

## CDP 気候変動質問書 2020 へようこそ

### C0. はじめに

#### C0.1

**(C0.1)** 御社の概要および紹介を記入してください。

The chemical industry brings new wealth to people's lives and helps make dreams come true. Mitsui Chemicals, Inc. (MCI) is contributing to society by providing high-quality products and services to customers through innovation and the creation of materials, while keeping in harmony with the global environment (MCI Corporate Mission). MCI has selected five business domains for contributing to society. They are mobility, healthcare, and food & packaging that drive the growth of MCI, next-generation business, and basic materials that support society and industry. For details, please refer to the attached corporate profile and annual report of our company.

<https://www.mitsuichem.com/en/corporate/vision/customers/index.htm>

#### C0.2

**(C0.2)** データ報告年の開始日と終了日を記入します。

	開始日	終了日	過去の報告の排出量データを記入する場合に表示されます
報告年	4 月 1, 2019	3 月 31, 2020	いいえ

#### C0.3

**(C0.3)** データを提供する対象の国/地域を選択します。

- 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

#### C0.4

**(C0.4)** 今回の開示の中で、全ての財務情報に使用する通貨単位を選択してください。

- 日本円(JPY)

## C0.5

**(C0.5)** 御社が開示している事業に対する気候関連の影響の報告バウンダリ(境界)に該当するものを選択します。この選択肢は、御社の温室効果ガスインベントリを統合するために御社が選択した手法と一致する必要があることにご注意ください。

財務管理

## C-CH0.7

**(C-CH0.7)** 御社は化学品のバリューチェーンのどの部分で事業を行っていますか？

行 1

### バルク有機化学品

低級オレフィン(クラッキング)  
エチレンオキサイドおよびエチレングリコール  
メタノール  
ポリマー

### バルク無機化学品

アンモニア  
塩素および水酸化ナトリウム  
その他の産業用ガス

### その他の化学品

特殊化学品

## C1. ガバナンス

### C1.1

**(C1.1)** 組織内に気候関連問題の取締役会レベルの監督機関はありますか？

はい

### C1.1a

**(C1.1a)** 取締役会における気候関連課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	The director in charge of the Corporate Sustainability Committee is the responsible officer. The Corporate Sustainability Committee is responsible for deliberation on policy, strategy,

幹部役員	planning, and countermeasures concerning climate change and plastic waste. The deliberation results are then reported to the Management Committee. The agendas are then, as necessary, discussed and deliberated also by the Group-wide Strategy Committee meetings and the Management Committee. The Board of Directors then finalizes the agendas and monitors them. The Corporate Sustainability Committee has formed subcommittees dedicated to climate change and plastic issues to discuss concrete actions.
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## C1.1b

(C1.1b) 気候関連問題の取締役会の監督に関して詳細を記載してください。

気候関連課題が予定議題項目に挙げられる頻度	気候関連課題が組み込まれるガバナンス構造	説明してください
予定されている - 一部の会議	戦略の審議と指導	The Board of Directors decides on business strategies, business plans, and all other important matters related to the management of our company. The Board also oversees the overall management of the Group by reporting on such matters as the performance and duties of individual directors, important operations of subsidiaries and affiliates, and the implementation status of compliance and risk management systems by our company and its subsidiaries and affiliates. Moreover, the Board of Directors deliberates important corporate management policies from the intermediate stage and takes steps to reinforce management supervisory functions by providing advice to executives .

## C1.2

(C1.2) 気候関連問題に責任を負う経営レベルにおける最高の職位または委員会をお答えください。

職位または委員会	責任	気候関連問題に関して取締役会に対する報告頻度
サステナビリティ委員会	気候関連リスクと機会の評価と管理の両方	半年に 1 回

## C1.2a

(C1.2a) この職位または委員会組織構造内のどこに位置するか、その責任の内容、および、どのように気候関連課題のモニタリングを行っているかをお答えください (個人の名前は含めないでください)。

Aiming for the sustainable growth and the development of both society and the Mitsui Chemicals Group, our company is striving to raise corporate value by engaging in dialogue with

all stakeholders and resolving social challenges along the three axes of economy, environment, and society. To that end, the Corporate Sustainability Committee considers policies, strategies and plans related to sustainable growth and development of the Group and obtains the approval of the Management Committee. The executive officer is in charge of the Corporate Sustainability Committee, which is chaired by the president (CEO).

