

Module: Introduction**Page: W0. Introduction****W0.1****Introduction**

Please give a general description and introduction to your organization.

MYTILINEOS Group is one of Greece's leading industrial groups, with a dynamic presence in a number of different, yet crucial to the country's development, production sectors. With efficient strategic planning, the Group has worked out a flexible deployment of its resources in the sectors of:

- Metallurgy & Mining, in which, through its subsidiary ALUMINIUM OF GREECE, it promotes the global competitiveness of the products of Greek metallurgy.

ALUMINIUM OF GREECE (AoG)

Since 1960, ALUMINIUM OF GREECE has consistently been a pillar of the Greek heavy industry, with a production that accounts for 15% of Europe's total alumina production, and an annual capacity that exceeds 182,000 tons of aluminium and 820,000 tons of alumina. The company is today the largest vertically integrated alumina and aluminium producer in Europe. Its plant in Ag.Nikolaos, Viotia, employs 1,461 people, directly and indirectly, and applies production and commercial processes on a par with those of the world's top metallurgical industries. Through a long-term investment plan, MYTILINEOS Group fortifies the traditionally strong Greek metallurgical industry and secures the current and future operations of ALUMINIUM OF GREECE which, thanks also to its international business activity, is a driving force for the growth of the Greek economy as well as for the development of the Greek periphery.

DELPHI - DISTOMON (subsidiary of AoG) is the second largest bauxite producer in Greece and in Europe, with an annual production of 650,000 tons. The Company's sites, which supply bauxite to ALUMINIUM OF GREECE S.A., are located in the Amfissa region with 82 direct and 135 indirect employees

- Turn-key Construction Projects, in which, through its subsidiary METKA, it ranks as one of the world's top EPC contractors in the energy sector.

METKA

Established in 1962 in N. Ionia, Volos, METKA is today a leading international EPC (Engineering- Procurement-Construction) contractor in the energy sector, undertaking the implementation of large-scale turn-key power plant projects, from design and procurement through to construction and commissioning. The company's turn-key capability extends across the full range of thermal power generation technologies (including combined cycle, cogeneration and simple cycle technologies), as well as hydro and solar power generation. METKA is currently today strongly focused on serving the energy needs of international markets, with projects currently under way in Europe, Middle East and Africa. METKA also has a strong industrial manufacturing base, with several decades of experience in complex, high value-added manufacturing of equipment and components, enabling it to serve numerous global customers and to rank as one of the leading Greek exporting companies. In addition, the company's 7th Class Contractor's Certificate has also opened up new possibilities for its participation in a wide range of public construction projects in the domestic market.

•Energy, where through its subsidiary Protergia and pioneering investments, it has been established as Greece's largest private electricity producer-supplier and the very first private alternative natural gas supplier.

Protergia

Protergia is the flagship company of MYTILINEOS Group in the electricity production and supply sector, bringing under the same roof the management of all energy assets and activities of the Group. Protergia's approach, concerning the retail electricity market, is based on its competitive charges, clear pricing mechanisms and customer rewards. Having invested in state of the art power plants and having in place a portfolio of energy assets which exceeds 10% of the country's needs in electricity, the objectives of the Company are to build and maintain a dynamic and diversified portfolio of energy assets, to develop business activities in the wholesale and retail electricity markets, to participate in the market for CO2 emissions trading, and to expand to the energy markets of neighbouring countries.

W0.2

Reporting year

Please state the start and end date of the year for which you are reporting data.

Period for which data is reported
Thu 01 Jan 2015 - Thu 31 Dec 2015

W0.3

Reporting boundary

Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported.

Companies, entities or groups over which operational control is exercised

W0.4

Exclusions

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

Yes

W0.4a

Exclusions

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion
METKA S.A. (subsidiary of the MYTILINEOS Group)	METKA S.A. & DELPHI - DISTOMON is excluded from this response boundary due to the extremely small fraction of the Group total water consumption (0,28%) with no exposure to water risk.
DELPHI - DISTOMON (subsidiary of the ALUMINIUM OF GREECE)	DELPHI - DISTOMON is excluded from this response boundary due to the extremely small fraction of the Group total water consumption (0,78%) with minimum exposure to water risk.

Further Information

Module: Current State

Page: W1. Context

W1.1

Please rate the importance (current and future) of water quality and water quantity to the success of your organization

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital for operations	Not very important	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 production facility is dependent on our ability to maintain our water rights and the physical availability of the water supplies.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Not very important	Our High Efficiency Combined Heat and Power (CHP) Plant installation, which is used by both sectors (Energy & Metallurgy & Mining), requires significant quantities of sea water for cooling purposes. Water for cooling is vital for the CHP's operation. Also, in Metallurgy & Mining we use brackish water for the casting's cooling system. In Energy sector, our our Combined Cycle Thermal Power plants use sea water as part of their operations. The availability of recycled, brackish and produced water for indirect use is not considered as very important for all power plants.

W1.2

For your total operations, please detail which of the following water aspects are regularly measured and monitored and provide an explanation as to why or why not

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals- total volumes	76-100	This data is collected monthly for the internal control needs and reported annually to the local authorities as is recommended. We publicly report the information for the entire Group in our annual sustainability report. 100% of MYTILINEOS Group production sites are monitored for volumes of water withdrawals by sources.
Water withdrawals- volume by sources	76-100	This data is collected monthly for the internal control needs and reported annually to the local authorities as is recommended. We publicly report the information for the entire Group in our annual sustainability report. 100% of MYTILINEOS Group production sites are monitored for volumes of water withdrawals by sources.
Water discharges- total	76-100	This data is collected monthly for the internal control needs and reported annually to the local

Water aspect	% of sites/facilities/operations	Please explain
volumes		authorities as is recommended. We publicly report the information for the entire Group in our annual sustainability report. 100% of MYTILINEOS Group production sites are monitored for volumes of water withdrawals by sources.
Water discharges- volume by destination	76-100	This data is collected monthly for the internal control needs and reported annually to the local authorities as is recommended. We publicly report the information for the entire Group in our annual sustainability report. 100% of MYTILINEOS Group production sites are monitored for volumes of water withdrawals by sources.
Water discharges- volume by treatment method	76-100	This data is collected monthly for the internal control needs and reported annually to the local authorities as is recommended. We publicly report the information for the entire Group in our annual sustainability report. 100% of MYTILINEOS Group production sites are monitored for volumes of water withdrawals by sources.
Water discharge quality data- quality by standard effluent parameters	76-100	This data is collected monthly for the internal control needs and reported annually to the local authorities as is recommended. We publicly report the information for the entire Group in our annual sustainability report. 100% of MYTILINEOS Group production sites are monitored for volumes of water withdrawals by sources.
Water consumption- total volume	76-100	This data is collected monthly for the internal control needs and reported annually to the local authorities as is recommended. We publicly report the information for the entire Group in our annual sustainability report. 100% of MYTILINEOS Group production sites are monitored for volumes of water withdrawals by sources.
Facilities providing fully-functioning WASH services for all workers	76-100	This data is collected monthly for the internal control needs and reported annually to the local authorities as is recommended. We publicly report the information for the entire Group in our annual sustainability report. 100% of MYTILINEOS Group production sites are monitored for volumes of water withdrawals by sources..

W1.2a

Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Fresh surface water	0.00	This is our first year of measurement	Taking into consideration the definition of Fresh water as it has been given in Guidance material, we are reporting specific water withdrawals in the categories of municipal supply & groundwater - renewable as they are presented below.
Brackish surface water/seawater	162903.17	This is our first year of measurement	Water for the cooling systems (brackish for cast house in aluminium production and seawater for the High Efficiency Combined Heat and Power (CHP) 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 Ellada. The use of the water is under permission by the local Authorities.
Rainwater	0.00	This is our first year of measurement	Rainwater volume of 7 megaliters per year is collected directly in a special reservoir configured in the area of a disused mine, used by DELPHI-DISTOMON (subsidiary of ALUMINIUM OF GREECE). We do not report this volume officially because DELPHI-DISTOMON has been excluded according to the Reporting boundary.
Groundwater - renewable	5108.22	This is our first year of measurement	The water is used primarily to meet the manufacturing / processing needs of the Group's industrial facilities in Metallurgy & Mining sector. The total volume of the water is obtained from a network of 17 drills, owned by ALUMINIUM OF GREECE, 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 Regional Administration of the Prefecture of Sterea Ellada. 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 montly measurements) and is located at shallow depth.
Groundwater - non-renewable	0.00	This is our first year of measurement	We do not withdraw water from sources which are located at deeper depths and cannot be replenished easily.
Produced/process water	0.00	This is our first year of measurement	Produced/process water not a relevant water withdrawal source.
Municipal supply	47.07	This is our first year of measurement	Volume of water used to meet the needs of the primarily industrial facilities in Metallurgy & Mining sector. The use of the water is according to the contract between ALUMINIUM OF GREECE and Municipalities (Mornos river)
Wastewater from	0.00	This is our first	We do not withdraw water from another organization.

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
another organization		year of measurement	
Total	168058.46	This is our first year of measurement	Total number of water withdrawn.

W1.2b

Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Fresh surface water	0.00	This is our first year of measurement	We do not discharge water in lakes, rivers or streams.
Brackish surface water/seawater	163559.46	This is our first year of measurement	The 95.5% of the volume of this water comes from the cooling process of our Combined Heat and Power plant which returns back to the sea (determined by legislation in terms of ph & temperature). The rest, 4.5% concerns water measured at the point of exit from the primary treatment (Settlement of floating particles, filtration of supernatant fluid, chlorination, discharge) facilities which is discharged to the sea according to the terms determined by legislation.

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Groundwater	0.00	This is our first year of measurement	We do not discharge water in soil beneath the soil surface.
Municipal/industrial wastewater treatment plant	0.00	This is our first year of measurement	We do not discharge water in Municipal/industrial wastewater treatment plants.
Wastewater for another organization	22.70	This is our first year of measurement	Disposal to the Motor Oil company liquid waste treatment plant.
Total	163582.16	This is our first year of measurement	Total number of water discharged.

W1.2c

Water consumption: for the reporting year, please provide total water consumption data, across your operations

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
5691.74	This is our first year of measurement	Water consumption is defined as the “amount of water that is used but not returned to its original source”. Total water consumption by activity sector: 1) Metallurgy & Mining Sector: 90.5% 2) Energy Sector: 9.5%.

W1.3

Do you request your suppliers to report on their water use, risks and/or management?

W1.3a

Please provide the proportion of suppliers you request to report on their water use, risks and/or management and the proportion of your procurement spend this represents

Proportion of suppliers %	Total procurement spend %	Rationale for this coverage
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W1.3b

Please choose the option that best explains why you do not request your suppliers to report on their water use, risks and/or management

Primary reason	Please explain
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W1.4

Has your organization experienced any detrimental impacts related to water in the reporting year?

No

W1.4a

Please describe the detrimental impacts experienced by your organization related to water in the reporting year

Country	River basin	Impact indicator	Impact	Description of impact	Length of impact	Overall financial impact	Response strategy	Description of response strategy
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W1.4b

Please choose the option below that best explains why you do not know if your organization experienced any detrimental impacts related to water in the reporting year and any plans you have to investigate this in the future

Primary reason	Future plans
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Further Information

Module: Risk Assessment

Page: W2. Procedures and Requirements

W2.1

Does your organization undertake a water-related risk assessment?

Water risks are assessed

W2.2

Please select the options that best describe your procedures with regard to assessing water risks

Risk assessment procedure	Coverage	Scale	Please explain
Water risk assessment undertaken independently of other risk assessments	Direct operations	Some facilities	Water risk assessment is taking place in Metallurgy & Mining sector and especially in 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.

W2.3

Please state how frequently you undertake water risk assessments, what geographical scale and how far into the future you consider risks for each assessment

Frequency	Geographic scale	How far into the future are risks considered?	Comment
Sporadically not defined	Facility	>6 years	Frequency & timeframe factors are interconnected and are based mainly on the results of our materiality process (GRI G4) according to which water issue is not a subject of first priority for specific reasons (monthly monitoring and alternatives). Using groundwater renewable sources we have not faced any incidents of uncertainty of water supplies, while the municipal supply source operates as a backup solution. We report information at facility level where our water management is more obvious.

W2.4

Have you evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy?

Yes, evaluated over the next 5 years

W2.4a

Please explain how your organization evaluated the effects of water risks on the success (viability, constraints) of your organization's growth strategy?

- 1) Through our Risk management System: 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 remedying environmental damages. Environmental issues within our responsibility might arise in the future in relation to our current facilities 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.
- 2) Through Group's sustainability issues analysis process which determines the aspects whose significance for the Group is material, in accordance with the GRI-G4 Sustainability Reporting Guidelines and in parallel with the procedures that govern the Group's application of the precautionary principle in the framework of its operation.
- 3) Through Group's annual Stakeholders Engagement process which includes environmental issues and allows easier identification and evaluation of Stakeholder expectations creating the right conditions for generating added value and achieving mutual benefits.

W2.4b

What is the main reason for not having evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy, and are there any plans in place to do so in the future?

Main reason	Current plans	Timeframe until evaluation	Comment
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W2.5

Please state the methods used to assess water risks

Method	Please explain how these methods are used in your risk assessment
Internal company knowledge	<p>This refers to Group'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. Group's CSR Strategy & Governance system assists in prioritizing environmental, social and economic challenges and opportunities. In addition, our CSR team (in ALUMINIUM OF GREECE) maintains a standing agenda item on environmental topics (including water) as part of its monthly meetings. The team includes senior personnel from the safety, supply chain, human resources, compliance, and environmental functions. Accordingly, we seek strategic partnerships with local authorities, communities and NGO's to ensure the viability of our projects. We explore opportunities with stakeholders as we continue to make long-term investments with environmental positive impact to support our operating and growth plans. Also, our stakeholder engagement process aims to promote open exchange between citizens and our site management with the goal of strengthening trust in our activities.</p>

W2.6

Which of the following contextual issues are always factored into your organization's water risk assessments?

Issues	Choose option	Please explain
Current water availability and quality parameters at a local level	Relevant, included	<p>The water which is used primarily to meet the manufacturing / processing, energy and water supply needs of the Group's industrial facilities in Metallurgy & Mining sector, is obtained from a network of 17 drills, owned by ALUMINIUM OF GREECE, 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 Regional Administration. Concerning seawater is by its nature not subject to scarcity while, wastewater discharges comply with national and local regulations and permit authorization.</p>
Current water regulatory frameworks and tariffs at a local level	Relevant, included	<p>Water withdrawals and wastewater discharges comply with national and local regulations and permit authorization. (e.g. under the Decision of the Water Resources Management Directorate of the</p>

Issues	Choose option	Please explain
		Sterea Hellas Regional Administration).
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	There were no such conflicts as ALUMINIUM OF GREECE is the water supplier of the local communities in the area of its operation. Also according to the MYTILINEOS Group annual Stakeholder Engagement process, the last 4 years, there were not red flags concerning water management issues.
Current implications of water on your key commodities/raw materials	Relevant, 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.
Current status of ecosystems and habitats at a local level	Not relevant, included	The areas used for water withdrawal by the Group's activity sectors, especially the Metallurgy & Mining Sector, do not contain water masses 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). In addition, they are not located in any other area designated as a protected area.
Current river basin management plans	Not relevant, explanation provided	Our main facilities in Metallurgy - Mining & Energy sector are located near the coast line and all internal water needs can be covered by sea water. In addition, they have long term agreements for sea water usage. Also the rational management of groundwater is of particular importance to ALUMINIUM OF GREECE, as the company is the major consumer of water in the region. For this reason, the company's industrial complex, as well as the settlements around it, is supplied with water obtained exclusively from wells drilled and managed by the company.
Current access to fully-functioning WASH services for all employees	Relevant, included	We are providing access to water, sanitation and hygiene at the workplace at an appropriate level of standard for all employees.
Estimates of future changes in water availability at a local level	Relevant, included	Group's alumina and aluminium production facilities have access to sufficient water supplies (groundwater renewable sources) to support present and future operational demands. Although we have set targets to decrease our total water withdrawal by 2017 (<14 megaliters/day).
Estimates of future potential regulatory changes at a local level	Relevant, 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 Ellada, 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 competent authorities.
Estimates of future potential stakeholder conflicts at a local level	Relevant, included	We consider early and effective engagement with our Stakeholders which strengthen the Group's process for the identification of conflicts in connection with sustainability issues including water. In this context a thematic consultation, with key and local stakeholders, on environmental issues (including water management) took place in 17/6/2016, in ALUMINIUM OF GREECE premises.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included	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.

Issues	Choose option	Please explain
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Relevant, included	The areas used for water withdrawal by the Group's activity sectors, especially the Metallurgy & Mining Sector, do not contain water masses 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 commissions, 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.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, included	Group'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.
Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, included	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 remedying 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.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, included	We consider early and effective engagement with our Stakeholders which strengthen the Group's process for the identification of conflicts in connection with sustainability issues including water. In this context a thematic consultation, with key and local stakeholders, on environmental issues (including water management) took place in 17/6/2016, in ALUMINIUM OF GREECE premises.
Scenario analysis of implications of water on your key commodities/raw materials	Relevant, included	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. ALUMINIUM OF GREECE has evaluated the possibility of using sea water after desalination treatment to cover a big part of its needs.
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Relevant, included	Regarding the seawater used (water discharge) in the cooling systems of the Combined Heat and Power (CH) plant of ALUMINIUM OF GREECE, the company commissions, 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.
Other		

W2.7

Which of the following stakeholders are always factored into your organization's water risk assessments?

Stakeholder	Choose option	Please explain
Customers	Relevant, not yet included	There are no requests information concerning water use and management by our certain customers. The trust of customers and consumers is essential for the Group's success.
Employees	Relevant, included	Our water risk assessment takes into consideration our employees behaviour and awareness concerning water consumption.
Investors	Relevant, included	Although there is no requests 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. The relevant presentation is available on our website.
Local communities	Relevant, included	A fixed component of our sustainability management is continuous exchange with our stakeholders. In Metallurgy & Mining sector, ALUMINIUM OF GREECE 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.
NGOs	Relevant, included	A fixed component of our sustainability management is continuous exchange with our stakeholders including NGOs. Our water risk assessment takes into consideration the views of NGOs with respect to water issues. In this framework, 5 local NGOs have received an invitation of participation in our thematic consultation on environmental issues, in June 2016.
Other water users at a local level	Not relevant, explanation provided	There are no other water users at a local level.
Regulators	Relevant, included	Our water risk assessment takes into account the water laws and regulations that are applicable to the development and preservation of sustainable water supplies for our operation. As part of this effort we interact with local authorities as key stakeholders whose input we evaluate through our risk assessment process.
River basin management authorities	Not relevant, explanation provided	There are no river basin management authorities
Statutory special	Not relevant,	Included in local communities concern.

Stakeholder	Choose option	Please explain
interest groups at a local level	explanation provided	
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. The only interest part that we could request, is our water suppliers, but it is considered as not important as it concerns only the 0,9% of the total groundwater consumption.
Water utilities/suppliers at a local level	Not relevant, explanation provided	There are no water utilities/suppliers at local level
Other		

W2.8

Please choose the option that best explains why your organisation does not undertake a water-related risk assessment

Primary reason	Please explain
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Further Information

Module: Implications

Page: W3. Water Risks

W3.1

Is your organization exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure?

Yes, direct operations only

W3.2

Please provide details as to how your organization defines substantive change in your business, operations, revenue or expenditure from water risk

Our aim is to avoid risks that pose a threat to MYTILINEOS Group 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.

W3.2a

Please provide the number of facilities* per river basin exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure and the proportion this represents of total operations company-wide

Country	River basin	Number of facilities exposed to water risk	Proportion of total operations (%)	Comment
Greece	Other: Sea (Golf of Antikira)	1	91-100	High Efficiency Combined Heat and Power Plant. 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.
Greece	Other: Groundwater sources & Municipal water (Mornos river)	1	61-70	Alumina & 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.

W3.2b

Please provide the proportion of financial value that could be affected at river basin level associated with the facilities listed in W3.2a

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected within the river basin	Comment
Greece	Other: Sea	% cost of goods sold	Less than 1%	Sea water is by its nature not subject to scarcity. There are no clear financial water risks, deriving from the operation of High Efficiency Combined Heat and Power Plant.
Greece	Other: Groundwater sources & Municipal water (Mornos river)	% cost of goods sold	Less than 1%	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.

W3.2c

Please list the inherent water risks that could generate a substantive change in your business, operations, revenue or expenditure, the potential impact to your direct operations and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
Greece	Other: Sea	Physical-Ecosystem vulnerability Regulatory-Statutory water withdrawal limits/changes to water allocation	Other: Water supply disruption, production reduce, stop of plant operation	Our Combined Heat and Power (CHP) plant requires specific quantity of sea water 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	Unknown	Unknown	Unknown	Engagement with public policy makers Strengthen links with local community Other: Cooperation with governmental research organisations	There is no separated cost to managing the water risks. The total planned expenditures for the implementation of the Group's environmental policy in Metallurgy and Mining Sector (which includes water issues) reaches the number of €10 million in annual basis. Also, the respective social expenditures which improve the relationships with the local communities reached 0.5 million.	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 Group. This view, which also serves as the foundation of the Group's environmental policy, aims to drive the continuous improvement of its environmental performance and is based, first and foremost, on

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				<p>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 thermophilic species) on the Antikyra Gulf seabed in terms of its ph and temperature.</p>						<p>the principle of adherence to the provisions of the law, as well as to the agreements concluded and the voluntary commitments made by its subsidiaries. 2) Group's subsidiary, ALUMINIUM OF GREECE, 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</p>

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										<p>environmental performance. 3) Group's Stakeholder Engagement process expresses, in a systematic way, the long-standing principle to engage in a consistent and honest dialogue with its Stakeholders. In this context, in June 2016, a thematic consultation on Environmental issues took place, in ALUMINIUM OF GREECE giving the opportunity to its social partners to raise its</p>

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										<p>concerns or expectations. (Cost €2.000-3.000) 4)</p> <p>Finally, the ALUMINIUM OF GREECE commissions, 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. (Cost: €57.050).</p>

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
Greece	Other: Groundwater sources & Municipal water (Mornos river)	Regulatory-Statutory water withdrawal limits/changes to water allocation	Other: Higher Operating costs and Plant/production disruption leading to reduced output	99,1%: Industrial service and drinking water, used primarily to meet the manufacturing / processing, and water supply needs of the Group's industrial facilities, in Metallurgy & Mining Sector, is obtained from a network of 17 drills, owned by ALUMINIUM OF GREECE, which the company operates in the broader region around its plant, in strict compliance with the	Unknown	Unknown	Low	Establish site-specific targets Other: Engagement with the national and local authorities	The cost is not significant and it is included to the total planned expenditures for the implementation of the Group's environmental policy in Metallurgy and Mining sector.	Group's subsidiary, ALUMINIUM OF GREECE, 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. The ALUMINIUM OF GREECE has set specific water target: Total groundwater withdrawal <14 megaliters

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				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.						per day.

Please list the inherent water risks that could generate a substantive change in your business operations, revenue or expenditure, the potential impact to your supply chain and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
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W3.2e

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your direct operations that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain
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W3.2f

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your supply chain that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain
Risks exist, but no substantive impact	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

Primary reason	Please explain
anticipated	not related to our production because of the raw materials (bauxite, pet coke etc) nature. The only interest part that we could request, is our water suppliers, but it is considered as not important as it concerns only the 0,9% of the total groundwater consumption. Also the Groups 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. Supply chain exposure to water-related risks may include changes in precipitation patterns/sea levels/storm patterns/storm intensities, water shortages & new or modified regulations.

W3.2g

Please choose the option that best explains why you do not know if your organization is exposed to water risks that could generate a substantive change in your business operations, revenue or expenditure and discuss any future plans you have to assess this

Primary reason	Future plans
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Further Information

Page: W4. Water Opportunities

W4.1

Does water present strategic, operational or market opportunities that substantively benefit/have the potential to benefit your organization?

Yes

W4.1a

Please describe the opportunities water presents to your organization and your strategies to realize them

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Please explain
Greece	Competitive advantage Cost savings Improved community relations	The power plants of MYTILINEOS Group are located near the coast line and use sea water. In Metallurgy & Mining Sector, Group's subsidiary, ALUMINIUM OF GREECE, covers its local communities water needs. Also, it operates three wastewater treatment plants for the needs of the plant and local communities.	Current-up to 1 year	The selected locations for the operation of MYTILINEOS Group facilities, in Metallurgy - Mining & Energy sectors, have a strategic importance. The use of seawater and groundwater provides cost savings for all plants. Also In Metallurgy & Mining Sector the Group through its network of 17 drills covers the water needs of its local communities, maintaining good community relations and its licence to operate.

W4.1b

Please choose the option that best explains why water does not present your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain
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W4.1c

Please choose the option that best explains why you do not know if water presents your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain
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Further Information

Module: Accounting

Page: W5. Facility Level Water Accounting (I)

W5.1

Water withdrawals: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 1	Greece	Other: Sea (Golf of Antikira)	High Efficiency Combined Heat and Power Plant.	162903.17	This is our first year of measurement	About the same. Water for the cooling systems for the High Efficiency Combined Heat and Power (CHP) plant). 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.
Facility 2	Greece	Other: Groundwater renewable sources	Alumina & aluminium	5155.29	This is our first year of	Higher, up 22% due to the increase in the production of aluminium. Groundwater:

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
		& Municipal water (Mornos river)	production Plant.		measurement	5.108.22 megaliters & Municipal water: 47.07 megaliters

Further Information

Page: W5. Facility Level Water Accounting (II)

W5.1a

Water withdrawals: for the reporting year, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.1

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
Facility 1	0.00	162903.17	0.00	0.00	0.00	0.00	0.00	0.00	Water 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

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
									by a Decision of the Water Resources Management Directorate of the Sterea Hellas Regional Administration.
Facility 2	0.00	0.00	0.00	5108.22	0.00	0.00	47.07	0.00	The total volume of the groundwater is obtained from a network of 17 drills, owned by ALUMINIUM OF GREECE, in strict compliance with the provisions of the relevant Decision of the Water Resources Management Directorate of the Sterea Regional Administration. The volume of the Municipal water used to meet the needs of the primarily industrial facilities in Metallurgy & Mining sector. The use of the water is according to the contract between ALUMINIUM OF GREECE and Municipalities (Mornos river).

W5.2

Water discharge: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
Facility 1	162903.17	This is our first year of measurement	Water discharge from the cooling process of the Combined Heat and Power (CHP) plant.
Facility 2	656.28	This is our first year of measurement	Before discharge water is treated through different methods. Wastewater measured at the point of exit from the primary treatment facilities (Primary treatment - Settlement of floating particles,filtration of supernatant fluid,chlorination,discharge).

W5.2a

Water discharge: for the reporting year, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.2

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
Facility 1	0.00	0.00	162903.17	0.00	0.00	Dischrge to the sea (determined by legislation).
Facility 2	0.00	0.00	656.28	0.00	0.00	Dischrge to the sea (determined by legislation).

W5.3

Water consumption: for the reporting year, please provide water consumption data for all facilities reported in W3.2a

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 1	0.00	This is our first year of measurement	
Facility 2	5155.30	This is our first year of measurement	

W5.4

For all facilities reported in W3.2a what proportion of their water accounting data has been externally verified?

Water aspect	% verification	What standard and methodology was used?
Water withdrawals- total volumes	Not verified	Audited by the authorities under permits' rules and terms (quantities measurement control etc)
Water withdrawals- volume by sources	Not verified	Audited by the authorities under permits' rules and terms (quantities measurement control etc)
Water discharges- total volumes	Not verified	Audited by the authorities under permits' rules and terms (quantities measurement control etc)
Water discharges- volume by destination	Not verified	Audited by the authorities under permits' rules and terms (quantities measurement control etc)
Water discharges- volume by treatment method	Not verified	Audited by the authorities under permits' rules and terms (quantities measurement control etc)
Water discharge quality data- quality by standard effluent parameters	Not verified	Audited by the authorities under permits' rules and terms (quantities measurement control etc)
Water consumption- total volume	Not verified	Audited by the authorities under permits' rules and terms (quantities measurement control etc)

Further Information

Module: Response

Page: W6. Governance and Strategy

W6.1

Who has the highest level of direct responsibility for water within your organization and how frequently are they briefed?

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Senior Manager/Officer	Scheduled - monthly	In Metallurgy & Mining Sector: Health, Safety, Environment and Continuous Improvement Director In Energy Sector: The Plant Managers and the Operation Managers of the power plants are responsible for reporting in a monthly basis to the competent local authority. Particularly, the monthly report consists of daily data concerning water discharges (volume, pH, temperature of water discharges).

W6.2

Is water management integrated into your business strategy?

Yes

W6.2a

Please choose the option(s) below that best explain how water has positively influenced your business strategy

Influence of water on business strategy	Please explain
Greater regulator engagement	For full compliance with the relevant environmental legislation and the conformity to the water use permission issued by local authorities.
Establishment of sustainability goals	The sustainability goals of the Group are demonstrated by the water-related targets and goals which are annually reviewed. Especially in Metallurgy & Mining Sector the Group sets annual targets for water consumption by production line (alumina or aluminium) and also takes special measures to address drought, if necessary.
Exploration of environmental impact	Although it has been proven that the consumption of water by the activities of Group subsidiaries does not affect aquifer levels or the quantity of the water available for use or the capability of an ecosystem to function. Our main target especially in the Metallurgy & Mining sector, focusing on the achievement of the highest possible conservation and on the reuse of water in the production process, with an abstraction target below 14 megaliters/day. for the reduction of water consumption in order to protect natural water resources.
Publicly demonstrated our commitment to water	Group specific Disclosure management Approach related to Responsible Management of Water, is available to our website: www.mytilneos.gr/en-us/climate-change/csr#tab-responsible-management-of-water
Greater due diligence	The environmental impact of the Group is explored through the implementation of ISO 14001 International standard (Environmental Management System) that requires the identification and the evaluation of environmental aspects associated with the activities and operations of all of our subsidiaries.

W6.2b

Please choose the option(s) below that best explains how water has negatively influenced your business strategy

Influence of water on business strategy	Please explain
Other: There is no negative influence so far.	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.

W6.2c

Please choose the option that best explains why your organization does not integrate water management into its business strategy and discuss any future plans to do so

Primary reason	Please explain
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W6.3

Does your organization have a water policy that sets out clear goals and guidelines for action?

Yes

W6.3a

Please select the content that best describes your water policy (tick all that apply)

Content	Please explain why this content is included
Publicly available Company-wide Performance standards for direct operations Incorporated within group environmental, sustainability or EHS policy Acknowledges the human right to water, sanitation and hygiene	MYTILINEOS Group is committed to invest in environment - related actions, by developing infrastructures and raising the environmental awareness of its people, in order to minimise its environmental footprint on the Greek landscape. With Environmental Management Systems that have been certified in accordance with the ISO 14001 International Standard, all its subsidiaries comply with the applicable laws and carry out annual evaluations of their results in this area. Their priority is to apply modern policies for the protection of the environment and to constantly improve their environment - related performance. MYTILINEOS Group specific Disclosure management Approach related to Responsible Management of Water, which refers to all its subsidiaries, is available to our website: www.mytilineos.gr/en-us/climate-change/csr#tab-responsible-management-of-water In Metallurgy & Mining sector: Water management consumption policy is a part of the Environmental and Industrial Hazards Policy of ALLUMINIUM OF GREECE. In Energy sector: Water policy is a part of the environmental policy of PROTERGIA S.A. and it is approved by the Chief Executive Officer.

Content	Please explain why this content is included

W6.4

How does your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) during the most recent reporting year compare to the previous reporting year?

Water CAPEX (+/- % change)	Water OPEX (+/- % change)	Motivation for these changes
	-1.97	Water-related OPEX costs are generally consistent over time, although they can increase mainly due to the increased demand for water use from municipal sources and for maintenance reasons of water facilities especially in Metallurgy & Mining sector. Metallurgy & Mining Sector Energy Sector Water OPEX ile of power plant. Korinthos Power S.A. : Water OPEX change is +8,6% and it is increased due to the increased demand for water use.

Further Information

Page: W7. Compliance

W7.1

Was your organization subject to any penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations in the reporting year?

No

W7.1a

Please describe the penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations and your plans for resolving them

Facility name	Incident	Incident description	Frequency of occurrence in reporting year	Financial impact	Currency	Incident resolution
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W7.1b

What proportion of your total facilities/operations are associated with the incidents listed in W7.1a

W7.1c

Please indicate the total financial impacts of all incidents reported in W7.1a as a proportion of total operating expenditure (OPEX) for the reporting year. Please also provide a comparison of this proportion compared to the previous reporting year

Impact as % of OPEX	Comparison to last year
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Further Information

Page: W8. Targets and Initiatives

W8.1

Do you have any company wide targets (quantitative) or goals (qualitative) related to water?

Yes, targets and goals

W8.1a

Please complete the following table with information on company wide quantitative targets (ongoing or reached completion during the reporting period) and an indication of progress made

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value
Reduction in consumptive volumes	Water stewardship	Our Alumina & Aluminium production plant in Ag. Nikolaos (Viotia): Total groundwater withdrawal <14 megaliters per day	Other: Megaliters/day	2012	2015	100%
Water pollution prevention	Water stewardship	Group's total facilities: Zero water pollution incidents	Other: Number of pollution incidents	2000	2100	100%
Improvement in monitoring of water use	Water stewardship	Our Gas-fired Combined Cycle Thermal Power Plant (CCGT) located in Ag. Theodoroi (Korinthia): The average annual percentage (%) of wastewater recycling should be greater than 20% per year	Other: Annual Percentage (%) of wastewater recycling	2014	2015	100%
Improvement in monitoring of water use	Water stewardship	Our Gas-fired Combined Cycle Thermal Power Plant (CCGT) in Ag. Nikolaos (Viotia): The consumption of industrial water per operating hour of the unit should be less than or equal to 9m ³ /h	Other: Water Consumption per operating hour of the power plant	2014	2015	100%

W8.1b

Please describe any company wide qualitative goals (ongoing or reached completion during the reporting period) and your progress in achieving these

Goal	Motivation	Description of goal	Progress
Strengthen links with local community	Shared value	Every year we cover our local communities (in boundaries of Group's subsidiary ALUMINIUM OF GREECE) total water needs.	For 2015, drinking water withdrawal for water supply of local communities: 854 megaliters

W8.1c

Please explain why you do not have any water-related targets or goals and discuss any plans to develop these in the future

Further Information

Module: Linkages/Tradeoff

Page: W9. Managing trade-offs between water and other environmental issues

W9.1

Has your organization identified any linkages or trade-offs between water and other environmental issues in its value chain?

No

W9.1a

Please describe the linkages or trade-offs and the related management policy or action

Environmental issues	Linkage or trade-off	Policy or action
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Further Information

Module: Sign Off

Page: Sign Off

W10.1

Please provide the following information for the person that has signed off (approved) your CDP water response

Name	Job title	Corresponding job category
Georgios Galanis	CSR Supervisor	Other: Director – Group Communication

W10.2

Please select if your organization would like CDP to transfer your publicly disclosed response strategy from questions W1.4a, W3.2c and W3.2d to the CEO Water Mandate Water Action Hub.

No

Further Information

CDP