

CDP 水セキュリティ質問書 2020 へようこそ

W0. イントロダクション

W0.1

(W0.1) 貴社の概要および紹介文を記入してください。

Chemistry is an industry that will be able to realize the dream of creating new wealth for people's lives. Mitsui Chemicals, Inc. (MCI) contributes to society by providing high-quality products and services to customers through innovations and creation of materials while maintaining harmony with the global environment (MCI's Corporate Mission). Here at MCI, we have 5 business sectors* to provide society with various inevitable materials for convenient, comfortable and sustainable life. For further details, please refer to attached Corporate Profile and Annual Report. * 5 business sectors: Mobility, Health Care, Food&Packaging, Next Generation Business, Basic Materials.

W-CH0.1a

(W-CH0.1a) 貴社が従事しているのは、化学セクターのどの活動ですか。

バルク有機化学品

W0.2

(W0.2) データの報告年の開始日と終了日を入力してください。

	開始日	終了日
報告年	4 月 1, 2018	3 月 31, 2019

W0.3

(W0.3) データを提供する対象の国/地域を選択してください。

中国
インド
インドネシア
日本
マレーシア
メキシコ
シンガポール
タイ
米国

W0.4

(W0.4) 回答全体を通じて財務情報の開示に使用する通貨を選択してください。

日本円(JPY)

W0.5

(W0.5) 貴社の事業への水の影響の報告にあたり、対象となる企業、事業体、グループの報告バウンダリ(境界)として最も当てはまるものを選択してください。

財務管理下にある企業、事業体、またはグループ

W0.6

(W0.6) 上記報告範囲の中で、本情報開示から除外される地域、施設、水に関する側面、その他の事項はありますか。

はい

W0.6a

(W0.6a) 除外されるものについて説明してください。

除外対象	説明してください
Head Office/Branches	Head Office and branches are based in rented offices. Water is managed by the landlord in accordance with the rental agreement at each location.

W1. 現在の状態

W1.1

(W1.1) 貴社事業の成功には、水質と水量ほどの程度重要ですか。(現在および将来の)重要度をお答えください。

	直接利用の重要度評価	間接利用の重要度評価	説明してください
十分な量の良質の淡水を利用できること	操業に不可欠である	操業に不可欠である	To manufacture the company's chemical products, high-quality fresh water is used as a heating and cooling medium, a solvent, and for cleaning. It is also used as steam, when using steam turbines as a power source, and by employees for drinking and hygienic purposes. Therefore, high-quality fresh water is essential to business activities at the production sites of the Mitsui Chemicals Group. The upstream of the supply chain requires a sufficient quantity and quality of fresh water

			as does the company because chemical products as raw materials are produced there. In the downstream of the supply chain, sufficient quantity and quality of fresh water is also essential for processing, such as resin molding, where the water is used for cooling and cleaning the resin. The rate of use of low-quality water is moderate at the company and supply chain, because it affects the manufacturing process operations and product quality. This trend is assumed to remain unchanged in the future. High-quality fresh water is necessary and is assumed to remain necessary, for manufacturing and quality control of chemical products. Accordingly, it is believed that measures such as the purification and recycling of more water will be necessary for securing high-quality fresh water.
十分な量のリサイクル水、半塩水、随伴水を利用できること	操業に不可欠である	中立	Recycled water accounts for the majority of water used for purposes such as turbine generators and steam and coolant used in the manufacturing process, due to the quantity and quality of water required in these processes. Recycled water is therefore essential for large-scale chemical production activities. In addition, in the supply chain, it is assumed that use of recycled water is required in regions where water cost is high or a large amount of water is used for producing products. It is believed that more recycled water will be needed in regions where the use of water will be difficult. However, water may not be recycled in regions where water cost is not high or water consumption for manufacturing products is small, which is why the importance rating is Neutral.

W1.2

(W1.2) 水に関する以下の側面について、貴社事業全体でどの程度の割合を定期的に測定・モニタリングしていますか。

	操業地/施設/事業の比率 (%)	説明してください
取水 – 総取水量	100%	For the purposes of water management at individual production sites, water intake is measured and monitored using equipment such as flow meters at each intake point. Measurements are taken at all applicable production sites. However, this does not apply where water intake is managed by the landlord in accordance with the rental agreement at each location.
取水 – 水源別取水量	100%	For the purposes of water management at individual production sites, water intake is measured and monitored using equipment such as flow meters at each intake point. Measurements are taken

		<p>at all applicable production sites.</p> <p>However, this does not apply where water intake is managed by the landlord in accordance with the rental agreement at each location.</p>
取水の水質	100%	<p>With regard to the quality of withdrawn water, the quality of groundwater, industrial water and municipal water is analyzed. Examples of analysis items include the general bacterial population and E. coli count for groundwater and tap water (drinking water) and turbidity, pH, electrical conductivity, hardness, COD and T-N for industrial water (used for manufacturing products, generating steam and other purposes). Withdrawn water is analyzed at all production sites by determining the necessary analysis items and frequency (once a day, once a week, and so on) in accordance with the purpose of use.</p>
排水 – 総排水量	100%	<p>For the purposes of compliance with water discharge regulations at individual production sites, the volume of wastewater is measured and monitored using equipment such as flow meters at each wastewater point. This initiative is taken at all production sites.</p>
排水 – 放流先別排水量	100%	<p>Wastewater volumes discharged into each destination at individual production sites are measured and monitored using equipment such as flow meters. This initiative is taken at all production sites. Discharge destinations include a river, ocean, sewerage and external wastewater treatment facilities. The volume of water discharged into each destination is measured and recorded for compliance with water discharge regulations and monitoring of the wastewater treatment cost.</p>
排水 – 処理方法別排水量	100%	<p>Wastewater discharged at individual production sites and treated with each method is measured and monitored using equipment such as flow meters. This initiative is taken at all production sites. At production sites with wastewater treatment facilities, wastewater containing greater amounts of SS, COD, nitrogen, phosphorus and other pollutants than regulatory values is treated using a method such as sedimentation and activated sludge process. Therefore, the amount of wastewater is checked before and after treatment by each method so as to comply with emission concentration regulation and total volume regulation as wastewater regulations. At production sites where wastewater is treated externally or as sewage water, the amount of treated wastewater is checked</p>
排水の質 – 標準的排水基準別	100%	<p>Water discharge quality is analyzed and monitored by setting items in line with local laws and regulations of the area where each production site is located. Water discharge quality is also analyzed and monitored at overseas production sites by setting</p>

		items (such as COD and BOD) in line with local laws and regulations of the area or country where each production site is located.
排水の質 – 温度	76-99	Temperature of wastewater is measured at production sites that have drainage facilities on their premises and where wastewater is treated as sewage. Because the temperature of wastewater is measured at all large-scale production sites in Japan, the ratio of the volume of wastewater from these production sites to the total volume of wastewater from all subject production sites was calculated with the value for the former as the numerator and the value for the latter as the denominator. The percentage thus obtained was 95.2%.
水消費量 – 総消費量	100%	Water consumption is calculated based on the balance between water intake and wastewater at each production site.
リサイクル水/再利用水	51-75	Water is recycled at 29 of all the 52subject production sites. The ratio of the number of production sites where water is recycled to that of all subject production sites was calculated, with the value for the former as the numerator and the value for the latter as the denominator. The percentage obtained was 55.8%.
十分に機能し完全に管理された上下水道・衛生 (WASH) サービスを全従業員に提供	100%	Hygienic facilities are provided to ensure water is sufficiently safe to be used by all employees at each production site.

W1.2b

(W1.2b) 貴社事業全体で、取水、排水、消費された水それぞれの総量をお答えください。また、それらの量は前報告年と比較してどうでしたか？

	量 (メガリットル/年)	前報告年との比較	説明してください
総取水量	536,676	多い	Total withdrawals are calculated by aggregating measured values from the respective production sites. Total withdrawals for the previous fiscal year was 493,747 megaliters, which means the volume increased approx. 9% year on year. The difference from the previous fiscal year is considered to be an increase in cooling water applications due to an increase in plant operating rates and an increase in average temperature.
総排	503,182	多い	Total volume of wastewater is calculated by aggregating measured values from the respective production sites. The total volume for the previous fiscal year was 456,671 megaliters, which means the volume increased approx. 10% year on year. The difference from the previous fiscal year is considered

水量			to be an increase in cooling water applications due to an increase in plant operating rates and an increase in average temperature.
総消費量	33,494	少ない	Water consumption is calculated based on the balance between the total water intake at production sites and the total volume of wastewater at the sites. Water consumption in the previous fiscal year was 33,494 megaliters, which means it declined approx. which means the volume decreased approx. 10% year on year. The difference from the previous fiscal year is considered to be an increase in cooling water applications due to an increase in plant operating rates and an increase in average temperature.

W1.2d

(W1.2d) 水ストレス下にある地域から取水しているか否かを示し、その割合を記入してください。

	取水は水ストレス下にある地域からのものです	水ストレス下にある地域からの取水の割合	前報告年との比較	確認に使ったツール	説明してください
行 1	はい	1%未満	ほぼ同じ	世界資源研究所(WRI)が発表したアキダクト (AQUEDUCT (水管、送水路))	Following the elimination of the WBSCD GWT and the update of the WRI's AQUEDUCT Water Risk Atlas and WWF's Water Risk Filter data, a re-evaluation was conducted using the AQUEDUCT and Water Risk Filter. Areas with water stress were assessed according to Extremely high (> 80%) in the AQUEDUCT Water Risk Atlas Baseline water stress item and 4 or more of Quantity-Scarcity in the Water Risk Filter. As in the previous report, of the 52 production sites, 1 production site in India was categorized as a water-stressed area. The water comes from underground water in the Nimurana industrial area, where the water is produced. The water is supplied by the Rajasthan Industrial Development and Investment Corporation (RIICO). In the reporting year, 18 megalitres of water taken from water-stressed areas accounted for 0.003% of our company's total water intake, down approximately 20% from the previous year.

W1.2h

(W1.2h) 水源別の総取水量をお答えください。

	事業への関連性 (relevance)	量 (メガリットル/年)	前報告年との比較	説明してください
淡水の地表水(雨水、湿地帯の水、河川、湖水を含む)	関連性がない			Excluded as a water intake source
汽水の地表水/海水	関連する	431,834	多い	The subject water source is seawater and the reported value for the previous fiscal year was 383,975 megaliters, which means that the volume increased approx. 12% year on year. There are four subject production sites in Japan. The volume of seawater withdrawals increased at all production sites.
地下水 (再生可能)	関連する	1,834	大幅に少ない	The reported value for the previous fiscal year was 3,264 megaliters, which means the volume decreased approx. 44% year on year. The significant decrease was due to a decrease in production. There are 12 subject production sites in Japan and two subject overseas production sites. The volume of groundwater withdrawals decreased at seven production sites and increased at four sites, and overall is expected to enter a downward trend.
地下水 (非再生可能)	関連性がない			Excluded as a water intake source
随伴水/混入水	関連性がない			Excluded as a water intake source
第三者の水源	関連する	103,008	ほぼ同じ	Subject water sources are tap water and industrial water, which are mainly supplied by public suppliers. The reported value for the previous fiscal year was 106,507 megaliters, which means that the volume decreased approx. 3% year on year. There are 29 subject

			production sites in Japan and 22 subject overseas production sites. Water consumption decreased at 15 domestic and 13 overseas production sites, and increased at 13 domestic and 8 overseas production sites. Overall, the volume of water withdrawals from third party sources are expected to enter a downward trend.
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W1.2i

(W1.2i) 放流先別の総排水量をお答えください。

	事業への関連性(relevance)	量(メガリットル/年)	前報告年との比較	説明してください
淡水の地表水	関連する	31,371	少ない	The reported value for the previous fiscal year was 33,347 megaliters, which means that the volume decreased approx. 6% year on year. The decline is attributed to the fact that one of the company's production sites in Japan began to discharge all wastewater into sewerage. The value for the volume of wastewater was measured by using equipment such as flow meters. The volume is expected to enter a downward trend.
汽水の地表水/海水	関連する	440,308	多い	The reported value for the previous fiscal year was 392,028 megaliters, which means that the volume increased approx. 12% year on year. The value for the volume of wastewater was measured by using equipment such as flow meters. There are four subject production sites in Japan. The volume of wastewater decreased at one production site and increased at two sites, and overall the volume of wastewater discharged into the sea is expected to enter a downward trend.
地下水	関連性がない			Excluded as a discharge destination.
第三者の放流先	関連する	3,157	多い	Discharge destinations are sewage treatment facilities of local municipalities (in Japan), and the volume for the last year was 2,392 megaliters. The value for the volume of wastewater was measured by using equipment such as flow meters. The volume of wastewater is expected to remain almost unchanged.

W-CH1.3

(W-CH1.3) 貴社では、化学セクターにおける事業活動の水集約度を測定していますか？

はい

W-CH1.3a

(W-CH1.3a) 製品重量/数量でみた貴社の上位 5 製品について、化学セクターでの貴社活動に関連する以下の水集約度情報をご提供ください。

製品の種類

バルク有機化学品

製品名

5 products with high sales

水集約度の値 (m3)

2.96

分子：水に関する側面

総水消費量

分母

トン

前報告年との比較

多い

説明してください

The company manufactures various chemical products, and water intensity differs greatly depending on the type of process and manufacturing scale. Accordingly, data are disclosed by selecting five mainstay products of the company. The average water intensity of the five products reported last fiscal year was 2.8. It is slightly higher than the previous report.

Water intensity data are used as an indicator for considering present and future water risks in each manufacturing area based on the planned production volume, together with the result of the water stress evaluation of the area.

W1.4

(W1.4) 水関連問題について、貴社のバリューチェーン上でエンゲージメントを行っていますか。

はい、サプライヤーと

W1.4a

(W1.4a) サプライヤーのうち、水の使用量、リスク、管理について貴社へ報告するよう求めているところは、貴社サプライヤー全体のどの程度を占めますか。またそれは、貴社調達費全体でどの程度を占めていますか。

行 1

数値ごとのサプライヤーの割合

26-50

調達費全体における比率 (%)

26-50

この対象範囲となる根拠

The Mitsui Chemicals Group Purchasing Policy includes the “selection of suppliers from the viewpoint of ‘sustainable procurement’.” One of the Group’s targets in the 2025 Long-term Business Plan is “Supplier sustainability assessments and improvement support (sustainable procurement ratio of 70% or more).” Using a self-assessment questionnaire (SAQ) form that was created by the UN Global Compact Network Japan, the company requests that its suppliers answer questions about the status of compliance with water-related laws and regulations, efficient use of water resources, the presence or absence of targets and others.

エンゲージメントがもたらすインパクトと成果の評価方法

The Mitsui Chemicals Group requests its suppliers to follow the Mitsui Chemicals Group Sustainable Procurement Guidelines. Their contents are concretized in the SAQ (self-assessment questionnaire form from the UN Global Compact Network Japan). The Group requests that its suppliers answer the questionnaire, and based on their answers, the Group provides feedback and support for improvements. The Group evaluates their answers to the SAQ on a three-point scale and helps them make improvements, with an aim to achieve sustainable procurement.

コメント

Our company has selected appropriate suppliers based on the 3-year purchase history since FY2014. The top 90% of suppliers are listed in descending order of purchase price. The total number of suppliers covered is 354. By fiscal 2018, we had received responses from approximately 90% of our suppliers, or 307 companies. The sustainable procurement rate of suppliers increased from 39% to 44%. Based on the results of the responses, feedback and improvement support are provided to suppliers.

W1.4b

(W1.4b) その他の水関連サプライヤーエンゲージメントの詳細を記入します。

協働の種類

新人研修とコンプライアンス

協働の具体的内容

ウォーターセキュリティに関する自社行動規範を順守するための要件

数値ごとのサプライヤーの割合

76-100

調達費全体における比率 (%)

76-100

協働の対象範囲の根拠

The company sends reminder letters, which contain the following information, to approx. 2,600 suppliers to the Purchasing Division.

- Examples of previous discrepancies
- Request items for each supplier

Compliance with laws and social norms from a sustainable standpoint

Avoid engaging in direct price negotiations with requesting divisions regarding transactions overseen by the Purchasing Division

Formulate BCPs (business continuity plans)

- The Mitsui Chemicals Group Purchasing Policy details and Risk Hotline reminder

エンゲージメントがもたらすインパクトと成果の評価方法

The reminder letters include compliance with laws and social norms and formulation of BCPs. It is therefore believed that the letters encourage suppliers to build resilience related to water.

コメント

URL of the website where the information is provided

<https://jp.mitsuichemicals.com/en/sustainability/society/supplier/deal.htm>

W2. 事業への影響

W2.1

(W2.1) 貴社はこれまでに、水関連の悪いインパクトを被ったことはありますか。

いいえ

W2.2

(W2.2) 貴社は報告年に、水関連の規制違反を理由として罰金、法的命令、その他のペナルティを科されましたか。

いいえ

W3. 手順

W-CH3.1

(W-CH3.1) 貴社では、化学セクターでの事業活動に関連し、水の生態系や人間の健康に有害となりうる潜在的水質汚染物質を、どのように特定、分類していますか。

To contribute to the sustainable development of society, the Mitsui Chemicals Group develops its business activities in accordance with its Corporate Mission, Action Guidelines, and Responsible Care Policy. Based on legal compliance not only for chemical substances and chemicals, but also for all the products handled, the Group continually works to improve safety, health, environmental platforms and quality as well as to maintain favorable communications with the stakeholders and corporate entities involved. Responsible care of the Group includes process safety and disaster prevention, occupational health and safety, quality, logistics, environmental protection, and product stewardship. For product stewardship, the Group has put internal rules in place regarding environmental safety and quality management guided by its Responsible Care Policy. These regulations help the Group to traverse the increasingly stringent laws and regulations of each country and provide a roadmap for conducting surveys of products containing chemical substances, conveying information to stakeholders including customers, ensuring the health of consumers, customers, and employees, and reducing its environmental impact. The Group also conducts a quantitative analysis of water pollutants by monitoring and analyzing the substances specified by laws and regulations at manufacturing plants, wastewater treatment plants, and other facilities. In addition, for the value chain where the Group's products are used, the Group provides toxicity information about chemical substances via safety data sheets (SDSs), thereby informing the value chain of the impact of such substances on people and ecosystems. The SDSs also contain information about applicable laws as well as emergency measures to be taken in the event of a leakage.

<https://www.mitsuichem.com/en/csr/rc/chemicals/index.htm>

Production sites of the Mitsui Chemicals Group have acquired/are working to acquire ISO 14001 certification, which is environmental management system standards that includes requirements for the prevention of water pollution.

<https://www.mitsuichem.com/en/csr/rc/policy/audit.htm>

W-CH3.1a

(W-CH3.1a) 潜在的水質汚染物質が水の生態系や人間の健康に及ぼす悪影響を、貴社ではどのように最小限に抑えているかを説明してください。化学セクターでの事業活動に関連する潜在的水質汚染物質を、最大 10 種類まで報告してください。

潜在的水質汚染物質	バリ ユ ー チ	水質汚染物質と潜在的影響の詳細	管理 手続 き	説明してください

	エ ー ン 上 の 段 階			
Chemical Oxygen Demand (COD) Biochemical oxygen demand (BOD)	直 接 操 業 サ プ ラ イ チ ェ ー ン	Wastewater with a high level of COD or BOD contains many oxidized organic substances and oxygen is consumed when the organic substances are biodegraded, resulting in a decreased concentration of oxygen in the water. This makes it impossible for fish and other aerobic organisms to survive in the water. Further, the generation of malodorous substances is caused by anaerobes, negatively impacting the ecosystem. Accordingly, COD and BOD are controlled under effluent standards in most countries. The same impacts are given on the value chain as well.	廃 液 品 質 基 準 の 順 守 流 出 、 浸 出 、 漏 出 の 防 止 策	COD and BOD are controlled under wastewater standards of the individual production sites based on legislation, values agreed with local communities, and others. Therefore, each production site needs to control the values of COD and BOD to keep them under the standard values and take measures for various production facilities and wastewater facilities. Each production site takes diverse measures, including separation of water from wastewater load through the management of rainwater and process water in different systems, monitoring for the detection of leakage abnormality with TOC meter, installation of wastewater treatment facilities that use microorganisms, and daily analysis of wastewater. In addition, wastewater treatment is optimized at each production site for controlling COD and BOD, with measures such as collecting wastewater data in R&D and forecasting changes in wastewater load reflecting the production plan of the production site.
Total nitrogen, ammoniacal nitrogen, nitrate nitrogen, nitrite nitrogen	直 接 操 業 サ プ ラ	When organic substances and phosphorus coexist in wastewater with high nitrogen content, these components help accelerate the proliferation of microorganisms that live on these components, which consume oxygen in the water, resulting in a decreased	廃 液 品 質 基 準 の 順 守 流 出 、	Nitrogen components are controlled under wastewater standards of the individual production sites based on legislation, values agreed with local communities, and others. Therefore, each production site needs to control the values of

	イ チ エ ー ン	<p>concentration of oxygen in the water. This makes it impossible for fish and other aerobic organisms to survive in the water. Further, generation of malodorous substances is caused by anaerobes, which negatively impacts the ecosystem.</p> <p>Accordingly, nitrogen is controlled under effluent standards in most countries. Nitrogen other than the total nitrogen is also controlled because nitrogen has various forms (ammonia, nitrous acid, and nitric acid). The same impacts are given on the value chain as well.</p>	浸 出、 漏 出 の 防 止 策	<p>nitrogen components to keep them under the standard values and take measures for various production facilities and wastewater facilities.</p> <p>For example, the ammonia production site has introduced a wastewater treatment facility dedicated to nitrogen treatment and uses it to eliminate nitrogen components from wastewater, because wastewater from this plant has high nitrogen content and is difficult to treat with the ordinary active sludge process. In addition, at the production sites in general, the nitrogen content of wastewater is measured prior to treatment, a carbon source such as methanol is added according to the content, and nitrogen content of the wastewater is reduced using the proliferation of activated sludge.</p> <p>Nitrogen content of wastewater is controlled by taking various measures such as the daily analysis of wastewater.</p>
Total phosphorus, phosphate phosphorus	直 接 操 業 サ プ ラ イ チ エ ー ン	<p>When organic substances and nitrogen components coexist in wastewater with high phosphorous content, these components help accelerate the proliferation of microorganisms that live on these components, which consume oxygen in the water, resulting in a decreased concentration of oxygen in the water. This makes it impossible for fish and other aerobic organisms to survive in the water. Further, generation of malodorous substances is caused by anaerobes, which negatively impacts the ecosystem.</p> <p>Accordingly, phosphorous is controlled under effluent standards in most countries. Phosphorous also has various forms (HPO4²⁻,</p>	廃 液 品 質 基 準 の 順 守 流 出、 浸 出、 漏 出 の 防 止 策	<p>Phosphorous components are controlled under wastewater standards of the individual production sites based on legislation, values agreed with local communities, and others.</p> <p>Therefore, each production site needs to control the values of phosphorous components to keep them under the standard values and take measures for various production facilities and wastewater facilities. For example, at the production sites in general, phosphorous content of wastewater is measured prior to treatment, a carbon source such as methanol is added according to the content, and phosphorous content of the wastewater is reduced using the</p>

		H ₂ PO ₄ ⁻ , and H ₃ PO ₄). Therefore, in some countries, phosphate-phosphorus (PO ₄ ³⁻), instead of total phosphorous, is subject to control. The same impacts are given on the value chain as well.		proliferation of activated sludge. Phosphorous content of wastewater is controlled by taking various measures such as the daily analysis of wastewater
suspended solid (SS)	直接 操 業 サ プ ラ イ チ ェ ー ン	Suspended matter and suspended solids (SS) subject to control are solid matter dispersed in water whose particle diameter is 2 mm or larger. If wastewater contains a large amount of SS, light transmission is obstructed and photosynthesis of microorganisms is affected. In addition, organic SS accelerate the proliferation of microorganisms for which the components serve as sources of nutrition. Such microorganisms consume oxygen in the water, resulting in a decreased concentration of oxygen in the water. This makes it impossible for fish and other aerobic organisms to survive in the water. Further, generation of malodorous substances is caused by anaerobes, negatively impacting the ecosystem. Suspended matter and SS may also kill fish by adhering directly to their gills. Accordingly, suspended matter and SS are controlled under effluent standards in most countries. The same impacts are given on the value chain as well.	廃液 品質 基準 の順 守 流 出、 浸 出、 漏 出 の防 止策	SS components are controlled under wastewater standards of the individual production sites based on legislation, values agreed with local communities, and others. Therefore, each production site needs to control the values of SS components to keep them under the standard values and take measures for various production facilities and wastewater facilities. For example, SS are eliminated by using filters at plants with wastewater containing many SS. At the production sites in general, they are eliminated by applying coagulating sedimentation prior to biological treatment or in a settling tank for biological sludge separation. SS concentration of wastewater is controlled by taking various measures, such as daily analysis of wastewater.
phenols	直接 操 業 サ プ ラ イ	Phenol is the collective name of substances with hydroxyl groups attached directly to benzene rings. Phenol becomes chlorophenol through a reaction with chlorine and causes drinking water to have an abnormal odor and taste. It also causes toxicity of active sludge in wastewater treatment facilities, and therefore is controlled under	廃液 品質 基準 の順 守 流 出、 浸	Phenol is controlled under wastewater standards of the individual production sites based on legislation, values agreed with local communities, and others. Therefore, each production site needs to control the value of phenol to keep it under the standard values and take measures for various production

	チ ェ ー ン	wastewater standards in many countries.	出、 漏出 の防 止策	facilities and wastewater facilities. For example, plants handling solutions with high phenol concentration have dikes, and valves for discharging wastewater to the outside are locked at such plants. In addition, plant wastewater with high phenol content is treated by degrading phenol with heating equipment or combustion equipment at each plant.
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W3.3

(W3.3) 貴社では水関連のリスクの評価を実施していますか。

はい、水関連のリスクを評価しています

W3.3a

(W3.3a) 水関連のリスクの特定と評価の手続きとして最も当てはまるものを選択してください。

直接操業

対象範囲

全部

リスク評価手順

その他の全社的リスク評価システムの一部として水リスクを評価します

評価の頻度

年1回

どの程度の将来のリスクまで考慮しているか

6年超

利用しているツールと手法の種類

市販のツール

その他

利用しているツールと手法

世界資源研究所(WRI)が発表したアキダクト (AQUEDUCT (水管、送水路))

世界自然保護基金 (WWF) 水リスクフィルター (Water Risk Filter)

コメント

Water risks are assessed using market tools (Aqueduct and Water Risk Filter) based on data about present and future water-related risks for domestic production sites and production sites of domestic and overseas affiliates. Water stress of each area is evaluated mainly by using Aqueduct and WRF to determine whether it falls into a water stressed area. Further, risks in water stressed areas are evaluated based on the volume of water withdrawals and water intensity of products.

サプライチェーン

対象範囲

なし

コメント

With regard to the supply chain, assessment that is similar to the assessment of direct operations is planned to be made in the future based on the purchase value and purchase quantity.

バリューチェーン上のその他の段階

対象範囲

なし

コメント

Identification of risks in the value chain (downstream) is planned. Subjects are to be selected in consideration of results of importance analysis of the company's businesses by the TCFD while the method will be based on the results of the assessment of water risks in direct operations.

W3.3b

(W3.3b) 貴社の水関連のリスク評価では、全体的状況に関わる以下のどの問題が考慮されていますか。

	関連性および組み入れ	説明してください
河川流域/集水地における取水可能な水資源量	関連性があり、常に評価に含めている	Water is essential to operations at production sites. Checks are carried out on the impact of changes in plant operating rates on water usage and potential water usage. Potential water usage in the future is assessed using Aqueduct. Water usage is also essential for the company's business activities and its activities in the value chain. Above all, water usage is extremely important for product manufacturing activities and influential to such activities. The company checks the current and future status of water stress of each production site based on its location information, by using tools such as Aqueduct and WRF. The company then identifies the level of

		<p>impact on the business in the production area based on the future changes in the required water volume rather than the present volume of water withdrawals and water intensity of each product. For example, according to Aqueduct and WRF, water stress is expected to increase at one of the company's production sites in India. However, a serious risk was confirmed to be unlikely in light of the water intensity of manufactured products and changes in the production volume.</p>
河川流域/集水地における水質	関連性があり、常に評価に含めている	<p>Water is essential to operations at production sites. Water quality is also monitored and analyzed to check for risks. Water is important for the company's business activities, especially for product manufacturing. Required items and level of water quality vary according to the purpose of use of water. Processes including pH adjustment, desalination, and distillation are required for improving the water quality, which generates treatment cost. Therefore, water quality influences the energy efficiency in the manufacturing process, product quality, cost of distillation and others, which is why the company analyzes the quality of water from each source at each production site and monitors it constantly.</p>
河川流域/集水地における水資源に関連したステークホルダー間対立	関連性があるが、評価に含めていない	<p>Industrial water and seawater account for a significant percentage of water intake sources at production sites. Industrial water supplies are secured in accordance with an agreement with the supplier. If a water shortage is forecast, the supplier will adjust volumes along with other users so as to avoid any conflict with other stakeholders. Seawater on the other hand is largely unaffected by water shortages and poses no risk of conflict with stakeholders. Assessments are carried out using WRI Aqueduct, to check that there are no potential issues for the future. If the situation changes, such changes will be factored into assessments.</p>
主要商品/原材料に対して水が持つ意味	関連性があり、常に評価に含めている	<p>There are no issues with current water volumes or water quality, as they are not having any significant impact on individual production sites. If the situation changes, such changes will be factored into assessments. Assessments are carried out to determine use of water resources at each production site using WRI Aqueduct, to check that there are no potential issues for the future.</p>
水関連の規制枠組み	関連性があり、常に評価に	<p>Wastewater volumes and quality are monitored in line with local wastewater regulations and agreed values at the local level at each production site. Water-related costs are included as a factor in assessments because they affect product manufacturing costs. On receipt of information relating to revised wastewater</p>

	含めている	legislation, appropriate measures are taken if deemed necessary. Information is monitored with regard to revised wastewater legislation.
生態系および動植物生息環境の状態	関連性があり、時々評価に含めている	Business activities at each production site are assumed to impact the biodiversity of the surrounding area. Because the level of biodiversity risks varies among production sites, biodiversity of the area around each production site is assessed by collecting information about the presence/absence of the conservation area and priority conservation area and the inhabitability of endangered species and applying the Integrated Biodiversity Assessment (IBAT).
全従業員が、適正に機能し完全に管理された上下水道・衛生 (WASH) サービスを利用できること	関連性はないが、評価に含めている	It is not factored into water assessment risks because WASH services have been secured for all employees at domestic all production sites.
全体的状況に関わるその他の問題 (具体的に教えてください)	考慮していない	no comment

W3.3c

(W3.3c) 貴社の水関連のリスク評価では、以下のどのステークホルダーが考慮されていますか。

	関連性および組み入れ	説明してください
顧客	関連性があるが、評価に含めていない	The company produces a large number of products, and therefore has a large number of customers. As it would be difficult to obtain water-related information from all customers, it is not possible to determine water risks.
従業員	関連性があるが、評価に含めていない	Water usage by employees remains within pre-determined boundaries and poses a low risk. It is therefore not a primary consideration when conducting water risk assessments.
投資家	関連性があり、時々評価	The company publishes data on water contaminants at each production site, via its website and other such channels, in the interests of water-related environmental preservation. It also publishes reports indicating that levels fall significantly below legal requirements, as part of its efforts to

	に含めている	provide information to investors. Moreover, in January 2019, the Group declared its endorsement of the TCFD recommendations. As a chemical company, the company is approaching the issue of climate change with sincerity, working to deepen understanding of the opportunities and risks that impact its business operations, and endeavoring to proactively disclose details of its initiatives to stakeholders outside the company, including investors.
地域社会	関連性があるが、評価に含めていない	The company aims to maintain facilities that are always open to the local community. It therefore shares environmental information (including water) and exchanges opinions with local people at each production site, and makes every effort to work in harmony with the local area.
NGO	関連性がない。理由の説明	he company aims to maintain facilities that are always open to the local community. It therefore shares environmental information (including water) and exchanges opinions with local people at each production site, and makes every effort to work in harmony with the local area.
河川流域/集水地におけるその他の水利用者	関連性がない。理由の説明	There is no conflict with other water users in using water at production sites, including water intake and wastewater. The company has therefore determined whether or not this is a relevant factor.
規制機関	関連性があり、常に評価に含めている	Any violation of wastewater legislation would directly result in operations being suspended. The company therefore has to carry out risk assessments, based on the present and future, at each production site, taking into account water-related legal information from the national, prefectural and regulatory authorities.
河川流域管理当局	関連性があり、常に評価に含めている	The company signs water-related environmental preservation agreements with prefectural and municipal authorities at each production site whenever requested to do so at the local level. Any violation of such agreements would result in operations at the relevant production site being suspended
地域レベルの法定の特殊利益集団	関連性がない。理由の説明	They are not evaluated because there is no certified local special interest group.
サプライヤー	関連性があるが、評価に含めていない	The company produces a large number of products, and therefore has a large number of suppliers. As it would be difficult to obtain water-related information from all suppliers, it is not possible to determine water risks.

地域レベルの水道事業者	関連性があるが、評価に含めていない	Industrial water in water intake, and discharge in wastewater, are relevant to businesses in each area. Risks relating to industrial water and discharge pose direct risks to operations at each production site.
その他のステークホルダー (具体的にお答えください)	考慮していない	no comment

W3.3d

(W3.3d) 貴社の直接操業およびバリューチェーンの他の段階における水関連のリスクの特定、評価、それへの対応に用いている、貴社のプロセスを具体的に説明してください。

Water risks are assessed, firstly, using WRI's Aqueduct Water Risk Atlas and the WWF's Water Risk Filter to determine whether each production site qualifies as being in a water stressed area. Water stressed areas are those which are rated as Extremely high in Aqueduct's "Baseline water stress" section and qualify for 4 or above in the WRF Quantity – Scarcity category. When an area qualifies as a water stressed area, the water risk level is judged based on comparisons of water intake volume, water consumption volume, and water intensity per production type at the site with internal standard criteria. As a reference for judgements regarding water risks, the company also takes into account biodiversity risks using the Integrated Biodiversity Assessment Tool (IBAT) for its assessments of its production sites. When the company judges the water risk to be high, it arranges for a detailed on-site water risk assessment to be conducted by an external body, and considers and implements response measures as necessary.

With regard to water security, since this issue relates to risks and opportunities to the company's business operations as a consequence of climate change, the company assesses the impact of physical risks and risks relating to the transition to a low-carbon society due to future climate change (from 2050 onwards) in accordance with the TCFD framework. The content of these assessments includes the impact of storm and flood damage due typhoons and floods; the impact of droughts and decreases in groundwater volume on business operations; the impact of the introduction of water usage taxes, such as water resource taxes and taxes accompanying effluent / wastewater load; the impact of site closure due to water shortages; criticism from citizen's organizations and the media; and legal action. The company is currently using various scenarios to conduct its risk assessments. For those items found, as a result of these assessments, to have a major impact on business operations, the company plans to hold internal discussions and reflect the decisions made in its future strategies. The company also plans to consider water risk assessments of its value chain (suppliers and customers, etc.) using scenario analysis under the TSCF framework.

The Mitsui Chemicals Group manages water-related risks through its Responsible Care and Risk & Compliance committees. The Responsible Care Committee discusses the need for water risk countermeasures and reviews the progress of strategies for driving environmental

conservation activities, including those relating to water. The Risk & Compliance Committee quickly identifies various potential risks to the Group, and engages in risk management to prevent crises by dealing with such risks at an early stage. Details of deliberations at Responsible Care and Risk & Compliance committee meetings are reported to the Management Committee, where they are discussed further as needed. In particular, climate change—which includes water security—is a core ESG theme for the group’s management, the direction of which is discussed by the Board of Directors, ESG Promotion Committee and other meeting bodies, and incorporated into the strategies of each division.

Links

Sustainability Management System:

https://jp.mitsuichemicals.com/en/sustainability/mci_sustainability/management/index.htm

Climate Change Policy:

https://jp.mitsuichemicals.com/en/sustainability/mci_sustainability/climate_change/policy.htm

W4. リスクと機会

W4.1

(W4.1) 貴社ではこれまで、事業に財務または戦略面で重大な影響を及ぼす可能性のある特有の水関連のリスクを特定したことがありますか？

はい、直接操業においてのみ

W4.1a

(W4.1a) 貴社では、事業に及ぶ財務または戦略面での重大なインパクトを、どのように定義していますか。

Water security is a key item relating to the company’s response to climate change, which is one of the company’s key issues, and has been incorporated into the Mitsui Chemicals Group Climate Change Policy which targets activities up until the year 2050. The company considers that water security, mainly in its application, links to opportunities and risks to realizing a healthy and sound society resistant to climate change risks.

It is necessary for the company to identify and assess opportunities and risks that impact its sustainability, and to reflect major opportunities and risks in its strategies moving forward. In its definition of business risks, the company considers two main types of risks: those that have a negative impact on short and long-term business management targets, and those that have a negative impact on sustainable business management.

Water-related risks include declines in production activity as a result of damage to equipment and facilities due to storm and flood damage due to typhoons, floods and other natural disasters; declines in production activity as a result of restrictions on water usage due to drought; and declines in product competitiveness as a result of water cost increases for both water intake and wastewater. Moving forward, the company plans to estimate the financial impact of these risks based on probability of their occurrence in the future and estimates of the amount of damage in monetary terms, in line with the TCFD recommendations. The planned scope of this is for the entire value chain (including directly operated sites, supply chains and

customers). For assessments of facilities with water-related risks that have the possibility to cause a major impact to the company's business operations, in terms of either financial or strategic aspects are conducted as follows. First, the Aqueduct and WRF tools are used to check whether or not the area qualifies as a water stressed area. For those areas that qualify as water stressed areas, the company ascertains the water risk level for the area in terms of water consumption and water intensity. For those areas with high water risk levels the company assesses potential impact, from the importance of the site in terms of net sales for the production site and its strategic business importance, to its effects on business from financial impact due to stoppage of operation or the need for investment.

W4.1b

(W4.1b) 貴社の施設のうち、事業に財務または戦略面で重大なインパクトを及ぼす可能性のある水関連リスクをもつ施設は、合計でいくつありますか。またそれは貴社の施設全体のどの程度の割合を占めますか。

	水リスクのある施設の総数	全施設に対する比率 (%)	コメント
行 1	1	1-25	At this current stage in its water risk assessments, the company judges that there are no water risks to its operations. With regard to future physical risks, the company has used the IPCC-RCP8.5 scenario with representative production bases in eight areas globally (Japan, China, Southeast Asia, India, the United States, Europe, Brazil and Mexico) to identify 47 locations of high importance in terms of sales, and analyzed and assessed risks of flood, drought and temperature increase for those locations. With regard to water-related disasters, there is a trend towards high levels of risk in Japan, China, Southeast Asia and India, and it is predicted that the frequency with which such disasters occur will increase in the future for many areas. With regard to droughts, there is a trend of stringency / stress for water supplies in India and Mexico. In the future this trend is expected to increase in severity, in Singapore and Thailand, India and Mexico. Based on these results, one production base in India qualifies as being located in a region with possible water risks. The company plans to conduct detailed water risk assessments for this production site in the future.

W4.1c

(W4.1c) 河川流域別に、貴社の事業に重大な財務上または戦略上の影響を及ぼす可能性のある水関連のリスクにさらされている施設の数と割合はいくらですか、また、これらの施設に関連する、事業への潜在的影響とはどのようなものでしょうか。

国/地域および河川流域

インド

ガンジス-ブラマプトラ

水リスクのある施設の数

1

全施設に対する比率 (%)

1-25

貴社の世界全体での総収入に対し、潜在的影響下にあるものの比率 (%)

1%未満

コメント

no comment

W4.2

(W4.2) 貴社の直接操業において、事業に対し財務または戦略面で重大なインパクトを及ぼす可能性があるとして特定されたリスクと、それへの貴社の対応について、具体的に説明してください。

国/地域および河川流域

インド

ガンジス-ブラマプトラ

リスクの種類と主なリスク要因

物理的要因

洪水

主要潜在的影響

生産能力の減少または混乱

企業固有の内容の説明

While this production location does qualify under the company's internal water risk assessment as being located in a water stressed area, the assessment based on water consumption and water intensity of products manufactured there is that the water risk is currently not high. However, with regard to future water risks, it has been verified that the possibility of flash floods and the frequency of flooding will increase as a consequence of climate change.

期間

6 年超

潜在的影響の程度

低い

可能性

可能性が低い

財務上の潜在的影響額をご回答いただくことは可能ですか？

いいえ、このデータはありません

財務上の潜在的影響額 (通貨)

財務上の潜在的影響額 – 最小 (通貨)

財務上の潜在的影響額 – 最大 (通貨)

財務上の影響についての説明

Net sales from this production location currently account for less than 1% of overall net sales for the Group, to the impact of risks at this location is considered small. However, the company believes that the size of this impact will increase in the future due to factors such as the expansion of production as a result of market growth in the area.

リスクへの主な対応

適正評価の強化

対応の詳細

In terms of the company's response at the current time, the company plans to conduct detailed water risk assessments at the production location. If it is found that a response is necessary, based on the results of these assessments and further water risk assessments, then the company plans to consider and implement appropriate response measures.

対応の費用

1,000,000

対応の費用についての説明

The cost of the response will be calculated as water risk assessment expenses charged by an external body.

W4.2c

(W4.2c) 貴社では、バリューチェーン(直接操業を超える)において、財務または戦略面で重大なインパクトを及ぼす可能性のある水リスクに曝されていないと考える理由は何ですか。

主な理由	説明してください
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行 1	まだ 評価 して いな い	The Mitsui Chemicals Group manufactures over 200 types of products. The number increases significantly when the products are sorted by brand. Naturally, there is a large amount of raw materials for the products upstream of the value chain, as with the number of customers downstream of the value chain. Accordingly, it is necessary to create criteria for selecting subjects of the assessment and conduct the assessment starting with subjects that are likely to have a significant impact on the Group. Therefore it is assumed that there are companies for which water is important in the value chain. However, this assessment has yet to be made.
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W4.3

(W4.3) 貴社ではこれまで、事業に財務または戦略面で重大なインパクトを及ぼす可能性のある水関連機会を特定したことがありますか。

はい、機会を特定し、一部/すべてが実現しつつあります

W4.3a

(W4.3a) 貴社の事業に財務または戦略面で重大なインパクトを及ぼす可能性のある機会の実現方法について、具体的に説明してください。

機会の種類

製品およびサービス

主な水関連機会

水資源に関する製品使用の影響低下

企業に特化した詳細と、機会実現の戦略

Cloth diapers require washing and therefore consume a lot of water. However, paper diapers do not require washing, leading to the reduction of water consumption. They also contribute to reducing the wastewater load because no detergent is required. The company manufactures nonwoven fabrics as raw materials for paper diapers and holds large market shares in Japan and Asia. Accordingly, it has set the strengthening of products for paper diapers and other hygiene products in its business strategies including the Long-term Business Plan.

機会実現までの推定期間

6 年超

財務上の潜在的影響の程度

中程度

財務上の潜在的影響額をご回答いただくことは可能ですか？

はい、単一の推計値

財務上の潜在的影響額 (通貨)

50,000,000,000

財務上の潜在的影響額 – 最小 (通貨)

財務上の潜在的影響額 – 最大 (通貨)

財務上の影響についての説明

Calculated based on the revenue by business targeted under the 2025 Long-term Business Plan of the Mitsui Chemicals Group .

機会の種類

製品およびサービス

主な水関連機会

水資源に関する製品使用の影響低下

企業に特化した詳細と、機会実現の戦略

The food and packaging business is included in the five business domains for realizing the society that the Mitsui Chemicals Group aims to realize. In this business, the Group provides film for maintaining food freshness as a solution to food problems. By keeping food fresh, the film contributes to reducing food loss and food waste, thereby helping to reduce the amount of water used for fruits, vegetables, grain, and meat. Under the Long-term Business Plan of the Mitsui Chemicals Group, the solutions business for maintaining food quality is included in the list of new businesses that the Group aims to create.

機会実現までの推定期間

6 年超

財務上の潜在的影響の程度

中程度

財務上の潜在的影響額をご回答いただくことは可能ですか？

はい、単一の推計値

財務上の潜在的影響額 (通貨)

30,000,000,000

財務上の潜在的影響額 – 最小 (通貨)

財務上の潜在的影響額 – 最大 (通貨)

財務上の影響についての説明

Calculated based on the revenue by business targeted under the 2025 Long-term Business Plan of the Mitsui Chemicals Group .

機会の種類

製品およびサービス

主な水関連機会

新しい製品/サービスの売上

企業に特化した詳細と、機会実現の戦略

The next-generation business is included in the five business domains for realizing the society that the Mitsui Chemicals Group aims to realize. One initiative of the next-generation business is the provision of a resource-saving crop cultivation system, which enables a 30% to 50% reduction of water consumption compared to drip irrigation systems that feature low water consumption, while also enabling the crop yield to increase 1.3 to 1.5 times. This product is believed to contribute to solving food shortage resulting from population increase and water shortage for cultivation in areas with high levels of water stress.

機会実現までの推定期間

6 年超

財務上の潜在的影響の程度

低度—中程度

財務上の潜在的影響額をご回答いただくことは可能ですか？

はい、単一の推計値

財務上の潜在的影響額 (通貨)

10,000,000,000

財務上の潜在的影響額 – 最小 (通貨)

財務上の潜在的影響額 – 最大 (通貨)

財務上の影響についての説明

Calculated based on the revenue by business targeted under the 2025 Long-term Business Plan of the Mitsui Chemicals Group .

機会の種類

製品およびサービス

主な水関連機会

既存の製品/サービスの売上増

企業に特化した詳細と、機会実現の戦略

An affiliated company of the Mitsui Chemicals Group sells materials for the infrastructures for disaster prevention and reduction and construction methods featuring the use of the materials. Examples of the products include materials for restoring slopes collapsed due to heavy rain, ones for emergency restoration of collapsed levees and ones for preventing coastal recession caused by the sea level rise.

These products enable the prevention of damages from increasing heavy rain and river flooding caused by climate change and increasing inundation resulting from the sea level rise due to global warming. They also enable early recovery from damages caused by such disasters. It is assumed that these materials will be the proof of the Mitsui Chemicals Group's contribution to addressing global warming caused by climate change as products for tackling those risks. Reflection of these products in the strategy for tackling climate change is being considered.

機会実現までの推定期間

6 年超

財務上の潜在的影響の程度

低度—中程度

財務上の潜在的影響額をご回答いただくことは可能ですか？

はい、単一の推計値

財務上の潜在的影響額 (通貨)

10,000,000,000

財務上の潜在的影響額 – 最小 (通貨)

財務上の潜在的影響額 – 最大 (通貨)

財務上の影響についての説明

Calculated based on the revenue by business targeted under the 2025 Long-term Business Plan of the Mitsui Chemicals Group .

W5. 施設レベルの水報告

W5.1

(W5.1) W4.1c で挙げた各施設について、地理座標、水会計データ、前報告年との比較内容を記入してください。

施設参照番号

施設 1

施設名 (任意)

mobility1

国/地域および河川流域

インド

ガンジス-ブラマプトラ

緯度

27.97

経度

76.38

水ストレス下にある地域に所在

はい

当該施設における総取水量(メガリットル/年)

18.17

前報告年との総取水量の比較

少ない

雨水、湿地帯の水、河川、湖水を含む淡水の地表水からの取水量

0

汽水の地表水/海水からの取水量

0

地下水からの取水量 - 再生可能

18.17

地下水からの取水量 - 再生不可能

0

随伴水/混合水からの取水量

0

第三者水源からの取水量

0

当該施設における総排水量(メガリットル/年)

0

前報告年との総排水量の比較

ほぼ同じ

淡水の地表水への排水

0

汽水の地表水/海水への排水

0

地下水への排水

0

第三者の放流先への排水

0

当該施設における水総消費量(メガリットル/年)

18.17

前報告年との総消費量の比較

少ない

説明してください

Water is mainly used for cooling, and is recycled. For this reason, consumption is due to evaporation during recycling.

W5.1a

(W5.1a) W5.1 で挙げた施設について、外部の検証を受けている水データの比率をお答えください。

取水 - 総取水量

検証率 (%)

76-100

利用した基準や方法論は何ですか。

The data were verified by an external organization based on the AA1000 Assurance Standard. An assurance report has been provided.

取水 - 水源別取水量

検証率 (%)

76-100

利用した基準や方法論は何ですか。

The data were verified by an external organization based on the AA1000 Assurance Standard. An assurance report has been provided.

取水量 - 水質

検証率 (%)

検証していない

排水 – 総排水量

検証率 (%)

検証していない

排水 – 放流先別排水量

検証率 (%)

検証していない

排水 – 処理方法別排水量

検証率 (%)

検証していない

排水の質 – 標準的廃液パラメータ別

検証率 (%)

76-100

利用した基準や方法論は何ですか。

COD and BOD were tested as items of water discharge quality.

The data were verified by an external organization based on the AA1000 Assurance Standard. An assurance report has been provided.

排水の質 – 温度

検証率 (%)

検証していない

水消費量 – 総消費量

検証率 (%)

検証していない

リサイクル水/再利用水

検証率 (%)

検証していない

W6. ガバナンス

W6.1

(W6.1) 貴社には水に関する企業方針がありますか？

はい、水に関する企業方針があり、文書化して公開しています

W6.1a

(W6.1a) 貴社の水に関する企業方針の適用範囲と内容について、最もよくあてはまるものを選択してください。

スコープ	内容	説明してください
行 1 全 社 的	事業 が水 に依 存し てい るこ との 説明 事業 が水 に影 響を 及ぼ すこ との 説明 規制 順守 にと どま らな い、 それ 以上	Water-related policy of the Mitsui Chemicals Group is as described below. This policy is also posted on the Group's website. https://www.mitsuichem.com/en/csr/rc/environment/aquatic_environment.htm In addition, the Mitsui Chemicals Group Purchasing Policy includes "4.CSR-oriented selection," which says, "When selecting suppliers, we will give priority to and seek to build stronger partnerships with companies that satisfy the following requirements." Therefore, the Group clearly states that it takes action to protect the environment and ensure safety. To promote CSR procurement, the Group has adopted the self-assessment questionnaire (SAQ) on CSR procurement that was created by the UN Global Compact Network Japan supply chain subcommittee, which includes topics on 10 laws of Japan related to water, wastewater control, and water use efficiency.

	の誓約	
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W6.2

(W6.2) 貴社内では、水関連問題について取締役会レベルの監督が実施されていますか。

はい

W6.2a

(W6.2a) 取締役会における水関連問題の責任者の職位をお答えください (個人の名前は含めないでください)。

個人の職位	説明してください
その他の経営幹部役員	Water-related issues are handled as a part of environmental protection among responsible care activities. Officer in charge of the Responsible Care Committee (CTO) takes responsibility to report the contents of deliberations and discussions by the Responsible Care Committee to the Management Committee, thereby ensuring the management's commitment to responsible care.

W6.2b

(W6.2b) 水関連問題に対する取締役会の監督について、その詳細を説明してください。

	水関連の問題が予定された議題として取り上げられる頻度	水関連の問題が組み込まれているガバナンス構造	説明してください
行 1	不定期の議題 - 重要な事案が生じたとき	主要な行動計画の審議と指導 戦略の審議と指導	The Board of Directors makes decisions regarding business strategies, business plans, and other key management issues. The Board of Directors also oversees the overall management of the Group by reporting on individual director's professional performance, the important operations of affiliated companies, and the operational implementation of compliance and risk management of the company and affiliated companies.

W6.3

(W6.3) 水関連問題に責任を負う最高管理レベルの職位または委員会をお答えください (個人の名前は含めないでください)。

職位または委員会

リスク委員会

責任

水関連のリスクと機会の評価と管理の両方

水関連問題に関して取締役会に報告する頻度

半年に 1 回

説明してください

● Risk Compliance Committee

The Mitsui Chemicals Group defines all of its businesses that become obstructive factors or threats to its management activities or the execution of its strategies as risks and has established a system for managing such risks. Specifically, it has set up the Risk Compliance Committee chaired by the assistant to the president (CFO). The Group thus identifies key risks within the annual budget of each Group company or division, undertakes an analysis of the status of risk, and implements measures accordingly. In addition, the Group uses tools such as compliance checklists as part of a risk management PDCA cycle that is designed to monitor the progress of risk management measures and prevent risks from materializing.

Moreover, the Risk Management System has been incorporated into the Group's internal control systems. The status of internal control system implementation is reported to the Board of Directors. Water-related matters are also included in the risk

職位または委員会

その他の委員会、詳述してください

the Responsible Care Committee

責任

水関連のリスクと機会の評価と管理の両方

水関連問題に関して取締役会に報告する頻度

半年に 1 回

説明してください

Water-related issues are handled as a part of environmental protection. Policies, strategies and plans related to responsible care are formulated, results are evaluated and systems related to responsible care are reviewed at the meeting (held three times annually) of, which is chaired by the officer in charge of the Committee (CTO). The officer in charge of the Responsible Care Committee (CTO) is responsible for reporting the contents of deliberations and discussions by the Responsible Care Committee to the Management Committee, thereby ensuring the management's commitment to responsible care.

W6.4

(W6.4) 水関連問題の管理に関して、経営幹部レベル役員または取締役インセンティブを付与していますか。

	水関連問題の管理に対してインセンティブを付与します	コメント
行 1	はい	

W6.4a

(W6.4a) 水関連問題の管理に関して、経営幹部レベル役員または取締役にどのようなインセンティブを付与していますか(ただし個人の名前は含めないでください)。

	インセンティブを得る資格のある役職	実績指標	説明してください
金銭的褒賞	取締役	効率の向上 - 直接操業 排水水質の改善 - 直接操業	<p>Concerning the compensation of board members, our company has formulated the following principles.</p> <ul style="list-style-type: none"> • a. Compensation will be commensurate with the entrustment of the Mitsui Chemicals' management and will be tied to the growth and performance of the Mitsui Chemicals Group. • b. Compensation schemes will be devised to reflect both corporate performance and the performance of the individual director. • c. Compensation for higher positions will more strongly reflect their contributions to mid- and long-term corporate growth, and deepen the sharing of values with shareholders. • d. We will ensure transparency and maintain accountability to our shareholders and other related parties regarding the determination of compensation for directors. • Compensation for directors (excluding outside directors) will be comprised of monthly compensation (a fixed amount), bonuses, and restricted stock compensation. Water-related risks and opportunities are also included in those aspects "tied to the growth and performance of the Mitsui Chemicals Group" mentioned in principle "a" above.
非金銭的褒賞	このインセンティブが与えられている者はいない		Not applicable

W6.5

(W6.5) 貴社では、水に関する公共政策に直接的または間接的に影響を及ぼしうる活動に、以下のいずれかを通じて関与していますか？

はい、業界団体を通じて

W6.5a

(W6.5a) 公共政策に影響を及ぼそうとする直接的および間接的活動のすべてが、貴社の水に関する企業方針/誓約に合致するものとなるよう、どのようなプロセスを実施していますか。

The company is a key member of the Japan Chemical Industry Association (JCIA). To formulate policies that will enable contributions to the realization of a low-carbon society, including contributions related to water, JCIA joins various policymakers and participates in a variety of government committees to express opinions and make recommendations on regulations and policies. As the representative of the chemical industry, JCIA provides its opinions on priority issues common to its member companies and activities in the chemical industry to international organizations and others via the International Council of Chemical Associations. The company is also a member of the Japan Business Federation (Keidanren) and submits requests related to environmental risks, including water risks, to Keidanren as proposals for regulatory reform.

W6.6

(W6.6) 貴社は、水関連のリスクへの対応に関する情報を直近の財務報告書に含めましたか。

はい (任意で報告書を添付していただけます)

W7. 事業戦略

W7.1

(W7.1) 水関連問題は、貴社の長期的・戦略的事業計画のいずれかの側面に組み込まれていますか。もしそうであれば、どのように組み込まれていますか。

	水関連の問題が組み込まれていますか。	説明してください
長期的な	いいえ、水関連の問題のレビューをまだ行っていません	Although the Mitsui Chemicals Group has set long-term targets for reducing greenhouse gas emissions in its 2025 Long-Term Business Plan, it is not set water-related targets. In accordance with the TFCD framework, the Group is currently

事業 目的	んが、今後 2 年以内に実施予定です	commencing scenario analyses and analyses of the importance of opportunities and risks for its business activities arising due to future climate change (between 2040 and 2050). In light of the results of its importance assessments, the Group has created a Climate Change Policy for up until 2050, and in the adaptation portion of it has raised the points of risk management at production sites and effective use of water resources as measures for improving water security. Moving forward, the Group plans to reflect physical risks (e.g. flood and drought risks to specific business operations or specific areas) found to have a major impact, based on the results of its scenario analyses, in its business strategies.
長期 目的 達成 のため の 戦略	いいえ、水関連の問題のレビューをまだ行っていませんが、今後 2 年以内に実施予定です	Based on the TCFD framework, the company is analyzing the importance of opportunities and risks for its businesses that are created by climate change, including water-related opportunities and risks, in the future (2040 to 2050) and conducting scenario analysis. It plans to reflect matters that have a significant financial impact on the company in its business plan.
財務 計画	いいえ、水関連の問題のレビューをまだ行っていませんが、今後 2 年以内に実施予定です	Based on the TCFD framework, the company is analyzing the importance of opportunities and risks for its businesses that are created by climate change, including water-related opportunities and risks, in the future (2040 to 2050) and conducting scenario analysis. It plans to reflect matters that have a significant financial impact on the company in its business plan.

W7.2

(W7.2) 報告年における貴社の水関連の設備投資費 (CAPEX) と操業費 (OPEX) の傾向と、次報告年に予想される傾向をお答えください。

行 1

水関連の設備投資費 (+/- %)

-25.3

次報告年の設備投資費予想 (+/- %)

-24.3

水関連の操業費 (+/- %)

3.6

次報告年の操業費 (+/- %)

8.2

説明してください

The data figures are based on the reporting year 2018. Past and future figures are calculated based on standards. The decrease in capital expenditures compared to the

previous year was due to a decrease in investment in equipment renewal. Capital expenditures and operating expenses for the fiscal year included a variety of factors that are difficult to determine unless changes are made for important reasons, including changes in water purchase prices, changes in water treatment costs, and changes in the value of facilities as fixed assets.

W7.3

(W7.3) 貴社では、気候関連シナリオ分析で得られる情報を事業戦略に利用していますか。

気候関連シナリオ分析の利用	コメント
行 1	はい At present, in response to the launch of the TCFD framework, the company has started analysis of the importance of opportunities and risks for its main businesses that will be created by climate change in the future (2040 to 2050). Physical risks and opportunities and transition risks and opportunities are identified through this importance analysis. Concerning domestic production sites of the Mitsui Chemicals Group and its domestic and overseas affiliates, confirmations are made about issues such as an increase in risks attributed to flooding and rainstorms, as well as risks from tidal waves, shortage of freshwater and drought, based on the IPCC-RCP 2.6 and 8.5 scenarios. In addition, significant risks and opportunities for the company's main businesses are identified using IEA's B2DS, SDS and The Future of Petrochemicals scenarios. Moving forward, scenario analysis of the company's businesses will be conducted one by one and strategies and financial impact will be assessed.

W7.3a

(W7.3a) 貴社の気候関連シナリオ分析では、水に関連した何らかの分析結果が確認されましたか。

はい

W7.3b

(W7.3b) 気候関連シナリオ分析で確認された水関連の分析結果はどのようなものですか？また、貴社はどのように対応しましたか？

適用される気候関連シナリオとモデル	水関連の可能性のある分析結果の詳細	水関連の可能性のある分析結果への企業の対応
行 1 2DS 代表濃度経路シナリオ (RCP) 2.6	It was found from the IPCC-RCP 2.6 and 8.5 scenarios that frequency of occurrence of flooding will increase at the company's production sites in the	At present, in response to the launch of the TCFD framework, the company is analyzing the importance of opportunities and

<p>国際エネルギー機関(IEA) 20シナリオ (B2DS)</p> <p>国際エネルギー機関 (IEA) 持続可能な発展シナリオ</p> <p>その他、具体的にお答えください</p> <p>RCP8.5、 IEA The Future of Petrochemicals</p>	<p>future (2070～). By country it was found that production sites with an especially high possibility of increase in frequency exist in Japan, China and India. It was also found that the impact of drought will be greater in the future than today at some sites and water supply is highly likely to be tight in Singapore, Thailand, Mexico and India. Regarding the impact on businesses, it was predicted that flooding will increase in areas around the bases of Basic Materials, Health Care, and F&P businesses and water supply will be tighter at some of the production sites of Basic Materials, Mobility and Health Care businesses. It was found that in the RCP 8.5 scenario Basic Materials, Mobility and Health Care businesses have sites where the temperature will be higher by 2 to 4 degrees Celsius in 2070. In addition, based on the IEA's SDS scenario, it was predicted that demand for chemical products will increase 40% from the current level in 2050 and the volume of freshwater intake will also increase accordingly. Above all, it is predicted that the increase in the volume of freshwater intake and consumption in the Asia-Pacific region will account for 80% of the total increase worldwide. It is therefore expected that risks, including ones of reduction or suspension of operation, will increase at the company's manufacturing sites in Asia.</p>	<p>risks for its businesses that will be created by climate change in the future (2040 to 2050), making qualitative assessments and conducting scenario analysis about the company's business fields using scenario information about the shift to a low-carbon society and physical changes. Moving forward, the company plans to continue scenario analysis of its main business fields. Then, it will assess the financial impact and judge the need for the results of the assessment to be reflected in its strategies.</p>
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W7.4

(W7.4) 貴社では、水に対して内部的価格付け（水プライシング）を実施していますか？

行 1

貴社では、水に対して内部的価格付け（水プライシング）を実施していますか？
いいえ、ですが現在水査定の方法を調査中です

説明してください

As an internal means of ranking water prices, the company considers shadow water prices using the Water Scarcity Valuation Tool (Version 1.0) tool developed by Natural Capital Declaration (NCD), organized by the United Nations Environment Programme Finance Initiative (UNEP-FI). Shadow water prices are calculated water values which do not reflect actual water usage rates. Direct and indirect merits offered by water resources are converted into monetary value (in US dollars), and the value of water (or water intensity) is calculated per cubic meter. By using shadow water prices, the company believes that it can predict future water price changes and make cost comparisons for production sites.

W8. 目標

W8.1

(W8.1) 水関連の目標や目的を、どのように設定・モニタリングしているかについて説明してください。

	定量的目標 (target) 及び/もしくは定性的目標 (goal) のレベル	企業レベルのモニタリング	定量的目標及び/もしくは定性的目標の設定とモニタリングの方法
行 1	全社的な定量的目標 (target) 及び定性的目標 (goal)	定量的目標 (target) を企業レベルでモニタリングしている	The Mitsui Chemicals Group has set “zero environment-related accidents at production sites” as one of its goals for FY2017. Environment-related accidents include the discharge of pollutants into wastewater and water-related accidents. While zero accidents is a target, it is also set as a status to maintain. This applies to production sites all over the world, that is, domestic production sites of the Mitsui Chemicals Group and those of the Group’s domestic and overseas affiliates.

W8.1a

(W8.1a) 企業レベルでモニタリングし、進捗が見られる水目標を具体的にお答えください。

目標参照番号

目標 1

定量的目標のカテゴリー

その他、具体的にお答えください

Number of environmental accidents

レベル

全社的

一番の動機

企業の社会的責任

定量的目標の詳細

The Mitsui Chemicals Group manufactures a variety of chemical products. Chemical substances affect humans and other living organisms when they are discharged into the environment (atmosphere, water, and oil). Accordingly, zero environment-related accidents has been set as a target for the entire Group.

<https://www.mitsuichem.com/en/csr/rc/environment/index.htm>

定量指標

その他、具体的にお答えください

Ecosystem preservation

基準年

2018

開始年

2018

目標年

2019

目標達成度 (%)

100

説明してください

We set the target of 0 environmental accident as a single year target and achieved our target in fiscal 2017.

目標参照番号

目標 2

定量的目標のカテゴリー

その他、具体的にお答えください

Number of violations to environmental laws and regulations

レベル

全社的

一番の動機

企業の社会的責任

定量的目標の詳細

The Mitsui Chemicals Group is a diversified chemicals company manufacturing a wide variety of chemical products. It therefore has a social responsibility to comply with environmental laws and regulations. It has set zero violation of environmental laws and regulations as its group-wide target.

<https://www.mitsuichem.com/en/sustainability/rc/environment/index.htm>

定量指標

その他、具体的にお答えください

Number of violations of laws and regulations

基準年

2018

開始年

2018

目標年

2019

目標達成度 (%)

100

説明してください

We set the target of 0 violations of environmental laws as a single year target and achieved our target in fiscal 2017.

W9. 検証

W9.1

(W9.1) CDP 情報開示で報告する (W5.1a の対象を除く) その他の水情報について、検証を実施していますか。

はい

W9.1a

(F9.1a) 貴社の CDP 開示の中ではどのデータポイントを検証しましたか。また、どのような基準を使用しましたか。

開示モジュール	検証したデータ	検証基準	説明してください

一 ル			
W 1 現 在 の 状 態	Volume of water withdrawal (public water supply, groundwater and industrial water)	AA100 0AS	Independent assurance of the company's sustainability activities shown in its ESG Report and related website was conducted based on the AA1000 Assurance Standard. Moving forward, the company will obtain assurance once a year. Concerning water-related data, the company plans to increase data items in the future by covering the scope of the reporting boundary for CDP reports. https://jp.mitsuichemicals.com/en/sustainability/rc/environment/pdf/assurance_statement.pdf?200402
W 1 現 在 の 状 態	COD and BOD emissions	AA100 0AS	Independent assurance of the company's sustainability activities shown in its ESG Report and related website was conducted based on the AA1000 Assurance Standard. Moving forward, the company will obtain assurance once a year. Concerning water-related data, the company plans to increase data items in the future by covering the scope of the reporting boundary for CDP reports. https://jp.mitsuichemicals.com/en/sustainability/rc/environment/pdf/assurance_statement.pdf?200402

W10. 最終承認

W-FI

(W-FI) この欄に、貴社の回答に関連すると考えられる追加情報や背景事情を記入してください。この欄は任意で、採点されないことにご注意ください。

W10.1

(W10.1) この CDP 水セキュリティ質問書への回答を最終承認する者に関する詳細を記入してください。

	役職	職種
行 1	The answers to the questions about CDP water safety are handled by the company's sustainability department and the director in charge is the final approver.	取締役

W10.2

(W10.2) インパクトおよびリスク対応戦略に関して貴社が公的に開示したデータを CDP が CEO ウォーターマンデートのウォーターアクションハブに転送することに同意いただける



かどうかを示してください【W2.1a(インパクトへの対応)、W4.2 と W4.2a(リスクへの対応)のみに当てはまります】。

いいえ