The Corporate Sustainability Committee is connected to the Board of Directors via the Management Committee and has separate committees established under it. Namely, they are the Risk & Compliance Committee (chaired by the officer in charge of the Risk & Compliance Committee) and the Responsible Care Committee (chaired by the officer in charge of the Responsible Care Committee). The Risk & Compliance Committee puts in place specific policies, strategies, and plans in the areas of risk management and regulatory compliance. The Responsible Care Committee deliberates on policies, strategies, and plans and evaluates the performance of Responsible Care activities that span the entire lifecycle of each chemical product, from development and manufacturing to transport, use, consumption and disposal, and are aimed at protecting the environment, ensuring process safety and disaster prevention, chemical safety, and maintaining occupational safety and health and quality. Our company has set tackling climate change as an important challenge and is planning to elevate this from a matter to be handled by the Responsible Care Committee to one to be addressed by the Corporate Sustainability Committee.

## C1.3

**(C1.3)** 目標達成を含む気候関連問題の管理に対してインセンティブを提供していますか？

	気候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	no comment

## C1.3a

**(C1.3a)** 気候関連問題の管理に対して提供されるインセンティブについて具体的にお答えください (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	インセンティブの種類	インセンティブを受ける対象活動	コメント
取締役会/執行役員会	金銭的褒賞	排出量削減目標	Remuneration paid to the director in charge of climate change is assessed based on analysis of climate change issues, and progress towards GHG reduction targets set out in the company's policies and medium-term management strategy.

取締役	金銭的褒賞	排出量削減プロジェクト	All directors and general managers are subject to a system of targets, balanced between the three axes of economic, environmental and social achievement. Appropriate environmental targets are set out for each division, based on reductions in GHG emissions through energy-saving countermeasures for instance, or development or sales of products contributing to reduced GHG emissions. Remuneration is then assessed based on progress towards the relevant targets.
環境/サステナビリティ部長	金銭的褒賞	排出量削減目標	Remuneration of staff planning and implementing energy management, or implementing energy-saving countermeasures at individual workers is assessed based on progress towards GHG reduction targets, through activities such as energy-saving countermeasures and switching to alternative fuels.
すべての従業員	非金銭的褒賞	環境に関する行動の変化	There is a system for rewarding improvement proposals or outstanding activities, including reduction of GHG emissions and climate change countermeasures, which applies to all employees. There are different award levels depending on the achievement, including President's Award, Plant Manager's Award, and Section Chief's Award, and they help raise employees' awareness for improvement. Our company also has a system where employees who are highly skilled in areas such as energy management or plant operation management are elected as meisters and seek to invigorate and standardize the workplace, transfer their skills, and endeavor to guide and develop successors.

## C2. リスクと機会

### C2.1

(C2.1) あなたの組織は、気候関連リスクおよび機会を特定する、評価する、およびそれに対応するプロセスを有していますか？

はい

### C2.1a

(C2.1a) あなたの組織は短期、中期、および長期の時間的視点をどのように定義していますか？

	開始 (年)	終了 (年)	コメント
短期	0	1	A single fiscal year is defined as the short term

中期	1	3	A three-fiscal-year period is defined as the medium term. The company conducts a rolling review of its three-year performance plan every year.
長期	3	10	The company announced its Long-term Business Plan in November 2016. The target year of the plan is 2025. The target year related to measures to address climate change is FY2030, which is also the target year of Japan's intended nationally determined contribution (INDC).

## C2.1b

**(C2.1b)** あなたの組織では、事業に対する財務または戦略面での重大な影響を、どのように定義していますか。

Among the things significantly impacting the management of the company in connection with all of its businesses, including its financial and strategic aspects, the company defines short-term impacts to be: 1) matters related to risk control and compliance with laws, regulations, and rules; 2) matters related to the environment, process safety and disaster prevention, chemical safety, occupational safety, occupational health, and quality assurance (responsible care activities) over the entire lifecycle of chemicals, from their development via production, distribution, use, and final consumption to disposal, and; 3) matters related to business sectors, research sector, and plants that impact business performance. Matters related to climate change include the violation of laws or regulations regarding the atmosphere or water and the slowdown or suspension of production activities attributable to an accident. In the medium term, the reduction of greenhouse gas emissions, energy conservation, and increased sales of products that contribute to the environment are reflected in the company's strategy in the 2025 Long-Term Business Plan as matters that significantly impact business. Regarding long-term impact (until 2050), the company has selected and is assessing matters which will significantly impact it. They were selected based on external information and in consideration of the size of their impact on future business (sales and earnings), and on the value chain, including their impact on investors and others. Through this assessment, the company will determine the materiality of the matters by calculating their financial impact and reflect them in its strategy by deciding what actions are necessary and the schedule that is necessary for the actions.

