International standard under the current Environmental Management Systems that requires the identification and the evaluation of environmental aspects associated with the activities and operations of all of our activity sectors.
Financial planning	No, water-related issues were reviewed but not considered as strategically relevant/significant	5-10	

W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

	Water-related CAPEX (+/- % change)	Anticipated forward trend for CAPEX (+/- % change)	Water-related OPEX (+/- % change)	Anticipated forward trend for OPEX (+/- % change)	Please explain
Row 1	0	0	-7	-3	Concerning water-related CAPEX no investments occurred related to water. Water-related OPEX has decreased by 7% mainly due to the cost reduction related to the use of municipality water as well as the reduction of the energy cost of the brackish water in Metallurgy and Mining Sector.

W7.3

(W7.3) Does your organization use climate-related scenario analysis to inform its business strategy?

	Use of climate-related scenario analysis	Comment
Row 1	No plans for the next two years	

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

No, and we do not anticipate doing so within the next two years

Please explain

As the costs associated with water use do not reflect a significant economic impact to the company in monetary terms, we do not use an internal price on water.

W8. Targets

W8.1

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

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Activity level specific targets and/or goals Site/facility specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Company wide our approach to setting water-related targets and goals derives mainly from our commitment to support the Sustainable Development Goals 6 and 14 in conjunction with our relations with local communities in terms of environmental issues and initiatives. Moreover we have site/facility policy to set water targets in order to decrease water cost and to comply with specific regulations.

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

Water stewardship

Description of target

Decrease the amount of groundwater withdrawal per day in Metallurgy Sector - Total groundwater withdrawal: <13.95 megaliters per day

Quantitative metric

Absolute reduction in total water withdrawals

Baseline year

2016

Start year

2016

Target year

2017

% achieved
100

Please explain
Target achieved: The total groundwater withdrawal for the year 2017 was 13.05 megaliters per day, a decrease of 6.4% of the initial target of 13.95 megaliters per day.

Target reference number
Target 2

Category of target
Water pollution reduction

Level
Company-wide

Primary motivation
Commitment to the UN Sustainable Development Goals

Description of target
Zero water pollution incidents

Quantitative metric
Other, please specify (Number of pollution incidents)

Baseline year
2016

Start year
2016

Target year
2017

% achieved
100

Please explain
Target achieved: No water pollution incidents occurred during 2017.

Target reference number
Target 3

Category of target
Water consumption

Level
Company-wide

Primary motivation
Commitment to the UN Sustainable Development Goals

Description of target
Total water consumption <6,100 megaliters /year

Quantitative metric
% reduction in total water consumption

Baseline year
2016

Start year
2016

Target year
2017

% achieved
100

Please explain
Target achieved: Total water consumption 5,759.44 megaliters in 2017. The decrease in water consumption is due primarily to improvements in installations as well as to small-scale water recycling practices, where this was feasible, in the framework of a large-scale “Black Belt” project implemented in the alumina and aluminium production processes with the aim of conserving water resources. As the project is currently in progress, more positive results are expected in the future. In this respect, it is interesting to note that the total quantity of water withdrawn from municipal water supplies and other public water utilities, as well as from the company’s network of drills, was the lowest in the last five years.

W8.1b

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

Goal
Engaging with local community

Level
Site/facility

Motivation
Shared value

Description of goal
Every year we cover our local communities total water needs (in boundaries of the company's metallurgy sector activity).

Baseline year
2016

Start year
2016

End year
2017

Progress
Within 2017, the amount of the drinking water withdrawal for local communities supply stood up to 958 megaliters (about the same comparing to 2016).

Goal
Other, please specify (Compliance with the regulations)

Level
Company-wide

Motivation
Brand value protection

Description of goal
Where we have specific limits on water withdrawals and discharges, our goal is to ensure ongoing compliance with them. We set this goal pursuant to our policy commitment to prevent pollution, be compliant and continually improve.

Baseline year
2016

Start year
2016

End year
2017

Progress
In 2017, no incidents arose that resulted any legal action.

W9. Linkages and trade-offs

W9.1

(W9.1) Has your organization identified any linkages or tradeoffs between water and other environmental issues in its direct operations and/or other parts of its value chain?

No

W9.1b

(W9.1b) Why has your organization not identified any linkages or tradeoffs between water and other environmental issues?

	Primary reason	Please explain
Row 1	Not considered, but we have plans to do so in the next 2 years	Water, so far, has not visible significant positive or negative impact on another environmental issues of the company. Although we have plans to investigate in more depth this topic and to report accordingly, within the next two years.

W10. Verification

W10.1

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?

No, we do not currently verify any other water information reported in our CDP disclosure

W11. 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.

W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	CSR Manager	Chief Operating Officer (COO)

W11.2

(W11.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Yes

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms