

W0. Introduction

W0.1

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

Since 1889, Michelin has constantly innovated to facilitate the mobility of people and goods. Today, the Group is setting the standard across every tire and travel-related services market, while leading a global strategy to drive responsible, sustainable and profitable growth. Backed by its unrivaled expertise in materials and leading-edge industrial processes, the Group's Michelin In Motion 2030 strategic plan is designed to grow its business with tires (automotive, road transportation and specialties), around tires with a range of fleet services and solutions for fleet operators and monetization of collected data, and beyond tires in high-tech materials, engineered polymers, hydrogen mobility, metal 3D printing polymer-based materials.

Michelin enjoys exceptional geographic coverage and is stepping up its deployment in emerging markets. Currently operating in 26 countries at 121 production facilities and 9 research centers, and 7,400 dealerships and service centers in 30 countries. Michelin employs a total of 132,000 people worldwide. Net sales in 2022 were €28.6 billion.

Operating in a wide variety of markets not only enables the Group to diversify its sources of revenue but also to capitalize on the countercyclical nature of certain industries or business segments to strengthen its resilience. Today, tire-related sales account for nearly 95% of the consolidated total, divided almost equally between B2C (replacement passenger car and two-wheeler tires) and B2B sales (Road transportation, Beyond road, Mining, Automotive original equipment, and Aircraft). The main targeted growth drivers are focused on the shift to electric mobility and specialty tires.

The Group also intends to expand in services and solutions for vehicle fleets by capitalizing on advances in digital technology and connected mobility. It also leverages its unrivaled expertise in high-tech materials and leading-edge industrial processes in a variety of industries, including energy, medical devices and aerospace. Non-tire sales rose by 22% in 2022.

In 2022 the Michelin Group, which previously owned 49% of Royal Lestari Utama (RLU), has purchased the remaining 51% of the joint venture created with Barito Pacific Group. In this way, Michelin has reasserted its objectives and its commitment to producing sustainable natural rubber in Indonesia and to improving the living conditions of local communities.

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 2022	December 31 2022

W0.3

(W0.3) Select the countries/areas in which you operate.

- Brazil
- Canada
- China
- France
- Germany
- Hungary
- India
- Indonesia
- Italy
- Japan
- Mexico
- Poland
- Romania
- Russian Federation
- Serbia
- Spain
- Thailand
- United Kingdom of Great Britain and Northern Ireland
- United States of America

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 over which financial control is exercised

W0.6

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

Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Tire distribution centers (retail and wholesale)	Calculations show that this source represents less than 3% of the Group total. For this reason, and consistent with legal requirements for reporting Group-wide extra-financial information under French law, this source is not included in the Group's consolidated annual report.
Acquisitions	Recently acquired businesses are gradually integrated into the Group indicator through a process based primarily on aligning and consolidating their data. Using this process, data from Camso's operations were aligned and consolidated in 2021, resulting in an impact estimated at around 3% of the Group's i-MEP (Industrial Michelin Environmental Performance) components. To confirm that these contributions are integrated into the i-MEP, the same data began to be reported on a parallel track in 2022, a process that will be pursued in 2023. Fenner's operations were reviewed according to the same alignment process in 2022, with consolidation scheduled for 2023. Multistrada will be fully integrated in 2023 into the Group's consolidated indicator measuring manufacturing's environmental performance. These 3 acquisitions account for less than 5% of the Group's total water withdrawals. In June 2022, Barito Pacific sold all its shares to Michelin, which is now Royal Lestari Utama's (RLU) sole shareholder. The process of integrating RLU's operations has begun. Data will be gradually integrated into the Group's reporting over the next few years.

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	FR0000121261

W1. Current state

W1.1

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Important	For direct use: Michelin plants use freshwater to cool installations, intermediate products and produce steam and hot water. Sufficient water is necessary to conduct industrial operations, which cannot continue for more than a couple of days if supply is cut off. Water is important for the continuity of operations even though on an intensity-basis, water use is relatively low compared to other industries. In some plants, water is used in the production of metallic cable reinforcements for tires in plating and cleaning processes, so water quality is extremely important. In the future, Michelin sites will be using less freshwater and more recycled water for cooling and heating purposes, driven by availability of supplies in 1) water-stressed regions and 2) localities with high water demand. For indirect use: Water quality and availability are also critical for the manufacturing of intermediate products purchased such as raw materials. Indeed our suppliers also depend on water for their production whether it be to produce steam, cool products or their installations. In the future, we expect that our suppliers will continue to depend on water for their operations so we expect that they will manage their withdrawals responsibly as there is a global increasing pressure on the demand for water. We do not expect a difference in future dependency between direct and indirect use since our supplier processes, and our operational activities are likely to remain broadly the same.
Sufficient amounts of recycled, brackish and/or produced water available for use	Not very important	Neutral	For direct use: Our industrial sites currently draw mainly on freshwater supplies, for historic reasons. Michelin plants use recycled water primarily to cool installations (water is recirculated and cooled down in cooling towers) and to produce steam and hot water (where condensates are returned to boilers). Recycled discharged water accounts for less than 5% of all withdrawals although there are more and more projects to treat and recycle discharges water. This represents opportunities for diversifying our water sources in the future where appropriate. Regarding indirect use: Some of our suppliers can use recycled/brackish/produced water for their operations since the process does not demand high quality water (e.g., descaling process for steel or water for cooling purposes). There is potential for some suppliers to diversify their water sources in the future where appropriate. However, others cannot use this type of water since water comes into direct contact with the product and must be of a very high quality to not to alter the product (e.g. washing the fibres for textile reinforcements or water entering into the process for chemical products). We do not expect a difference in future dependency between direct and indirect use since our supplier processes, and our operational activities are likely to remain broadly the same.

W1.2

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

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Daily	Facilities either measure water withdrawals in real-time, using "in-place" flow meters or via data which is provided at least daily by water suppliers	100% of manufacturing facilities and research centers monitor total water withdrawal volumes which is one of our key environmental performance indicators. The data are entered and uploaded by sites on a quarterly basis. They are consolidated and reviewed by the corporate EHS department on a quarterly and annual basis. The procedure is documented in an internal reference document.
Water withdrawals – volumes by source	100%	Daily	The water sources are known and recorded for all our sites. The data is available either through flow meters (continuous information) or via water suppliers (at least daily information)	Water withdrawal volumes by source are monitored at 100% of our operations. At corporate level, this information is collected in an annual questionnaire. The information is consolidated and reviewed by the corporate EHS department. It allows to better comprehend our water sources and increases our comprehension of exposure to potential water risks. This has led in the past to projects consisting in switching water sources to reduce our local impacts (switching from groundwater to surface water for instance in one location in France to reduce the pressure on the groundwater resource)
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Daily	Water withdrawals quality is monitored at the site level using samples (either manual or automatic sampling) and lab testing. Parametres include turbidity, conductivity, silica, TSS.	100% of our operational sites measure water withdrawals quality. In some cases, water and/or steam can be in direct contact with the product. In these cases, the water used must meet strict quality standards. The frequency and the parameters monitored will depend on the water source, availability of pre-treatment at the plant and the criticality of the water usage. Also, to ensure proper functioning and preserving the life of our equipment using water (boilers, cooling towers), our sites monitor frequently ISO standard parameters such as turbidity, conductivity, silica, TDS etc. This concern is directly integrated in the running of operations and if the quality varies significantly and it doesn't meet the standards, actions are immediately launched to correct the situation . Corporate level monitoring by the EHS department is not focused on data collection, but on ensuring that the sites better measure and understand and manage any issues relating to the quality of their water sources.
Water discharges – total volumes	100%	Daily	Facilities either measure water discharges in real-time, using "in-place" flow meters or via daily totalisers for open channel flow measurements	100% of our operational sites measure this water aspect which is important for the calculation of total discharged flows of quality parameters.
Water discharges – volumes by destination	100%	Daily	Facilities either measure water discharges in real-time, using "in-place" flow meters or via daily totalisers for open channel flow measurements. The destination of the discharge is known and recorded for all sites.	100% of our operational sites are monitored for this water aspect and is considered part of the usual management for our sites. This is relevant because the receiving body triggers the treatment process to be installed and the knowledge of discharged destination is also of importance in case of an accidental pollution. This information is collected in an annual questionnaire by the corporate EHS department but known by sites daily.

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water discharges – volumes by treatment method	100%	Monthly	Facilities have detailed records of the volumes that flow through their treatment installations and do at least monthly flow balances to review the efficiency of the treatments in place	100% of our operational sites monitor this water aspect which is relevant to the efficiency of the treatment systems in place and guarantee their performance. This is critical to ensure we are complying with local regulations.
Water discharge quality – by standard effluent parameters	100%	Daily	Facilities either monitor continuously (example pH), daily (example COD) or monthly (example BOD) the standard effluent parameters. Either via on-line monitoring systems or via samples which are then lab tested	100% of our sites monitor standard effluent parameters which is critical regarding our commitments to reduce water pollution and compliance with regulations. The plants' discharges are subject to many regulatory requirements that vary in frequency and parameters to be followed (according to destination of the water discharge and the on-site fabrication processes). This information is meticulously followed by each site and reported to the appropriate regulatory agencies as required. Measurements are either carried out via real time monitoring or in-house / third party sampling based on the standards where factories are located.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Not monitored	<Not Applicable>	<Not Applicable>	This water aspect is not monitored in our sites; discharge quality is only monitored by standard effluent parameters. We are planning to monitor this aspect in line with the CSRD timeframe.
Water discharge quality – temperature	76-99	Daily	We use online sensors or sampling then monitoring via thermometers which is done either continuously or daily according to the equipment.	More than 3/4 of our facilities monitor daily the water temperature of discharged water. This is done via real time monitoring or sampling analysis based on the standards of the countries and regions where our sites are located. In locations where administrations have considered it unnecessary to measure water discharge temperature this is not measured.
Water consumption – total volume	100%	Yearly	We measure our water consumption yearly by calculating the difference between our water withdrawals and water discharges both measured via flow meters.	This information is calculated annually based on 1) water withdrawals collected quarterly minus 2) total discharges collected from the annual questionnaire. 100% of the production facilities and research centres are monitored. The information is consolidated and reviewed by the corporate EHS department. It is not relevant to report this data more frequently as we do not incorporate any water in our production, hence only water withdrawals is a relevant indicator for our activity.
Water recycled/reused	51-75	Yearly	Sites calculate this value based on metering and calculations when metering is missing.	This information is calculated in an annual questionnaire. We expect 100% of our sites to measure this aspect in line with the CSRD timeframe.
The provision of fully-functioning, safely managed WASH services to all workers	Less than 1%	Yearly	Measurement was done based on the pilot site.	Michelin has signed the WASH pledge. The self-assessment tool proposed by the WBCSD was used by one pilot site. Subsequently, the tool was simplified for more rapid deployment. Other pilot sites are in the process of being identified

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	26101	Much lower	Increase/decrease in efficiency	Lower	Investment in water-smart technology/process	<p>Description for "comparison with previous reporting year" thresholds :</p> <p>Deviation +/- 2% = about the same; Deviation between +/- 2-5% = higher / lower; Deviation > +/- 5% = much higher / lower.</p> <p>Water withdrawals in absolute volume were lower by 5,1% compared to the previous year. Production dropped by 5% which can explain part of this but withdrawal's intensity is not directly proportionnal to production hence why this result also relies on water efficiency measures such as better steering of cooling towers, closing of once-through cooling loops and recycling of industrial wastewater. .</p> <p>These actions are included in our 2030 water roadmap strategy.</p> <p>In the future we expect withdrawals to decrease with increased investments in water-smart technologies and water efficiency measures.</p>
Total discharges	21422	Much lower	Increase/decrease in efficiency	Lower	Investment in water-smart technology/process	<p>Discharges have decreased by 6,6% in line with water withdrawals reduction.</p> <p>Total future volumes will decrease as withdrawals will decrease.</p>
Total consumption	4679	Lower	Increase/decrease in efficiency	Lower	Investment in water-smart technology/process	<p>The total water consumption is determined by subtracting the total discharges from the total withdrawals. The figure reported accounts for the evaporation, leaks and other losses, but also the rain water volume taken into account in the discharges. Water is used in the manufacturing process for transferring energy (heating and cooling) – hence the losses by evaporation -- and for some limited washing applications or the electroplating process to produce metal cables at a restricted number of sites. Consumption is lower than previous year as withdrawals and discharges have reduced similarly. Future consumption will decrease as withdrawals will decrease.</p>

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	1-10	Much lower	Investment in water-smart technology/process	Much lower	Investment in water-smart technology/process	WRI Aqueduct WWF Water Risk Filter	Water withdrawals in water stressed regions have decreased by 9,8% where total water withdrawals have decreased by 5,1%. This demonstrates our stronger focus in these zones where our efforts are doubled. It is expected withdrawals will continue to decrease in the years to come.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	7740	Much higher	Change in accounting methodology	Many Michelin sites have access to local surface water supplies for industrial purposes and as a complement to municipal supplies which meet drinking water needs. Surface water supplies have been an inexpensive and reliable source of water to use in heating and cooling, which makes this source highly relevant. 99% comes from rivers and 1% from rainwater. In 2022, the volume has increased by 11% but this is mainly due to a confusion with third party water or municipal water which is also sourced from surface water and which has decreased by 12% . Fresh surface water accounts for 29% of the withdrawals. Michelin will analyse in the future the feasibility to switch other groundwater withdrawals to fresh surface water withdrawals explaining that future trends will slightly increase.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Michelin sites cannot use brackish water due to the corrosive effect this water has on equipment. This condition will not change in the foreseeable future.
Groundwater – renewable	Relevant	6578	Much lower	Increase/decrease in efficiency	Many Michelin sites have access to site-based renewable groundwater supplies for industrial purposes and as a complement to municipal supplies which meet drinking water needs. Groundwater supplies have been an inexpensive, convenient and reliable source of water of sufficient quality to use in heating and cooling, which makes this source highly relevant. The volume is much lower (6,9% lower) than the last reporting year due to actions described in W1.2b. Renewable groundwater supplies account for 25% of water withdrawals. Future trend is to decrease as global withdrawals will decrease.
Groundwater – non-renewable	Relevant	1365	Much lower	Increase/decrease in efficiency	A handful of Michelin sites have access to site-based non-renewable groundwater supplies for industrial purposes, and as a complement to municipal supplies which meet drinking water needs. In 2022 the volume is much lower than last year reporting (17% lower) due to actions described in W1.2b. Non-renewable groundwater remains a minority use (5%). The global value is to decrease as withdrawals will decrease.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Produced water is the result of the extraction, processing, or use of any raw material, this source is therefore not relevant for Michelin as we do not process raw materials that liberate water. This will stay non-relevant in the future.
Third party sources	Relevant	10419	Much lower	Change in accounting methodology	For historical reasons: 1) the necessity to provide drinking water to employees 2) the convenience and low cost of readily available fresh water, meant that the majority of sites put in place and have maintained a single water connection to the local municipal water system for both industrial and drinking water purposes. Adding a second source to existing sites to meet industrial water needs would involve extremely high costs to install and maintain, with no benefits to manufacturing processes. This is why existing withdrawals from municipal sources are highly relevant. The volume is 12% lower than the last reporting year and balances out with total freshwater variation. The future trend will be to decrease overall water intake.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	15462	Lower	Increase/decrease in efficiency	Discharges are measured via flowmeters. All sites have the knowledge of the destination of their discharges. Slightly less than half of all sites discharge to a surface water body, and for half of these sites it is the sole discharge outlet, making this type of discharge highly relevant. The volume has decreased by 2,2% compared to the last year reporting. This is in line with the reduction of water withdrawals. The future trend is to decrease discharges as withdrawals will decrease.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	No sites discharge to brackish surface water or seawater because they are not located near such water bodies. This situation will not change in the foreseeable future.
Groundwater	Relevant	618	Much lower	Increase/decrease in efficiency	Discharges are measured via flowmeters. All sites have the knowledge of the destination of their discharges. Only a few sites discharge to groundwater making this outlet relevant for these sites only but not in general. The value is much lower (-30%) to the previous year due mainly to the closing of a once through cooling loop in one site. The future trend is to decrease discharges as withdrawals will decrease.
Third-party destinations	Relevant	5342	Much lower	Increase/decrease in efficiency	Discharges are measured via flowmeters. All sites have the knowledge of the destination of their discharges. For historical reasons, the majority of Michelin sites were designed and built with a connection to the local municipal wastewater collection and treatment system, making this type of discharge highly relevant. The volume has decreased by 14% compared to last year's reporting. This is mainly due to increase in efficiency and production decrease. The future trend is to decrease as withdrawals will decrease.

W1.2j

(W1.2) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	5172	Much lower	Increase/decrease in efficiency	11-20	Level of treatment at our plants depends on the nature of our processes, the substances that can be found in our discharge, the receiving body and local regulation requirements. Our plants can have different discharges which are treated at different levels. At some of our plants tertiary treatment is needed. The value is much lower than previous year following the result of reduction of withdrawals. Anticipated future trend : it is expected that the volume of discharge will reduce as discharges will reduce.
Secondary treatment	Relevant	5339	Lower	Increase/decrease in efficiency	21-30	Level of treatment at our plants depends on the nature of our processes, the substances that can be found in our discharge, the receiving body and local regulation requirements. Our plants can have different discharges which are treated at different levels. At some of our plants secondary treatment is needed. The value is much lower than previous year following the result of reduction of withdrawals. Anticipated future trend : it is expected that the volume of discharge will reduce as discharges will reduce.
Primary treatment only	Relevant	1891	Much higher	Change in accounting methodology	21-30	Level of treatment at our plants depends on the nature of our processes, the substances that can be found in our discharge, the receiving body and local regulation requirements. Our plants can have different discharges which are treated at different levels. At some of our plants primary treatment is needed. The value is much higher than the previous year due to some adjustments in the definition of treatment at some sites. Anticipated future trend : it is expected that the volume of discharge will reduce as discharges will reduce.
Discharge to the natural environment without treatment	Relevant	6738	Much lower	Increase/decrease in efficiency	11-20	Some sites can discharge part of or all of their water directly to the natural environment. This concerns sites with once through cooling loops in which no chemicals are added, the water is not in contact with the product and the temperature is strictly monitored and controlled. In this water can also be found rain water from sites. In all cases the quality of discharged water is monitored and compliant with local permitting. The value is much lower than the previous year following the results of reduction of withdrawals. Anticipated future trend : it is expected that the volume of discharge will reduce as discharges will reduce.
Discharge to a third party without treatment	Relevant	2281	Much lower	Increase/decrease in efficiency	41-50	About half of our sites have their discharges connected to a municipal treatment plant with whom we have agreements on quantity and entry parameters to comply with. The quantity is much lower as the previous year in line with the reduction of withdrawals. Anticipated future trend : it is expected that the volume of discharge will reduce as discharges will reduce.
Other	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	This is not relevant as all the other categories describe where our discharges are sent. It is not expected to become relevant in the future.

W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	2859000000	26101	1095360.3310218	On the historic perimeter of Michelin tyre activities it can be anticipated that the future trend is an increase in water withdrawal efficiency as revenues are expected to increase and withdrawals to decrease as part of Michelin's strong water commitments. However, there is some uncertainty as the Michelin Group hopes to grow outside of its traditional tyre activities where this ratio could be lower to start with.

W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
Row 1	Yes	<Not Applicable>

W1.4a

(W1.4a) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Regulatory classification of hazardous substances	% of revenue associated with products containing substances in this list	Please explain
Annex XVII of EU REACH Regulation	Less than 10%	We are in compliance with the conditions specified in Annex XVII of EU reach
Candidate List of Substances of Very High Concern for Authorisation above 0.1% by weight (EU Regulation)	Less than 10%	None of the substances listed in the 233 entries of the Candidate List updated on January 17th, 2023, is present at rates above the regulatory threshold of 0.1%/w/w in tires, tracks and innertubes rubber composition.
EU Persistent Organic Pollutants (POPs) Regulation	Less than 10%	We are in compliance with the regulation.

W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement	Primary reason for no engagement	Please explain
Suppliers	Yes	<Not Applicable>	<Not Applicable>
Other value chain partners (e.g., customers)	Yes	<Not Applicable>	<Not Applicable>

W1.5a

(W1.5a) Do you assess your suppliers according to their impact on water security?

Row 1

Assessment of supplier impact

Yes, we assess the impact of our suppliers

Considered in assessment

- Basin status (e.g., water stress or access to WASH services)
- Supplier dependence on water
- Supplier impacts on water availability
- Supplier impacts on water quality
- Procurement spend

Number of suppliers identified as having a substantive impact

58

% of total suppliers identified as having a substantive impact

Less than 1%

Please explain

ALL Raw Mat: Michelin assesses its main suppliers with EcoVadis on their CSR performance, including water issues. This assessment is complemented with specific studies:
NAT RUBBER: Michelin deploys a CSR survey Rubberway®, including questions about water. Questionnaires are adapted to the supplier profile (factory, estate, intermediary, smallholder). Michelin includes in its supplier processing factories quality audits environmental aspects (e.g wastewater treatment performance).
Other Raw Ma.t: In 2022-23 Michelin conducted a study of its top supplier production sites, based on supplier site locations, to identify sites with risks linked to water availability, water quality, climate events. Threshold used: Suppliers identified as having a substantive impact = natural rubber suppliers covering 90% of the volumes + other Raw Mat. suppliers and with sites identified at "high" or "very high" level risk in the 2022-23 water study vs water stress or water depletion or blue water scarcity.

W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization's purchasing process?

	Suppliers have to meet specific water-related requirements	Comment
Row 1	Yes, water-related requirements are included in our supplier contracts	<Not Applicable>

W1.5c

(W1.5c) Provide details of the water-related requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Water-related requirement

Complying with going beyond water-related regulatory requirements

% of suppliers with a substantive impact required to comply with this water-related requirement

100%

% of suppliers with a substantive impact in compliance with this water-related requirement

76-99

Mechanisms for monitoring compliance with this water-related requirement

Grievance mechanism/Whistleblowing hotline

Off-site third-party audit

Response to supplier non-compliance with this water-related requirement

Retain and engage

Comment

- Michelin Purchasing Principles & Sustainable Natural Rubber Policy states expectation to go beyond legal requirements on environmental, water, ecosystem and biodiversity protection

- Ecovadis supplier surveys conducted on a regular basis

-Grievance mechanism is open to external sources and can handle environment related issues

Water-related requirement

Conducting water-related risk assessments on a regular basis (at least once annually)

% of suppliers with a substantive impact required to comply with this water-related requirement

100%

% of suppliers with a substantive impact in compliance with this water-related requirement

76-99

Mechanisms for monitoring compliance with this water-related requirement

Grievance mechanism/Whistleblowing hotline

Off-site third-party audit

Response to supplier non-compliance with this water-related requirement

Retain and engage

Comment

- Michelin Purchasing Principles & Sustainable Natural Rubber Policy states expectation to go beyond legal requirements on environmental, water, ecosystem and biodiversity protection

- Ecovadis supplier surveys conducted on a regular basis

-Grievance mechanism is open to external sources and can handle environment related issues

Water-related requirement

Complying with a water-related certification

% of suppliers with a substantive impact required to comply with this water-related requirement

100%

% of suppliers with a substantive impact in compliance with this water-related requirement

76-99

Mechanisms for monitoring compliance with this water-related requirement

Certification

Response to supplier non-compliance with this water-related requirement

Retain and engage

Comment

ISO14001 certification (includes water and waste water management) encouraged for all raw material suppliers but not mandatory.

W1.5d

(W1.5d) Provide details of any other water-related supplier engagement activity.

Type of engagement

Innovation & collaboration

Details of engagement

Encourage/incentivize innovation to reduce water impacts in products and services

Encourage/incentivize suppliers to work collaboratively with other users in their river basins toward sustainable water management

Educate suppliers about water stewardship and collaboration

% of suppliers by number

Less than 1%

% of suppliers with a substantive impact

26-50

Rationale for your engagement

Actions for all kinds of natural rubber suppliers in our upstream supply chain :

To follow-up with suppliers and ensure adherence, Michelin developed an app-based CSR survey Rubberway®, including questions specifically about water, to reach suppliers, the majority of whom are individual small-holders farming from several up to 45 hectares. Questionnaires are adapted to the supplier profile (factory, estate, intermediary, smallholder). Each questionnaire has at least one question related to water. To give a sense of the scale, Michelin's natural rubber value chain is comprised of 6 million households involved in farming hevea (rubber); 85% of these farms are less than 4 hectares.

In 2018, Michelin has expanded its on-site supplier quality audits, which assess all supplier natural rubber processing factories a minimum of once every two years to include environment and social aspects, such as wastewater treatment performance benchmarked against national or regional standards. Time-bound corrective action plans are required when underperformance is found.

Impact of the engagement and measures of success

In 2017 Michelin developed and began using an app-based questionnaire called Rubberway®, to "map" environmental, human rights and governance risks in its natural rubber supply chain. Rubberway® contains questions related to complaints around water usage and quality. The goal is to obtain replies from suppliers that represent 80% of natural rubber volumes used by Michelin .

Impact and measure of success : At end 2022, 80% had been mapped via Rubberway® more than 143,000 respondents (smallholders, intermediaries, plantations and processing plants). Success is measured by a complete reply to the water questions in the app. Given the number of questionnaires completed and the coverage of natural rubber volumes, the engagement method is so far successful and has provided useful information. For example, regarding processing plants, in 2022, 8% have received a complaint from within the local community about water used for rubber production (% of complaints have decreased, from 14% reported in 2021 to 8% in 2022). Among intermediaries, plantations, or smallholders the average rate of water complaints is 4%. Furthermore, 93% of processing plants provided training to their workers on water, energy and/or waste management (this figure has increased from 89% reported in 2021).

The on-site audits also serve to identify areas for improvement for specific natural rubber suppliers regarding their management of water and to propose follow-up actions. In 2022, on-site audits that have been further expanded to include environmental aspects, including wastewater treatment parameters, were carried out on suppliers. Impact : suppliers which are evaluated to need to act on their wastewater treatment and do not implement an action plan may be disqualified.

Comment

Type of engagement

Innovation & collaboration

Details of engagement

Encourage/incentivize innovation to reduce water impacts in products and services

Encourage/incentivize suppliers to work collaboratively with other users in their river basins toward sustainable water management

Educate suppliers about water stewardship and collaboration

% of suppliers by number

Less than 1%

% of suppliers with a substantive impact

1-25

Rationale for your engagement

Actions have been taken regarding the natural rubber suppliers which Michelin is engaged in a joint-venture with, or fully owns.

This represents 15 natural rubber plants. Following the diagnosis made in 2021, on water consumption and quality of water effluents on each site, subsequent investments were decided on several sites to improve their performance on water quality and consumption.

Impact of the engagement and measures of success

Following the 2021 diagnosis, a roadmap has been established, together with follow-up indicators, to drive progress on water consumption and effluent quality in our natural rubber plants. The assistance of experts has been provided to these suppliers to continue working on their action plans.

In 2022, 1 factory in Africa had completed its improvement WWTP project, while others are continuing to follow their actions plans.

Impact is measured with KPIs, as for example KPI on water consumption in m3 per ton of rubber produced, ratio of treated water reused in the process, water quality.

Measure of success: notable progress on water-related indicators include:

- Fresh Water Withdrawal: 6.5 m3 per ton of rubber produced in 2022 (vs 9.9 m3 per ton in 2021) (Target: 5 m3 per ton in 2030).
- Ratio of Treated Water Reused in the process: 43% in 2022 (target 75% in 2030)

Comment

Type of engagement

Information collection

Details of engagement

Collect water management information at least annually from suppliers

% of suppliers by number

1-25

% of suppliers with a substantive impact

76-99

Rationale for your engagement

Michelin assesses its main suppliers with EcoVadis (third party rating company) on their CSR performance, including water issues, with a focus on supplier with potential risks and impact on the environment.

Impact of the engagement and measures of success

In 2012 Michelin has started assessing its suppliers with Ecovadis on their CSR performance, requesting actions plans if low performance was observed.

Impact : The number of assessed suppliers spend coverage increases every year. In 2022 ,1121 suppliers had valid EcoVadis scores (vs 965 in 2021). This represents around 66% of the total Group procurement spend, and 93% of raw material procurement spend (all affiliates included). The number of assessed suppliers spend coverage increases every year.

Measure of success : Of those which had an assessment track record , 66% had improved their global score. Only 13,5% show no evidence of actions on water. If we focus on the circa 300 raw material and natural rubber suppliers , this is numbers falls below 10%, and when focusing on suppliers with a substantive impact, none show no evidence of actions on water.

Comment

W1.5e

(W1.5e) Provide details of any water-related engagement activity with customers or other value chain partners.

Type of stakeholder

Other, please specify (Universities, research institutes and ONGs)

Type of engagement

Innovation & collaboration

Details of engagement

Encourage stakeholders to work collaboratively with other users in their river basins toward sustainable water management

Rationale for your engagement

The rationale of Michelin's engagement is to participate in the development of tools to identify the main pressures of corporate activities on biodiversity, including the pressures exerted on water resources (quantitative and qualitative impacts and dependencies a cross its value chain), and to share its experiences with other companies. Michelin's feedback can help tool developers such as SBTN improve tools.

For these reasons, Michelin pursued its engagement with the Natural Capital Lab initiative founded by WWF France and the Environmental Accounting Chair at AgroParisTech, the University of Paris-Dauphine, Reims Champagne-Ardenne University and the Louis Bachelier Institute. Led by the AgroParisTech Foundation, the Lab is dedicated to supporting companies in testing robust sustainability tools.

As part of the initiatives, Michelin tested the first two stages in the Science Based Targets for Nature (SBTN) method, which helps first to identify the dependencies and material impacts of Michelin's operations on biodiversity across the value chain and then to map these impacts geographically and define priority actions aligned with local issues.

Impact of the engagement and measures of success

A compilation of the work done and feedback from Michelin and other stakeholders was published by the Natural Capital Lab in 2022, <https://lab-capital-naturel.fr/>. Besides, Michelin launched a pilot to test the SBTN Water guidance in 3 of its manufacturing sites in 2023.

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?

	Water-related regulatory violations	Fines, enforcement orders, and/or other penalties	Comment
Row 1	Yes	Fines, but none that are considered as significant	This was not a regulatory fine but a fine from the municipal water treatment plant for an exceedance compared to the limits defined in the contract.

W2.2a

(W2.2a) Provide the total number and financial value of all water-related fines.

Row 1

Total number of fines

1

Total value of fines

700

% of total facilities/operations associated

1

Number of fines compared to previous reporting year

About the same

Comment

In 2022 there was only one fine out of 75 sites.

W3. Procedures

W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified	Please explain
Row 1	Yes, we identify and classify our potential water pollutants	<p>A global scientific and regulatory monitoring is made on the main raw materials used in tires.</p> <p>An inventory of substances either introduced in products (as raw materials or impurities) or which can be degraded by such raw materials or impurities, is done. Over 400 substances constitute what is called the "HSE Roadmap" - the standard used.</p> <p>These substances are then ranked according to two axes:</p> <p>The first one is their danger on human health, or on the environment, and how regulations have addressed these substances (hazard classes from ECHA are used, regulations such as REACH, CLP and Water Framework Directive are taken into account). This evaluation gives a first ranking.</p> <p>The second axis concerns emissions of the substance. In this phase it is analysed whether and how a substance can be emitted to the environment and if yes what are its environmental impact(s). Ranking is carried out according to emission levels of the substance.</p> <p>Both axes put together show the intrinsic danger and actual emission of the substance and enable prioritization.</p> <p>The top substances from this ranking lead to specific actions according to the stakes: from increasing measurements, increasing means of control, to reduction of emissions, to restriction of use and all the way to substitution of the substance (research of alternatives and/or short-term phase-out).</p>	<Not Applicable>

W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Water pollutant category

Inorganic pollutants

Description of water pollutant and potential impacts

Zinc oxide an inorganic substance, which is classified as aquatic acute 1 and aquatic chronic 1 according to annex VI of CLP

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Reduction or phase out of hazardous substances

Please explain

Zinc oxide is used as a vulcanizing agent. Michelin launched a challenging research program in order to reduce the quantities of zinc oxide in the tread. The procedure is reduction or phase out of hazardous substances. All setpoints were re-challenged in order to lower as much as possible zinc oxide levels while maintaining the performance of the product. The threshold of success is to significantly reduce zinc oxide levels in the tread which was achieved as they were evaluated to have reduced by 33%.

Water pollutant category

Inorganic pollutants

Description of water pollutant and potential impacts

Cobalt salts are inorganic chemicals, which have the following classification on the environment :

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Reduction or phase out of hazardous substances

Please explain

Cobalt salts are used to help the adhesion between rubber and metal in tyre components. Michelin has launched research programs to suppress the use of cobalt salts. This is an ongoing program and will be measured by the level of reduction in their use.

Water pollutant category

Other synthetic organic compounds

Description of water pollutant and potential impacts

Ethoxylated nonyl and octylphenols are substances which are toxic to aquatic life with long lasting effects.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Reduction or phase out of hazardous substances
Requirement for suppliers to comply with regulatory requirements

Please explain

Michelin requested as of July 2017 from its suppliers of maintenance greases that no greases sold contained ethoxylated nonylphenols and octylphenols. These substances were also found to be contained in some anti-sticking products and un moulding products. Michelin carried out successful substitution projects for these products in 2017 and 2018. Threshold of success was achieved as these products are no longer used in our operations.

Water pollutant category

Oil

Description of water pollutant and potential impacts

Oil can have acute effects on aquatic life.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
Industrial and chemical accidents prevention, preparedness, and response
Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

One of Michelin's core principles stated in its environmental policy is the commitment to control pollution risks. The Group aims to operate sustainably, to preserve the environment at our facilities and their vicinity by identifying and managing environmental risks. The steering of this policy essentially relies on the implementation of environmental management systems in line with the ISO 14001 standard.

In the case of preventing oil pollution several procedures minimize adverse impacts : first of all assessing and managing risks such as identifying how and where oil is delivered, stored, used and treated as waste. Each situation delivers an adequate measure of response. For example : installation of retention basins of appropriate volume, assessment of infrastructure included in maintenance plan and / or operator control. Installation of oil / water separators to minimize eventual discharge.

Secondly, in case of accidents, the site prepares itself by regular exercises to increase the efficiency of the response. Success is measured by recording and reduction in incidents across the organisation.

Water pollutant category

Microplastics and plastic particles

Description of water pollutant and potential impacts

When tire-users drive their vehicle on the road, contact between the tire and the road causes abrasion, which generates microparticles composed of an agglomeration, in more or less equal parts, of rubber from the tire and debris or deposits from the road. Tire and road wear particles (TRWP) are a sub-family of microplastics. However, they display characteristics which are very different from common microplastics from "ordinary" plastic (bottles, packaging, textiles), notably in terms of degradability, size, composition and density.

This generation of TRWP is a universal physical phenomenon that occurs regardless of the vehicle or brand of tire used. These TRWPs are an issue for the entire industry, as well as for road paving companies.

Potential impacts in water: According to a recent study commissioned by the tire industry, a geospatial model of the Seine watershed indicated that 2% to 5% of TRWPs released into the environment reach estuaries and potentially the marine environment (<https://www.tyreandroadwear.com/>).

Value chain stage

Product use phase

Actions and procedures to minimize adverse impacts

Other, please specify (Reducing product emissions through R&D programs, Supporting legislation, Collaborating with the industry on research programs)

Please explain

Since 2006, the Group has been working to deepen its understanding of the of TRWPs, allocating resources to internal and external research programs to collect, characterize and understand, their composition, flow, and their potential impact on the environment and human health. Aware that scientific knowledge in this area is currently incomplete it has set up working groups to track scientific publications that could improve its knowledge.

Irrespective of developments in knowledge, enabling the Group to better understand the scope and risks linked to tire abrasion, Michelin has been committed to reducing the phenomenon of abrasion for many years, by leveraging its materials expertise and a design strategy focused on optimizing the use of the material. Between 2015 and 2020, this policy resulted, in particular, in reducing the TRWP emissions of its products by 5%. Worldwide, it helped to reduce Michelin's TRWP emissions by approximately 100,000 cumulative tons. Today, the Group is committed to further reducing such emissions from new products.

Moreover, the Group supports abrasion threshold legislation that would rapidly remove the worse performing tires from the market, is working with the European Tyre and Rubber Manufacturers' Association (ETRMA) to define a standardized measurement method, and is collaborating with other major tire makers in several research programs overseen by the Tire Industry Project (TIP).

Water pollutant category

Other synthetic organic compounds

Description of water pollutant and potential impacts

When tire-users drive their vehicle on the road, contact between the tire and the road causes abrasion, which generates microparticles composed of an agglomeration, in more or less equal parts, of rubber from the tire and debris or deposits from the road. These tire and road wear particles (TRWP) contain traces of substances in addition to the rubber matrix, coming from our raw materials and reaction products. Indeed, chemicals play a core role both in our tire manufacturing process and in delivering key performance attributes such as safety, endurance and a small environmental footprint. They are used in compliance with the European and national regulations intended to safeguard human health and the environment.

This generation of TRWP is an universal physical phenomenon that occurs regardless of the vehicle or brand of tire used. These TRWPs are an issue for the entire industry, as well as for road paving companies.

Potential impacts: According to a recent study commissioned by the tire industry, a geospatial model of the Seine watershed indicated that 2% to 5% of TRWPs released into the environment reach estuaries and potentially the marine environment (<https://www.tyreandroadwear.com/>).

Value chain stage

Product use phase

Actions and procedures to minimize adverse impacts

Reduction or phase out of hazardous substances

Please explain

Michelin is continuing its research to further reduce its emissions of wear particles and is working to develop new materials that are more respectful of the environment to reduce the impact of its products. Success is and will be measured by the level of reduction in emissions to the environment.

W3.3

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

Yes, water-related risks are assessed

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

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market

Enterprise risk management

International methodologies and standards

Databases

Other

Tools and methods used

GEMI Local Water Tool

WRI Aqueduct

WWF Water Risk Filter

Life Cycle Assessment

Contextual issues considered

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level

Implications of water on your key commodities/raw materials

Water regulatory frameworks

Status of ecosystems and habitats

Stakeholders considered

Customers

Employees

Investors

Local communities

NGOs

Regulators

Suppliers

Water utilities at a local level

Other water users at the basin/catchment level

Comment

Value chain stage

Supply chain

Coverage

Partial

Risk assessment procedure

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

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market

Enterprise risk management

International methodologies and standards

Databases

Other

Tools and methods used

EcoVadis

WRI Aqueduct

WWF Water Risk Filter

Life Cycle Assessment

Other, please specify (SBTN)

Contextual issues consideredWater availability at a basin/catchment level

Water quality at a basin/catchment level
 Impact on human health
 Implications of water on your key commodities/raw materials

Stakeholders considered

Suppliers

Comment

Michelin run Life Cycle Analysis on all main raw materials.
 In 2022-23 Michelin has renewed a 2018 study on its raw materials top supplier production sites, based on supplier site locations, to identify sites with risks linked to water availability, water quality, climate events.
 In 2021, Michelin agreed to participate in the Natural Capital Lab initiative founded by WWF France and the Environmental Accounting Chair at AgroParisTech, the University of Paris-Dauphine, Reims Champagne-Ardenne University and the Louis Bachelier Institute. Led by the AgroParisTech Foundation, the Lab is dedicated to encouraging and supporting companies in testing robust sustainability tools, to help them align their business development with replenishment timeframes and the planetary boundaries of natural ecosystems. As part of the Lab's undertakings, Michelin began testing the first two stages of the SBTN method in 2021, supported by its partner WWF France and an outside consultant. The method is being used to identify the material impacts of Michelin's operations and supply chain on biodiversity and ecosystems , which include impact on water use, water pollution and water river fragmentation.
 Additionally, Michelin assesses the CSR engagement of its suppliers since 2012 using the EcoVadis rating platform, with annual KPIs. This tool assesses CSR performance, including water stewardship and management. The rationale for this approach is to provide an overview of suppliers representing potentially CSR risks, including on water issues. For those which the score is lower than our expectations we engage them to improve their practices.

Value chain stage

Product use phase

Coverage

Full

Risk assessment procedure

Other, please specify (Environmental risks from the use of products:)

Frequency of assessment

Every two years

How far into the future are risks considered?

3 to 6 years

Type of tools and methods used

International methodologies and standards
 Databases

Tools and methods used

Life Cycle Assessment

Contextual issues considered

Other, please specify (Environmental impact of its products)

Stakeholders considered

Regulators
 Other, please specify (Academics and research institutions, Sector actors)

Comment

When tire-users drive their vehicle on the road, contact between the tire and the road causes abrasion, which generates microparticles composed of an agglomeration, in more or less equal parts, of rubber from the tire and debris or deposits from the road. This generation of tire and road wear particles (TRWP) is a universal physical phenomenon that occurs regardless of the vehicle or brand of tire used. These TRWPs are an issue for the entire industry, as well as for road paving companies. For many years, Michelin has been actively involved in reducing abrasion, by leveraging its materials expertise and a design strategy long focused on optimizing materials use.
 In this way, TRWP emissions from Group products were reduced by 5% between 2015 and 2020, representing around a 100,000-tonne reduction in total worldwide TRWP emissions from the use of Michelin tires. Today, the Group is committed to further reducing such emissions from new products.
 The Group supports abrasion threshold legislation that would rapidly remove the worse performing tires from the market, is working with the European Tyre and Rubber Manufacturers' Association (ETRMA) to define a standardized measurement method, and is collaborating with other major tire makers in several research programs overseen by the Tire Industry Project (TIP).
 Lastly, aware that scientific knowledge in this area is currently incomplete, the Group has set up an intelligence unit to track scientific publications that could improve its understanding of the direct or indirect impacts of TRWPs on the planet. As a result, this risk factor is assessed regularly.

W3.3b

(W3.3b) 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.

Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
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	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	<p>For its direct operations Michelin has developed two water risk assessment methodologies. The first one uses WRI Aqueduct, WWF Water Risk Filter and a local risk assessment focusing on water availability enables to determine the level of water stress at each site. Indicators are analysed per site combined with questions concerning water risks linked to availability. This assessment is mandatory for all sites and the data is re-examined yearly. Sites are classified in low/medium/high water stress. This has a direct impact on their water performance level as a coefficient is given according to the water stress, directly affecting the site's water performance ratio. As sites are challenged on their performance, the higher the ratio the more actions have to be put in place. There is a stronger focus for sites in high water stressed zones as water saving investments are pushed prioritarily. Michelin has also developed an internal methodology (based on tools like GEMI local water tool, LCA) to assess water stakes, risks and opportunities more globally than water stress. It consists in analyzing sites' local context in order to determine potential risks: water availability, knowledge of surrounding ecosystems, stakeholders concerns, etc. This is an optional tool done at a site by site basis.</p> <p>Supply chain risks are assessed mainly on direct suppliers, using market available tools (Ecovadis, WRI Aqueduct, WRF), as well company or sector specific tools (Rubberway) for natural rubber.</p>	<p>'Water availability at a basin/catchment level is considered as can have a direct impact on operations. A lack of water has a direct impact on production or on electricity supplied to the plant. Water quality at a basin/catchment level and status of ecosystems and habitat are considered to identify potential surrounding vulnerabilities which could then impact our discharge levels. Stakeholder conflicts concerning water resources at a basin/catchment level are analysed to consider how the water resource can be used in harmony with nature and other users. Implications of water on your key commodities /raw materials are more considered on our supply chain analysis to assess risks</p> <p>Water regulatory frameworks are considered as can have a direct impact on operations and water treatment systems.</p>	<p>The stakeholders considered are included for the following reasons:</p> <ul style="list-style-type: none"> - employees are key actors to reduce water risks. Actions regarding employees include raising awareness, communicating on targets, involvement throughout the Group's "Progress Idea" program. -customers and investors can voice their concerns and questions which can have a direct impact on our water strategy. - Local communities and NGOs are regularly involved. For example our site in India, Chennai, has a full time CSR team who meet frequently with local communities to identify subjects of concern. - Regulators are ket to quickly catch regulatory evolutions. -other water users at basin level are approached to analyse possible synergies and share knowledge regarding risks and risk reduction. This is the case of one site in France which is analysing the possibility to use the discharge of another site in the same basin to use as its primary water source. -water utilities are in direct contact with sites and discuss future evolutions and impacts. The case of the Bassens plant described previously illustrates this matter 	<p>The risk management framework is based on a review of risks that could have a material adverse effect on operations, financial position, reputation or impact on people or the environment, and compliant with the Committee of Sponsoring Organizations of the Treadway Commission standards. The risk map is comprised of 14 risk families which are the basis for reassessing risks, identifying emerging risks and steering risk reduction actions. It is reviewed annually in a process steered by the Corporate Risk Department that involves: a/bottom-up risk assessment, b/external risk watch and c/internal audit, culminating in a status report to the Group Executive Committee (GMC). Overseen by the Corporate Risk Department (methodology and internal control), each operational and business entity establishes and updates its risk portfolio and sets its action plans. Results are reviewed and approved by the designated risk governance committees.</p> <p>Water risks related to operations are reviewed by the Environment Governance, whose role is to prioritize these risks, arbitrate and follow up remediation actions. The Group Management Committee (GMC) oversees the risk management process. Risks with a substantive financial or strategic net impact are regularly reviewed by the GMC. The Supervisory Board Audit Committee checks the effectiveness of the management process. Business units integrate corporate and activity-specific risks into their 5-year business plans & annual risk management action plans.</p>

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 in our value chain beyond our direct operations

W4.1a

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

For Michelin, a risk corresponds to the possibility of an event occurring whose consequences could affect its objectives, particularly as concerns its financial position, reputation or impact on people or the environment. A substantive financial or strategic impact on business is defined by the Group Management Committee (GMC) as a risk that has an adverse effect on annual operating income (low risk = less than 150 M €, medium risk = between 150 M and 400 M€, high risk = more than 400 M€).

While risks may exist at the site level (Michelin site or supplier site), they will not be considered substantive for the Group if their potential financial impact does not exceed the threshold defined above. Nevertheless, site-level water risks if sufficiently high are accounted for in business continuity plans.

Water-related risks are included in the Group risk map, which may be substantive, include for example : 1) water intake and water pollution at Michelin sites; and indirectly 2) water availability to suppliers of raw materials insofar as this could cause a discontinuity of supply and therefore have potential consequences for manufacturing operations. This definition applies to direct operations and supply chain.

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	0	Less than 1%	Risks are assessed at site, entity, region and Group level. While some water risks exist and have been identified, they are not considered substantive for the Group as their potential final impact does not exceed the threshold defined in question W4.1.a (adverse effect on annual operating income : low risk = less than 150 M €, medium risk = between 150 M and 400 M€, high risk = more than 400 M€)

W4.1c

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

Country/Area & River basin

India	Other, please specify (Our value chain is global. Country selection is for illustrative purposes only.)
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Number of facilities exposed to water risk

0

% company-wide facilities this represents

Less than 1%

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

<Not Applicable>

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

<Not Applicable>

% 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

Risks are assessed at site, entity, region and Group level. While some water risks exist and have been identified, they are not considered substantive for the Group as their potential final impact does not exceed the threshold defined in question W4.1.a (adverse effect on annual operating income : low risk = less than 150 M €, medium risk = between 150 M and 400 M€, high risk = more than 400 M€)

W4.2a

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

Country/Area & River basin

China	Other, please specify (All river basins)
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Stage of value chain

Supply chain

Type of risk & Primary risk driver

Acute physical	Other, please specify (Water stress)
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Primary potential impact

Supply chain disruption

Company-specific description

Risks have been identified in 2022 using WRI Aqueduct tool on 186 raw material supplier sites throughout the world.

One criterion to be considered at risk was to have a "high" or "extremely high" rated local baseline water stress. Increased water stress could reduce or disrupt supply to Michelin's sites and thus impact the Group's output if disruption is sustained. China concentrated the most supplier sites (17) with high or extremely high water stress.

Timeframe

More than 6 years

Magnitude of potential impact

Low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

60000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Impact quantified as a fraction of the spend of the concerned suppliers.

Primary response to risk

Upstream	Other, please specify (Include in Business Continuity Plan)
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Description of response

The raw material risk screening tool used by Michelin takes into account multiple risks which could lead to business continuity issues. Among those risks is natural disaster at supplier sites, which includes water related risks. These risks are taken into account in the Business Continuity Plans.

To anticipate this risk, Michelin has set up a specific plan which integrate protection measures such as keeping buffer inventory of replacement parts for critical equipment, performing regular maintenance, multi-sourcing finished-product inputs, developing multi-sourcing among component suppliers, and striking the right balance between insourcing and outsourcing of component production; and a Business Continuity Management process for all production activities that makes it possible to respond swiftly in the event of a crisis, by quickly transferring a production line to another plant and identifying critical products so that strategic decisions can be made ahead of time. This risk management process proved particularly useful and effective during the recent crises.

Cost of response

0

Explanation of cost of response

Including water-related risk assessment into Business Continuity Plans should not cost the Group anything as the main risk is supply rupture, which is already considered in Business continuity plans as it can be caused by multiple other factors such as for example other natural disasters, geopolitical issues, supplier failure, etc.

Country/Area & River basin

United States of America	Mississippi River
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Stage of value chain

Supply chain

Type of risk & Primary risk driver

Acute physical	Flood (coastal, fluvial, pluvial, groundwater)
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Primary potential impact

Supply chain disruption

Company-specific description

Risks have been identified in 2022 using WRI Aqueduct tool on 186 raw material supplier sites throughout the world.

One criterion to be considered at risk was to have a "high" or "extremely high" riverline flooding risk. Flooding could reduce or disrupt supply to Michelin's sites and thus impact the Group's output if disruption is sustained. The USA concentrated the most supplier sites (18, of which 10 identified on the Mississippi River basin) with extremely high flood occurrence.

Timeframe

More than 6 years

Magnitude of potential impact

Low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

75000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Impact quantified as a fraction of the spend of the concerned suppliers.

Primary response to risk

Upstream	Other, please specify (Include in Business Continuity Plan)
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Description of response

The raw material risk screening tool used by Michelin takes into account multiple risks which could lead to business continuity issues. Among those risks is natural disaster at supplier sites, which includes water related risks. These risks are taken into account in the Business Continuity Plans.

Cost of response

0

Explanation of cost of response

Including water-related risk assessment into Business Continuity Plans should not cost the Group anything as the main risk is supply rupture, which is already considered in Business continuity plans as it can be caused by multiple other factors such as for example other natural disasters, geopolitical issues, supplier failure, etc.

W4.2b**(W4.2b) Why does your organization not consider itself exposed to water risks in its 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	Risks are assessed at site, entity, region and Group level. While some water risks exist and have been identified, they are not considered substantive for the Group as their potential final impact does not exceed the threshold defined in question W4.1.a (adverse effect on annual operating income : low risk = less than 150 M €, medium risk = between 150 M and 400 M€, high risk = more than 400 M€).

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**

Products and services

Primary water-related opportunity

Increased sales of existing products/services

Company-specific description & strategy to realize opportunity

Michelin is applying its R&D expertise to create new tires to meet changing customer demand to be able to handle new or unusual weather conditions. The unpredictable weather patterns that might result from climate change mean that tires must cope with a wide range of road conditions, driven by extremes in temperature and precipitation. Since our products are designed to deliver excellent performance in a wide range of conditions, this approach is part of our strategy to increase sales.

In the US, Michelin is already responding to customers demand for all-season tires to avoid having to switch from winter tires to summer tires and vice versa. The introduction of Michelin's CrossClimate range in Europe in 2015, that combines excellent performance in winter with excellent performance in summer, has been a first major extension of this approach, followed by the launch of Cross Climate SUV range in 2017, and Agilis Cross Climate for Vans in 2019. Since 2015, All Season market has grown in Europe by 26% per year (vs market average growth around 1%, excluding All Season). In 2020 the Group remained the leader in the all-season segment, with its MICHELIN Cross Climate line in the regions where it is sold. In 2021 Michelin launched MICHELIN CrossClimate2. The all-season range has seen strong growth since Michelin introduced the first summer tire certified for winter use in 2015. It is expected to continue to deliver double-digit gains in Europe, particularly in France where winter tires have become mandatory in 48 departments. Michelin has taken a leader role in this segment and will continue in the future, for instance by aiming at homologating with European OEMs this all-season range.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

100000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

According to Tire Business, the global tire market was estimated at US\$ 180 billion in 2021, with light-vehicle tires accounting for 60% for a total market segment worth US\$108 billion. Michelin's market share was 14.6% in 2021; an increase in market share of just 1% could represent an increase in earnings of US\$ 1 billion. This is without considering increased demand for tires. Over the medium term, it is estimated that demand for tires by volume will grow by 0% to 2% per year in mature markets and by 2% to 4% in emerging markets (Source: Michelin estimates). Note: these estimates have been officially published in US\$ in the 2022 annual report. Converting them here to euros would not provide a meaningful value given the exchange rate fluctuations.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Respect of the environment is one of our core values. Michelin committed to reduce by half the environmental impact of its industrial sites between 2005 and 2020. Michelin's new commitment is to reduce by a third the environmental impact of industrial sites between 2019 and 2030. Michelin has integrated in its sites' environmental indicator the reduction of water withdrawals since 2005. Since 2021 the water withdrawals indicator has been modified to take into account sites' water stress. Numerous actions have been put in place to reduce water consumption leading to a 44% reduction in absolute value in 2022 compared to 2005. Furthermore, the water risk/opportunity and impact assessment method validated in 2016 includes a review of local stakeholders and user relations within the watershed in order to identify opportunities to improve our stewardship, particularly in regions subject to water stress. It is recommended to apply it across all facilities worldwide.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

125000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

It is estimated that from 2005 to 2022, 195M€ were saved as a result of measures identified during the implementation of the Group's environmental indicator with a focus on water reduction, the site-based water risk/opportunity and impact assessments. This figure is based on actual operating and capital expenses reported for sustainably managing water resources.

Type of opportunity

Markets

Primary water-related opportunity

Improved community relations

Company-specific description & strategy to realize opportunity

This is strategic, as improving community relations increases external stakeholder confidence in Michelin, which influences that status of the Michelin brand. As part of a project to build a new manufacturing facility in the Indian state of Tamil Nadu, Michelin India worked with an NGO to assess socioeconomic needs in the communities around the new plant in Chennai. A major need identified was better access to water supply. Since then, Michelin has been providing extensive assistance towards meeting local communities' water needs. This engagement pursues a triple strategic objective: ensure sustainability of agriculture and animal husbandry, health improvements, and create public awareness on the importance of water availability and quality. These actions directly helped the local communities, and improved relationships.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

79000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

These actions directly help the local communities and increase external stakeholder confidence in Michelin which influences that status of the Michelin brand. According to Brand Finance, in 2022, Michelin's brand was valued at US\$7.9 billion. A 1% increase could add 79 M€ to the brand value.

W6. Governance

W6.1

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

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

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	<p>Description of the scope (including value chain stages) covered by the policy</p> <p>Description of business dependency on water</p> <p>Description of business impact on water</p> <p>Commitment to reduce water withdrawal and/or consumption volumes in direct operations</p> <p>Commitments beyond regulatory compliance</p> <p>Reference to company water-related targets</p>	<p>Respect for the environment is one of Michelin's five core values, as expressed in 2002 in the Michelin Performance and Responsibility Charter and reaffirmed in 2012.</p> <p>In 2013, Michelin defined its 2020 environmental objective: reduce the Michelin Environmental Footprint (MEF) by 50% by 2020 (2005 baseline year). This composite indicator includes water withdrawal intensity, and performance levers have been defined for each type of manufacturing process for internal benchmarking purposes.</p> <p>In 2020 Michelin's environmental policy has been updated. It aims at controlling pollution risks and reducing the Group's environmental footprint towards impact neutrality. The environmental issues are considered over the whole life cycle of products. Objectives and action plans are prioritized in proportion to the issues at stake.</p> <p>The prioritization is based on our ambitions, our commitments and our perception of our stakeholders' expectation, as well as on the mid-term action feasibility. It is subject to validation by the Environmental Governance.</p> <p>The policy is detailed in different chapters, in a life-cycle-based approach. Every chapter is an integral part of the « Group Environmental Policy ».</p> <p>A complementary document has been formalized to detail the 'Production facilities and other sites' chapter of the Group's Environmental Policy, by spelling out the principles, ambitions and obligations applicable to the Group's facilities. The aim is to reduce the impact of our activities in absolute value, so as to progressively move toward our 2050+, polar star, ambition: "100% of the substances taken from, and emitted to, the environment during the full life cycle of our products can be assimilated by nature and are neutral for human health and biodiversity".</p> <p>Our policy states our water objectives aim at reducing water withdrawals (-33% in 2030 compared to 2020), thus helping to limit the impact of non-availability for the environment. They are aligned with SDG #6 "clean water and sanitation".</p> <p>Our policy also includes our water ambition which is that in 2050, Michelin has zero impact on water availability for local communities.</p> <p>Our water policy has established a fundamental rule which is that for all new facilities, the supply of water from non-renewable underground sources is forbidden.</p>

W6.2

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

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual or committee	Responsibilities for water-related issues
Board-level committee	<p>The Group Executive Committee (GEC), Group Management Committee (GMC) and the Supervisory Board are the 3 board-level committees responsible for environmental-related issues including water. The GEC –the managing chairman, general manager and the executive VPs– focuses on strategic decisions, such as corporate transformations, business models, acquisitions, performance, brand strategy, and sustainable growth. Two members –executive VPs of manufacturing and R&D, respectively –have delegated responsibility to make decisions on water related issues regarding operations through the Environmental Governance (EG) body which represents all operational departments. The GEC as a whole oversees climate-related risks and opportunities regarding business strategy through the annual strategic planning process for business units. The GMC is comprised of the GEC plus the heads of Strategy, Purchasing, Corporate Business Services, Finance, Legal Affairs, Quality, Audit, Internal Control and Risk Management, Supply Chain, Information Systems, and the China and North America Regions. The GMC manages transformation, competitiveness, integration of acquisitions and the internal control, quality and risk management processes. It oversees water-related risks and tracks water-related progress in operations supported by the Environment Governance (EG) body. The EG body oversees all water-related issues impacting operations. An example of a water-related decision made by this committee is the establishment of our 2050 water ambition which is to have zero impact on water availability for local communities.</p> <p>The role of Supervisory Board is to exercise permanent oversight of the Group's management and to assess its quality for the benefit of the shareholders. Its 4-member CSR Committee examines the Group's strategy, objectives, policies and commitments regarding environmental impacts, and makes recommendations in this regard; reviews the roadmaps and their implementation.</p>

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	Monitoring implementation and performance Overseeing and guiding scenario analysis Overseeing major capital expenditures Overseeing the setting of corporate targets Overseeing value chain engagement Reviewing and guiding corporate responsibility strategy Reviewing and guiding risk management policies Reviewing and guiding strategy Setting performance objectives	<p>Reviewing and guiding strategy, risk management policies and corporate responsibility: The Group Management Committee (GMC) reviews all strategic actions related to water issues. To do this, it conducts a biannual review, organized by the corporate sustainability officer, of decisions made and issues handled by the Environment Governance (EG) body.</p> <p>This review enables the GMC to verify that steady progress is being made towards short-, medium- and long-term water reduction targets and validate the strategic objectives and risks and their internal control.</p> <p>Monitoring implementation and performance and setting performance objectives: The GMC regularly reviews the indicators monitored by the Environmental Governance body, which include KPIs on reducing water withdrawals and water withdrawal intensity of production operations. The Environment Governance body validates the commitments, ambitions and associated targets related to water on a 30-year time horizon. It validates the roadmap to go towards these targets and makes necessary arbitrations. As of 2021 the GMC oversees 6 Group-wide transformations, one of which is "All in action for the environment". This transformation includes reaching the 2030 target to cut by 33% water withdrawals, as weighed with sites' water stress coefficients, compared with 2019 (indicator: Stress*m3 per tonne of semi-finished and finished product). The role of the GMC is to ensure that the necessary changes take place across Group's organizations that will enable the water roadmap to be implemented and achieved.</p> <p>The Group Executive Committee (GEC) by delegation of decision-making to two members – the executive VPs of manufacturing and R&D, respectively, as co-chairs of the Environmental Governance (EG) body – reviews, guides and decides on major plans of action for managing water risks and opportunities regarding operations, the main levers to be put in place, their level of gain and the associated capex and opex. All major decisions on water-related risks, opportunities and investments impacting operations that are not made by the GEC are made at this governance level.</p> <p>The EG body also includes the chief procurement officer, chief risk officer, EHS manager, sustainability manager, and chief legal officer. The EG meets three times a year.</p>

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Yes	<p>The criteria used to assess the competency of board members on water related issues is based on initial training, professional experience in relation to water use and challenges, awareness and exposure to high level water related topics and decision making.</p> <p>2 members of the Group Executive Committee (GEC) have competencies on water-related issues who are both also co-leaders of the Environmental Governance body. The chief operating officer, through his educational training and more importantly his professional career, which has led him to work at different manufacturing sites and as head of industrial operations, has always been involved with water uses, technological challenges and stakes which have required high-level decision making.</p> <p>The president of research and development via his educational training and his professional background have given him a good understanding of water usage on the whole life cycle of the tyre.</p> <p>Complementary to this knowledge, during each presentation regarding water issues at the environmental governance there is an important reminder of the context related to water, its use, the technical challenges which increase their competence on water.</p>	<Not Applicable>	<Not Applicable>

W6.3

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

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

Other C-Suite Officer, please specify (Executive Vice President of R&D (EVP of R&D))

Water-related responsibilities of this position

Assessing future trends in water demand
 Assessing water-related risks and opportunities
 Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

As part of the Group's 2030 strategy, 6 transformation Programs were defined and are paramount to achieve our 2030 goals. One of them called "All in Action for the Environment" is divided into 4 workstreams. Water is one of these workstreams which is sponsored by the Executive vice president of R&D. Every quarter the outcomes of the water stream which include results, future trends, risks and opportunities are reviewed with the executive vice president of R&D which then relays successes and warnings towards the Group Management Committee. Complementary to these quarterly meetings water related issues are overseen by the environmental governance (EG) body that is chaired by 2 members of the GEC: the COO and the Executive Vice President of R&D. The EG meets three times a year. cf. Question W6.2b.

W6.4

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

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Contribution of incentives to the achievement of your organization's water commitments	Please explain
Monetary reward	Corporate executive team Chief Executive Officer (CEO) Chief Financial Officer (CFO) Chief Operating Officer (COO)	Reduction of water withdrawals – direct operations	The Michelin Group is committed to eliminating all of its impact on water availability in local communities by 2050. It is well aware of the growing scarcity of this vital resource and is pursuing its strategy of steadily reducing withdrawals. Its 2030 objective is to reduce these withdrawals, weighted for each facility's specific water stress coefficient, by 33% compared to 2019 (indicator: water stress x cu.m per tonne of semi-finished and finished product). In order to align the Managers' medium/long-term objectives with the objectives assigned to performance share plans for eligible Group employees, this compensation has taken the form of Michelin performance share rights since 2020. One of the 5 performance criteria is the Industrial-Michelin Environmental Performance (i-MEP) This composite indicator, that includes water withdrawal intensity weighed with sites' water stress coefficients, was chosen because it reflects the environmental performance of the Group's industrial sites. This indicator must be below a defined threshold for the monetary reward to be triggered.	
Non-monetary reward	No one is entitled to these incentives	<Not Applicable>	<Not Applicable>	

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

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

No, but we plan to do so in the next two years

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	11-15	In 2016, the Group Executive Committee (GEC) reviewed water-related issues as part of a corporate program, called the Water Program, to reduce the environmental footprint across all manufacturing facilities. It was assessed that our main impact on water concerned water withdrawals. As a result, the Environmental Governance validated a long-term ambition related to water in manufacturing operations being "by 2050 our industrial sites have zero impact on water availability for local communities". This long term ambition was broken down into a 2030 objective which states that we wish to achieve a 33% water withdrawal reduction (in m3 per tons) objective between 2020 and 2030 for all Group facilities, with a prioritisation for the 9 sites identified in high water stressed areas. In 2021, extra focus and priority was given to the Water Program. As part of the Group's 2030 strategy, 6 transformation Programs were defined and are paramount to achieve our 2030 goals. One of them called "All in Action for the Environment" is divided into 4 workstreams. Water is one of these workstreams. These transformation programs show the will of the Michelin Group to help drive the transition the world needs to become more environmentally responsible. The fact that water is one of the workstreams demonstrates the importance of this resource and its preservation for the Michelin Group.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	The strategy for achieving reduction in water footprint and zero impact goals is focused on 1) deploying known levers and 2) exploring new ones. The strategy is set-up to deliver our long-term objectives by 2050 that our industrial sites have zero impact on water availability for local communities. The known levers are being more energy efficient and more particularly reducing our steam consumption. An example is the development of new industrial processes that consume significantly less water such as electric presses which replace steam curing presses. New levers are the leaning on digitalisation to follow in real-time key water parameters to operate our water consumption more efficiently. We are also working on how to reduce, reuse and recycle all waste water streams within our industrial sites to lower our water withdrawals. All known and exploration levers are in our Group Water Roadmap which details the path towards our objectives and ambitions. Known levers typically span out till 2030 when new levers span out beyond 2030 and are continuously updated taking into account new water challenges.
Financial planning	Yes, water-related issues are integrated	5-10	The GEC requests from the EHS team the building of 10 year roadmaps in line with our 2030 objectives and 2050 ambitions. Such a roadmap exists for water. It describes all the levers, gains and associated CAPEX and OPEX to reach our water goals. These capex and opex represent the financial planning of our strategy and are broken down by business line which then include these budgets in their portfolio to deploy the corresponding levers. The follow up and review of this roadmap takes place in each business line and then at Group level during an environmental governance meeting. For example the lever of digitalisation requires approximately 50k€ per site for deployment (without counting additional metering). For sites wishing to activate this lever, this sum is budgeted in their annual plan.

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?

Row 1

Water-related CAPEX (+/- % change)

100

Anticipated forward trend for CAPEX (+/- % change)

10

Water-related OPEX (+/- % change)

25

Anticipated forward trend for OPEX (+/- % change)

10

Please explain

Routine operating expenses for water management are not consolidated at Group level. The figures reported represent costs of implementing NEW means (e.g., equipment, processes, infrastructure, etc.) for achieving improved performance in preventing surface water pollution and in sustainably using water resources, consolidated in two categories: capital expenditures and operating expenses. Significant water saving projects took place this year such as closing of once-through cooling loops, installation of reverse osmosis to recycle discharged water, more efficient water pumps or the detection and replacement of damaged water pipes. The trend is an increase in CAPEX and OPEX as we can anticipate more reuse and recycling projects which have impacts on both.

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Water-related	<p>Water risk is a local problem, that's why the situation of the country that each supplier is located in were studied to better understand their intrinsic risks. The parameters are: The dependency ratio (total water renewable resources originating from outside the country), industrial water withdrawal, total water withdrawal and industrial water withdrawal as a % of total withdrawals over three periods of time.</p> <p>Countries were selected based on where the various supplier sites are located (total of 33 countries). All the data and definitions came from the FAO AQUASTAT database with the time period spanning 14 years (2003 to 2017), broken up into 3 periods each lasting 4 years.</p> <p>Tool used on scenario analysis: WRI Aqueduct.</p> <p>3 indicators that could show a potential disruption to business were considered: 1/Baseline water stress: measures the ratio of total withdrawals to total available annual renewable supply. 2/Flood occurrence: a count of the number of floods recorded between 1985 and 2011. 3/Drought severity: estimates the average of the length times the dryness of droughts from 1901 to 2008.</p> <p>Three different scenarios were studied: "Optimistic" (SSP2 RCP4.5): Stable economic development and carbon emissions peaking and declining by 2040. "Business as usual" (SSP2 RCP8.5): Stable economic development and steadily rising global carbon emissions. "Pessimistic" (SSP3 RCP8.5): Fragmented world with uneven economic development and steadily rising global carbon emissions.</p> <p>Based on these three scenarios, we will look at how water stress (projected change) and water demand (projected change) could change in 2020, 2030, and 2040 for the supplier sites.</p> <p>This is a qualitative scenario analysis.</p>	<p>The results of the supplier site water risk study showed that certain suppliers are located in areas of higher water stress and/or higher competition among users. Depending on the scenario, roughly 50% of supplier sites are located in areas not projected to undergo any significant change compared to the baseline year, and the other 50% are located in areas projected to undergo slight increases in water stress and competition. Only a few sites are located in areas projected to show a significant increase in the two parameters. The main outcome of this scenario analysis was the understanding that supply disruptions could very well occur, but at a small number of supplier sites, given the current diversification of raw material supplies.</p>	<p>Water scenario analysis was used during an update to a supplier site water risk study to provide a qualitative description of how the water stress and water demand could change in the future for the priority supplier sites (all suppliers of raw materials) that were included in the study. This study enabled the corporate purchasing department to be informed of supplier sites that potentially require monitoring for water risks and which ones could be problematic in the years to come due to water shortages. In 2021, an SBTN methodological test was conducted to identify the water-related risks throughout the group's value chain. Updates of this test will be conducted regularly in the future.</p>

W7.4

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

Row 1

Does your company use an internal price on water?

Yes

Please explain

The growing pressures on the water resource has led the Group to define an internal price of water of 5€*site water stress per cubic meter which is to be applied via ROI (return on investment) calculations of investment projects impacting water consumption.

This price was determined by a group of internal water and energy experts and was selected among several scenarios after external benchmarking.

It considers the upstream total cost of water for its usage on an industrial site and the downstream cost represented by the valorization of externalities.

The total cost of water was achieved after analysis of data at approximately half of Michelin's industrial sites.

The valuation method used is based on OECD definition of valuing avoidance costs, with input from ISO 14007 and ISO 14008.

Its base of 5€, common to all sites, multiplied by the sites' specific water stress makes it a simple and comprehensive tool. It is more than 5 times higher than the weighted average cost for 1m3.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	No, but we plan to address this within the next two years	<Not Applicable>	Important but not an immediate business priority	<p>Our tyre products are classified in Europe via the tyre labelling system which provides consumers with information on fuel efficiency, safety and noise by detailing the tyres' rolling resistance, wet grip, and external rolling noise. However, for the moment we haven't classified our products or services with regard to their water impact.</p> <p>We rank the water intensity of each of our industrial sites (in m3 per ton of finished products) but haven't tagged this analysis as a formal classification. However it helps us pull progress as we can see which production sites are the less water intensive. Therefore we could imagine in the future classifying industrial sites of "low water impact" according to their water intensity, comparing either to the Group's yearly average or maybe the sites which are already under the Group's 2030 target.</p>

W8. Targets

W8.1

(W8.1) Do you have any water-related targets?

Yes

W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	No, but we plan to within the next two years	<p>Currently all our industrial sites are following the limits of their discharge permits. Percentage of conformity to regulations is an indicator followed by each industrial site as part of the Environmental Management System in place.</p> <p>We believe it is necessary to go beyond compliance to local regulations. Therefore we have launched in 2023 a plan to increase the knowledge of the potential impact of water discharged on the receiving bodies.</p> <p>We are testing 2 methodologies on 3 pilot sites : one inspired by SBTN and one inspired by the French Environmental Ministry on the compatibility of discharged water with the receiving body.</p> <p>We hope that this increased knowledge will help us define the right target regarding water quality which is extremely difficult to set considering the local specificities.</p>
Water withdrawals	Yes	<Not Applicable>
Water, Sanitation, and Hygiene (WASH) services	No, but we plan to within the next two years	Michelin has signed the WASH pledge. The self-assessment tool proposed by the WBCSD was used by one pilot site. Subsequently, the tool was simplified for more rapid deployment. Other pilot sites are in the process of being identified.
Other	Please select	<Not Applicable>

W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number

Target 1

Category of target

Water withdrawals

Target coverage

Company-wide (direct operations only)

Quantitative metric

Reduction in withdrawals per unit of production

Year target was set

2021

Base year

2019

Base year figure

3.37

Target year

2030

Target year figure

2.26

Reporting year figure

3.15

% of target achieved relative to base year

19.8198198198198

Target status in reporting year

Underway

Please explain

The target is to cut withdrawals by 33% in 2030 compared to the baseline year of 2019 (2020 is not considered as representative due to the covid crisis). This is measured in cubic meters multiplied by the site water stress coefficient per ton of semi-finished and finished product.

By end of 2022, Michelin has achieved a 6,14% reduction compared to 2019 which means 19% of the global 2030 target has been reached.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

Michelin_DEU_2022_US_MEL_V2.pdf

W9.1a

(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	Water withdrawals: total volume of all Michelin plants	ISAE 3000	22% of site-level data and 100% of corporate-level data have been verified by a third-party chartered accountant providing limited assurance according to the ISAE3000 standard for purposes of complying with French law for transparent reporting on CSR information (Code de Commerce, article L. 225-102-1). The methodology followed is stipulated by the French law (Code de Commerce, article L. 822-11-3).
W8 Targets	Percentage of manufacturing sites having implemented the standardized water assessment method.	ISAE 3000	100% of the information have been verified by a third-party chartered accountant providing limited assurance according to the ISAE3000 standard for purposes of complying with French law for transparent reporting on CSR information (Code de Commerce, article L. 225-102-1). The methodology followed is stipulated by the French law (Code de Commerce, article L. 822-11-3).
W1 Current state	Water discharge quality – by standard effluent parameters – for all sites with an industrial activity that discharge directly into the natural environment	ISAE 3000	22% of site-level data and 100% of corporate-level data have been verified by a third-party chartered accountant providing limited assurance according to the ISAE3000 standard for purposes of complying with French law for transparent reporting on CSR information (Code de Commerce, article L. 225-102-1). The methodology followed is stipulated by the French law (Code de Commerce, article L. 822-11-3).

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Value chain stage	Please explain
Row 1	Yes	Product use phase	<p>Methodology for mapping the environmental impact of our products: Michelin has long used life cycle assessments (LCAs) and is continuously improving its expertise in measuring the lifetime environmental impact of its products. This approach, which is based on ISO 14040 guidelines, provides greater insight into these impacts that then informs the design choices made to reduce them.</p> <p>Type of plastic generated: Tire and road wear particles (TRWP) are tiny debris generated by the friction between the road and the tire during the operation of a vehicle on the road. They are microparticles composed of an agglomeration of rubber from the tire and debris from the road. While they are a universal physical phenomenon that occurs regardless of the vehicle or brand of tire used, the level of emissions will depend on tire design and road surface. They represent an issue for the entire tire industry.</p>

W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Value chain stage	Please explain
Row 1	Yes	Product use phase	<p>Factoring in the environmental impact of its business activities is a major concern at Michelin. The Group has been proactively engaged with the tire industry and other stakeholders (representatives from governments, academia, non-governmental organizations) in examining the potential impacts from tire and road wear particles (TRWPs). This was specially accomplished through Michelin's participation in the Tire Industry Project (TIP). This project has been developing research to collect, characterize and understand both TRWP's composition and flow, as well as its potential impact on the environment and human health. In addition, Michelin continues to carefully track the research being conducted worldwide that could serve to enhance current scientific knowledge. A wide variety of studies conducted by the TIP and other research organizations are providing converging signals that TRWPs account for a small percentage of total urban air pollution particles. Moreover, according to a recent study commissioned by the tire industry, a geospatial model of the Seine watershed indicated that only 2% to 5% of TRWPs released into the environment reach estuaries and potentially the marine environment. Similar research is being pursued by the European Tyre and Rubber Manufacturers Association (ETRMA), which in July 2018 launched the Tyre and Roadwear Platform, a multi-stakeholder platform, facilitated by CSR Europe, dedicated to sharing scientific knowledge and co-designing mitigation options to reduce the environmental impact of TRWPs.</p>

W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk exposure	Value chain stage	Type of risk	Please explain
Row 1	No, risks assessed, and none considered as substantive	<Not Applicable>	<Not Applicable>	

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Target type	Target metric	Please explain
Row 1	Yes	Microplastics Waste management	Reduce the potential release of microplastics and plastic particles Other, please specify (Kilogram of waste per ton of semi-finished and finished product)	<p>Waste management: By 2050, the Group hopes to reduce the amount of waste produced per ton of total output by 50% compared to 2019. An intermediate goal has also been set for 2030, aiming at a reduction of 25% compared to the 2019 baseline. To meet these reduction targets, the waste program is benefiting on the digitization of waste data and the Group's 4R strategy: Avoid, Reduce, Reuse and Recycle.</p> <p>The amount of waste generated is also included in the i-MEP, an internal indicator that allows Michelin to track the progress of its environmental performance, based on five variables (energy use, CO2 emissions, organic solvent use, water withdrawal x water stress and amount of waste generated). The Group's goal is to have their i-MEP score to decline by one-third until 2030.</p> <p>Microplastics: Michelin has been actively involved in reducing abrasion, by leveraging its materials expertise and a design strategy long focused on optimizing materials use. TRWP emissions from Group products were reduced by 5% between 2015 and 2020, representing around a 100,000-tonne reduction in total worldwide TRWP emissions from the use of Michelin tires. Today, the Group is committed to further reducing such emissions from new products.</p>

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers	No	
Production of durable plastic components	No	
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	No	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	

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	Chief Manufacturing Officer, Member of the Group Executive Committee, Member of the Groupe Management Committee and lead chair of the Environment Governance body.	Chief Operating Officer (COO)

SW. Supply chain module

SW0.1

(SW0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	28590000000

SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?

No facilities were reported in W5.1

SW1.2

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	No, this is confidential data	

SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

No

SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services.

Product name

Passenger car and light truck tires

Water intensity value

8.2

Numerator: Water aspect

Water withdrawn

Denominator

metric tons of finished product

Comment

The figure represents the average value of water intensity for production plants worldwide that manufacture primarily passenger car and light truck tires.

Product name

Truck, bus and other heavy-duty on-road tires

Water intensity value

4.2

Numerator: Water aspect

Water withdrawn

Denominator

metric tons of finished product

Comment

The figure represents the average value of water intensity for production plants worldwide that manufacture primarily truck, bus and other heavy-duty on-road tires.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

No

Please confirm below

I have read and accept the applicable Terms