## C2.2

**(C2.2)** 気候関連リスクおよび機会を特定、評価する、およびそれに対応するプロセスについて説明します。

対象となるバリューチェーン上の段階

直接操業

リスク管理プロセス

多専門的な全社的なリスク管理プロセスへの統合

評価の頻度

年に複数回

### 対象となる時間軸

短期

中期

### プロセスの詳細

Short-term and medium-term climate-related risks are covered by the Responsible Care activities for environmental protection and the Responsible Care Committee assesses risks related to climate change, formulates strategies and plans related to climate change, assesses results of related activities and takes other initiatives.

The Responsible Care Committee meets three times a year.

The assessment of long-term climate-related risks and opportunities are considered by the Corporate Sustainability Committee and reflected in the Long-term Business Plan and others.

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### 対象となるバリューチェーン上の段階

上流

### リスク管理プロセス

多専門的全社的なリスク管理プロセスへの統合

### 評価の頻度

3年に1回かそれ以上

### 対象となる時間軸

中期

長期

### プロセスの詳細

Mitsui Chemicals factors in the viewpoint of sustainable procurement. In its purchasing activities, to fulfill its environmental and social responsibilities along the entire supply chain from a global perspective, the company has summarized the requests it makes of suppliers to the Mitsui Chemicals Group in the Mitsui Chemicals Group Sustainable Procurement Guidelines. These guidelines include items related to environmental protection, occupational safety, and quality assurance, among others. When it starts business with a new supplier, the company checks its initiatives aimed at achieving a sustainable society. The company regularly checks the same initiatives at existing suppliers. (For example, the company confirms whether each supplier has set a voluntary GHG emissions target exceeding the legally required level to reduce the impact on the environment.) The confirmation is made by using a CSR procurement self-assessment questionnaire form created by the supply chain subcommittee of the UN Global Compact Network Japan. As one of the targets under the 2025 Long-Term Business Plan, the company has set a sustainability assessment of suppliers and support for improvement (to achieve a sustainable procurement ratio at 70% or higher). The Responsible Care Committee conducts the assessment and gives guidance, and

the results are reflected in the plan for the following fiscal year. If there are any material issues, they are discussed by the Corporate Sustainability Committee.

## C2.2a

(C2.2a) 御社の気候関連リスク評価において、どのリスクの種類が検討されていますか？

	関連性および組み入れ	説明してください
現在の規制	関連性があり、常に評価に含めている	Under the Act on the Rational Use of Energy, a Japanese law established to promote energy conservation, it is mandatory to aim for a 1% improvement in the average annual energy consumption intensity. The Top Runner Program has been established, which aims to improve the energy consumption efficiency of equipment. The energy improvement target applies to the company and the company represents the chemical sector. Accordingly, energy conservation targets are set under the Long-term Business Plan and their progress is managed.
新たな規制	関連性があり、時々評価に含めている	With regard to new regulations to be imposed in the future, the introduction of a carbon tax and emissions trading are deemed to be risks related to the shift to a low-carbon society, which is directly linked to operating cost. Other risks assumed by the company include an increase in cost attributed to the third-party verification of GHG emissions that was made mandatory due to the obligation to report GHG emissions. At present, the company has finished materiality analysis of businesses based on the TCFD framework, and scenario analysis is underway. The company will consider addition of results of the assessment to what it assumes as risks.
技術	関連性があり、時々評価に含めている	With regard to technology, a decline in the competitiveness of products and services attributed to lower carbon, increase in product development cost reflecting investment in low-carbon technologies, and failure to invest in new low-carbon technologies are among the risks related to the shift to a low-carbon society that are assumed by the company. At present, the company has finished materiality analysis of businesses based on the TCFD framework, and scenario analysis is underway. The company will consider addition of results of the assessment to what it assumes as risks.
法的	関連性があり、時々評価に含めている	With regard to new regulations to be imposed in the future, the introduction of a carbon tax and emissions trading are deemed to be risks related to the shift to a low-carbon society, which is directly linked to operating cost. Other risks assumed by the company include an increase in cost attributed to the third-party verification of GHG emissions that was made mandatory due to the obligation to report GHG emissions. At present, the company has finished materiality analysis of businesses based on the TCFD framework, and scenario analysis is underway. The company will consider addition of results of the assessment to what it assumes as risks.



市場	関連性があり、常に評価に含めている	Market risks assumed by the company include concentrated purchasing of environmentally-friendly products reflecting changes in consumer awareness and behaviors resulting from the shift to a low-carbon society, increase in manufacturing cost attributed to increase in raw material cost, and a steep rise in energy cost as the result of criticism against the use of power supplies with high GHG emissions. At present, the company has finished materiality analysis of businesses based on the TCFD framework, and scenario analysis is underway. The company will consider addition of results of the assessment to what it assumes as risks.
評判	関連性があり、時々評価に含めている	Reputational risks assumed by the company include criticism against industries with high GHG emissions, decline in sales quantity of products, occurrence and expansion of boycotts, and a decline in the appraisal value of the company's stock, which may result from changes in consumer awareness and behaviors related to the shift to a low-carbon society. At present, the company has finished materiality analysis of businesses based on the TCFD framework, and scenario analysis is underway. The company will consider addition of results of the assessment to what it assumes as risks.
緊急性の物理的リスク	関連性があり、常に評価に含めている	With regard to acute physical risks, risks of disasters such as floods and typhoons are considered in the BCP of production sites. Increase of damage to employees' health caused by rising temperatures is also a potential risk. At present, the company has finished materiality analysis of businesses based on the TCFD framework, and scenario analysis is underway. The company will consider addition of results of the assessment to what it assumes as risks.
慢性の物理的リスク	関連性があり、時々評価に含めている	Chronic physical risks assumed by the company include suspension of the use of water at production sites that may result from a change in the rainfall pattern, suspension of operation caused by torrential rain or a similar disaster, and need to take countermeasures against the rising sea levels for production facilities. At present, the company has finished materiality analysis of businesses based on the TCFD framework, and scenario analysis is underway. The company will consider addition of results of the assessment to what it assumes as risks.

## C2.3

**(C2.3)** 御社の事業に重大な財務的または戦略的な影響を及ぼす可能性がある潜在的な気候関連リスクを特定しましたか？

はい

### C2.3a

**(C2.3a)** あなたの組織の事業に重大な財務的または戦略的な影響を及ぼす可能性があると特定されたリスクを記入してください。

ID

## リスク 1

### バリューチェーンのどこでリスク要因が生じますか？

直接操業

### リスクの種類と主な気候関連リスク要因

緊急性の物理的リスク

サイクロンや洪水などの異常気象の重大性と頻度の上昇

### 主要な財務上の潜在的影響

生産能力低下に起因した売上減少

### 企業固有の内容の説明

Possible risks caused by storms and flooding include logistics confusion, supplier disruption, difficulty in securing employees, occurrence of long-term power outages, and the risk of business interruptions linked to power outages, in addition to direct damage to plants. An increase in the cost of insurance and a decrease in asset values in areas at high risk of flooding are also included in assumed risks.

Among areas where our company operates, the risk of flooding is expected to rise significantly in Japan, China, India, and Mexico. A study that assesses the risks of flooding in major river basins in the world forecasts that floods that were likely to occur once in a 100-year period in the 20th century (100-year floods) will be likely to occur every five to 25 years by the end of the 21st century in the basins of the Ganges River, the Yellow River, and the Yangtze River. On the other hand, in the basins of the Mississippi River, the probability of such floods occurring is expected to decline, to once every 105 to 250 years, by the end of the 21st century.

On the other hand, the risk of catastrophic typhoons is expected to rise in Japan and the United States. Further, sea level rise is expected to increase the risk of tidal waves in Japan, the United States, China, India, and Thailand. This should be kept in mind in particular because many of our company's production sites are located on the coast.

### 時間的視点

中期

### 可能性

可能性がおおよそ 5 割

### 影響の程度

中程度～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)

### 財務上の影響額の説明

The financial impact has yet to be assessed because the financial impact of river and coastal flooding is being studied at present. To show an example of assessment, the amount of property loss by 2030 caused by river flooding at six major production sites in Japan (Ichihara, Mobarra, Nagoya, Osaka, Iwakuni-Ohtake, and Omuta) will be approx. 1.1 billion yen. The company plans to continue assessing the financial impact.

### リスク対応費用

4,000,000

### 対応の内容と費用計算の説明

The cost is calculated from the cost of the impact studies investigating the effect of river and coastal flooding on production sites by an external institution.

### コメント

The company plans to continue studying the financial impact of physical risks.

## ID

リスク 2

### バリューチェーンのどこでリスク要因が生じますか？

直接操業

### リスクの種類と主な気候関連リスク要因

新たな規制

カーボンプライシングメカニズム

### 主要な財務上の潜在的影響

直接費の増加

### 企業固有の内容の説明

In China, a water resource tax was introduced in 2016. In 2017, this tax was expanded to nine provinces and cities (Beijing, Tianjin, Shanxi province, the Inner Mongolia Autonomous Region, Shandong province, Henan province, Szechuan province, Shaanxi province, and the Ningxia Hui Autonomous Region). In addition, a resource tax will be imposed on September 1, 2020. This will allow local governments to increase the water resource tax rate in areas with high water stress. Our company's production sites are located include Tianjin, Zhongshan, and Foshan, which are included in these areas. It is believed to be highly likely that a water resource tax will be imposed in Tianjin, where water stress will increase in the future. There is concern that the imposition of a water

resource tax in this area will result in an increase in production costs and impact earnings.

時間的視点

中期

可能性

可能性がおよそ 5 割

影響の程度

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)

財務上の影響額の説明

At present, water intake in China is approx. 100,000 m3. If the water resource tax rate is 15 yuan/m3, the total cost of the tax would be 40 million yen. The impact is expected to increase further as tax rates are raised.

リスク対応費用

0

対応の内容と費用計算の説明

At present, water intake in China is approx. 100,000 m3. If the water resource tax rate is 15 yuan/m3, the total cost of the tax would be 40 million yen. The impact is expected to increase further as tax rates are raised. Therefore, collection from local production sites is believed to be necessary. Accordingly, costs will not be generated.

コメント

Influences not monetically quantified.

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**ID**

リスク 3

バリューチェーンのどこでリスク要因が生じますか？

直接操業

## リスクの種類と主な気候関連リスク要因

新たな規制  
カーボンプライシングメカニズム

## 主要な財務上の潜在的影響

直接費の増加

## 企業固有の内容の説明

As mentioned by the OECD, carbon pricing is regarded as a cost-efficient political tool for achieving CO2 reduction targets. Believed to play the leading role in achieving the nationally determined contributions (NDC) under the Paris Agreement, carbon pricing has already been introduced by many national and municipal governments. In Japan, a carbon tax and emissions trading have been introduced as carbon pricing measures. The carbon tax, which was introduced to control energy-derived CO2 emissions, is charged at the rate of 289 yen/tCO2e. There is concern regarding the possible expansion of the carbon tax to other CO2 emissions and an increase in its rate. A carbon tax and emissions trading system (ETS) are also spreading among overseas countries. The most recent examples include the introduction of a carbon tax in Singapore and the expansion of ETS in China. IEA estimates that the rate will be increased to 100 dollars/t-CO2 (2030) and 140 dollars/t-CO2 (2040) depending on the status of climate change transition. Accordingly, we have introduced an internal carbon pricing system for investments for the construction of new plants and facility expansion. Last fiscal year, we changed the carbon price from 1,000 yen/t-CO2 to 3,000 yen/t-CO2 in our efforts to increase investments and loans for low carbon transition. The estimated costs for taking these measures were calculated based on the total of the Scope 1 emissions for 2018, which is 3.84 million tons, and the rate of carbon tax estimated by IEA, which is 100 dollars/t-CO2 (2030). By the way, GHG emissions from Singapore and China are 425,000 tons and 36,000 tons, respectively. The cost generated due to carbon pricing in Singapore could be 170 to 680 million yen, and the cost generated from emissions trading prices in China could be 20 to 180 million yen.

## 時間的視点

長期

## 可能性

可能性が高い

## 影響の程度

やや高い

## 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)

### 財務上の影響額の説明

An accurate financial impact was not assessed because it is uncertain on what basis the carbon tax will be assessed. Calculated approximately by multiplying the amount of Scope 1 emissions for the current fiscal year (fiscal 2019) by \$100 (carbon tax/ CO2et), the amount is approx. 40 billion yen.

### リスク対応費用

0

### 対応の内容と費用計算の説明

At present, information related to the carbon tax and ETS in areas where the company operates businesses has been gathered and the situation is being monitored. A study of the future financial impact is planned using TCFD scenario analysis. Accordingly, costs will not be generated for the response.

### コメント

Influences not monetically quantified.

## ID

リスク 4

### バリューチェーンのどこでリスク要因が生じますか？

直接操業

### リスクの種類と主な気候関連リスク要因

技術

低排出技術への移行

### 主要な財務上の潜在的影響

損金処理につながる資産価値または資産耐用年数の減少、資産減損、または既存資産の早期除却

### 企業固有の内容の説明

Under the 2-degree scenario, the cost of renewable energy is expected to decline in the medium to long term, to a level equivalent to the current cost of conventional electricity in 2030. On the other hand, the cost of thermal power generation using coal and oil is expected to be difficult to maintain until 2030 due to the increase in the price of carbon. Accordingly, it is believed that our company will gradually need to shift to renewable energy by following this timeline.

An increase in demand for renewable energy among companies is also expected given the spread of RE100 and other movements to suppliers of advanced global companies.

In addition, moves to use renewable energy for electricity used for all production activities, including not only activities of a company but also those of its suppliers, which is done by Apple, are likely to grow. This needs to be kept in mind.

**時間的視点**

長期

**可能性**

5割を超える確率で

**影響の程度**

やや高い

**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)**

**財務上の影響額の説明**

At present, the financial impact has yet to be assessed in detail. However, if a rough calculation is made assuming that the electricity purchased at production sites in Japan in Scope 2 is changed to electricity from solar power in 2020, costs will increase to about 4.4 yen/kW above the forecast costs (2°, Japan), or by approx. 5.0 billion yen. A study is planned using TCFD scenario analysis.

**リスク対応費用**

0

**対応の内容と費用計算の説明**

At present, the company is acquiring information related to electricity costs in the areas where it operates businesses. A study of the future financial impact is planned using TCFD scenario analysis. Accordingly, costs will not be generated for the response.

**コメント**

Influences not monetically quantified.

---

**ID**

リスク 5

**バリューチェーンのどこでリスク要因が生じますか？**

直接操業

### リスクの種類と主な気候関連リスク要因

新たな規制

既存の製品およびサービスに対する命令および規制

### 主要な財務上の潜在的影響

商品およびサービスに対する需要減少に起因した売上減少

### 企業固有の内容の説明

Users of ride sharing and car sharing services in the field of mobility is expected to increase, and various predictions have been made about the impact of this trend.

According to the most comprehensive prediction, by McKinsey & Company, the rate of growth in vehicle unit sales will decrease by approx. 30% by 2030 due to MaaS. This is likely to lead to a significant reduction in unit sales of automobiles in the future. This is likely to affect sales of not only parts for ICE but also ones for EVs.

### 時間的視点

長期

### 可能性

可能性がおおよそ 5 割

### 影響の程度

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？

はい、推定範囲

### 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)

0

#### 財務上の潜在的影響額 – 最大 (通貨)

5,000,000,000

### 財務上の影響額の説明

At present, the financial impact has yet to be assessed in detail. However, the amount of the decrease in sales from components that can be attributed to the reduction of internal combustion engine vehicles under the 2°C scenario, has been calculated to be approx.

5.0 billion yen in the scenario analysis. The company believes that it will not have an impact because sales will increase from their current level in the 4°C scenario. The impact on businesses will be studied further using TCFD scenario analysis.

### リスク対応費用

140,000,000,000



### 対応の内容と費用計算の説明

Matters which will impact business regarding the shift to a low-carbon society (including CASE, lightweight technology, and resource recycling) are reflected in the company's Mobility business strategy. In addition, in the 2025 Long-Term Business Plan, the company plans to make strategic investments of 400 billion yen. Because the company aims to increase the ratio of earnings from the Mobility business to 35% in 2025, approx. 140 billion yen is expected to be invested by 2025.

### コメント

Influences not monetically quantified.

## C2.4

**(C2.4)** あなたの組織の事業に重大な財務上・戦略上の影響を及ぼす可能性がある気候関連機会を特定したことがありますか？

はい

### C2.4a

**(C2.4a)** 御社の事業に重大な財務的または戦略的な影響を及ぼす可能性があるとして特定された機会の詳細を記入してください。

#### ID

機会 1

バリューチェーンのどこで機会が生じますか？

下流

機会の種類

製品およびサービス

主な気候関連機会要因

低排出量商品およびサービスの開発および/または拡張

主要な財務上の潜在的影響

商品とサービスに対する需要増加に起因する売上増加

企業固有の内容の説明

As an opportunity related to climate change, we assume that there will be an increase in sales of products that contribute to reducing GHG throughout their life cycles. Specific contributions include the use of biomass-derived substances as raw materials, the introduction of energy-saving devices for our manufacturing processes, the reduction of manufacturing energy consumption through the streamlining of our manufacturing processes, energy and resources conservation by our customers through the relaxation of processing conditions, the simplification of processes, and yield

improvement, contributions to uses including the use of lightweight processed materials for improving automobile fuel efficiency, the extension of product life, and other benefits, as well as contributions to disposal, including the recycling of processed materials. We also assume that there will be an increase in sales of products that contribute to solving social issues associated with climate change, such as food shortage, water shortage, resource shortage, and the occurrence of disasters. Because the risks associated with climate change are expected to increase in the future, we believe that our company's business opportunities will increase along with growing demand for products that contribute to avoiding or eliminating those risks.

#### 時間的視点

長期

#### 可能性

可能性が非常に高い

#### 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？

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)

#### 財務上の影響額の説明

Under our company's Long-term Business Plan, we set a target for FY2025 sales of 2 trillion yen and a target for the ratio of sales of Blue Value™ (our environmentally friendly products and services) of 30%. The ratio of sales of Blue Value™ products that contribute to a low-carbon society is around 90% at present. We used this value for the calculation.

#### 機会を実現するための費用

540,000,000,000

#### 機会を実現するための戦略と費用計算の説明

In the Long-term Business Plan, our company set its 2025 targets along environmental and social axes. In terms of the environment, we set a target for sales of Blue Value™, our environmentally friendly products and services. Blue Value™ products and services contribute to realizing a low-carbon, recycling-oriented, nature symbiosis society. We aim to increase the ratio of sales from these products and services to 30% of the total by 2025. In addition, we certify products and services that contribute to improving quality of

life (QOL) in society as Rose Value™ products and services. As with Blue Value™, we have set a target for the ratio of sales of Rose Value™ products and services that contribute to solving the food problem (such as those that contribute to increasing food production and reducing food loss) of 30% of the total by 2025. These targets are reflected in the strategy of each business.

## コメント

We certify products and services that contribute to improving QOL in society as Rose Value products and services, with which we aim to solve issues for adapting to climate change, such as the prevention of infections and the reduction of food loss for the realization of a healthy, safe society that is resilient to climate change risks (adaptation). As with Blue Value, we have set a target for the ratio of sales of Rose Value products and services of 30% of the total by 2025. In the climate change policy that we established in the current fiscal year, we set a reduction of GHG with Blue Value products for the realization of a low-carbon society through the promotion of GHG reduction (mitigation) and the expansion of adapted products with Rose Value products for preventing infections, reducing food loss, and other benefits for the realization of a healthy, safe society that is resilient to climate change risks (adaptation).

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## ID

機会 2

バリューチェーンのどこで機会が生じますか？

下流

機会の種類

製品およびサービス

主な気候関連機会要因

事業活動を多様化する能力

主要な財務上の潜在的影響

商品とサービスに対する需要増加に起因する売上増加

企業固有の内容の説明

In Our Group, one of its business domains is Food & Packaging, which includes the agrochemicals business. In 2050, the world population will reach 9.7 billion, and the production of food and feed will need to increase, and agricultural productivity will need to be improved. In order to improve agricultural productivity, the use of pesticides such as herbicides, insecticides, and fungicides is essential, and safer and more selective chemicals are required. The strength of Our Company's agrochemicals business lies in its excellent R & D capabilities, which enable it to continuously create agrochemicals with highly unique product groups. In the past 20 years, 10 agrochemicals have been launched on the market, and multiple pipelines are in place for development and research.

**時間的視点**

長期

**可能性**

可能性が高い

**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)**

20,000,000,000

**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)**

**財務上の影響額の説明**

Our Group 's long-term management plan for fiscal 2025 calls for expansion and growth in the 3 areas of growth as its business strategy, and also calls for expanding investment opportunities, business expansion through expansion of peripheral businesses, and securing facilities and equipment capacity to meet demand. One of the 3 business areas is food and packaging, and the company aims to achieve an operating profit of 40 billion yen in 2025. In fiscal 2018, sales of agricultural chemicals, including agrochemicals, totaled about 40 billion yen, and the company aims to double its operating profit by fiscal 2025. The pesticide market is also expected to double in size in 10 years from 2025 to 2015.

**機会を実現するための費用**

13,000,000,000

**機会を実現するための戦略と費用計算の説明**

Our Group 's long-term management plan for 2025 calls for expansion and growth in 3 growth areas as part of its business strategy, and calls for expanding investment opportunities, business expansion through expansion of peripheral businesses, and the securing of facilities and equipment capable of meeting demand. One of the three business areas is food and packaging. In the field of agricultural chemicals, the company has a growth strategy in which it will continue to grow on its own with five new chemical substances, strengthen research and development, and strengthen its overseas business base. In addition, in our investment strategy, we are steadily promoting capital investment in the five new drug substances to further accelerate growth.

**コメント**

Against the backdrop of increasing infectious diseases caused by global warming, Our Group, together with BASF, Bayer, Sumitomo Chemical and Syngenta, launched an initiative in 2018 with the support of the Bill & Melinda Gates Foundation and the Innovative Vector Control Consortium, and released a joint statement in support of research, development and supply of innovative products to eradicate malaria by 2040. We are using organic synthesis technology that we have cultivated over many years to contribute to solving the social issue of eradicating malaria, which is stated in the sustainable development goal (SDGs).

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**ID**

機会 3

**バリューチェーンのどこで機会が生じますか?**

下流

**機会の種類**

製品およびサービス

**主な気候関連機会要因**

低排出量商品およびサービスの開発および/または拡張

**主要な財務上の潜在的影響**

商品とサービスに対する需要増加に起因する売上増加

**企業固有の内容の説明**

Mobility is one of Our Group 's business domains, and Toyota aims to achieve sustainable growth in the global market by offering solutions that meet diversifying needs and by strengthening the competitiveness of its business. As global awareness of environmental protection increases, CO2 emissions regulations are being tightened in various countries, and the need to improve fuel efficiency and shift to motorized vehicles are increasing year by year. In the 2 ° C scenario, 60% of passenger cars are expected to be EVs by 2060, which will increase the need for lighter weight and materials for batteries. Our Company 's long-fiber glass-reinforced PP products, electrolytes, fibers for LiB separators, LiB sheathing materials, and in-vehicle camera lenses are contributing to the shift to EVs, which we believe will enable us to meet growing demand and gain new market shares.

**時間的視点**

長期

**可能性**

可能性が非常に高い

**影響の程度**

高い

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？

はい、単一の推計値

財務上の潜在的影響額 (通貨)

90,000,000,000

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)

財務上の影響額の説明

Our Group's long-term management plan for fiscal 2025 calls for expansion and growth in the 3 areas of growth as its business strategy, and also calls for expanding investment opportunities, business expansion through expansion of peripheral businesses, and securing facilities and equipment capacity to meet demand. One of the 3 business areas is mobility, and the company aims to achieve an operating profit of 70 billion yen in fiscal 2025. Operating income from our mobility business in fiscal 2017 was approximately 43 billion yen, and we aim to increase operating income by fiscal 2025.

機会を実現するための費用

90,000,000,000

機会を実現するための戦略と費用計算の説明

Our Group's long-term management plan for fiscal 2025 calls for expansion and growth in the 3 areas of growth as its business strategy, and also calls for expanding investment opportunities, business expansion through expansion of peripheral businesses, and securing facilities and equipment capacity to meet demand. Mobility is one of the three business areas, and the company has established a growth strategy that includes responding to the need for multi-materials, establishing technologies for fiber-reinforced composite materials, expanding customer support functions, expanding its product portfolio, anticipating needs through open innovation and alliances, developing new businesses in new markets, and promoting downstream and service-oriented businesses. In addition, the investment strategy aims to strengthen the global supply system that is closely linked to customers by reinforcing the capacity of polymer products that require large-scale production facilities in appropriate locations to meet expanding global demand, further strengthening our competitive advantage, and timely reinforcing the capacity of compound products that are produced locally for local consumption.

コメント

Our Company's environmentally conscious products certified with Blue Value that contribute to 'Reduce the amount of CO2' include unpainted bumpers, instrument panel components, resin tank adhesives, and automotive lubricants.

## C3. 事業戦略

### C3.1

(C3.1) 気候関連リスクと機会は御社の戦略および/または財務計画に影響を及ぼしましたか？

はい、低炭素移行計画を作成しました

#### C3.1a

(C3.1a) 御社は戦略の周知のために、気候関連シナリオ分析を使用しますか？

はい、定性的に。しかし今後2年以内に定量的を追加する予定である

#### C3.1b

(C3.1b) 御社の気候関連シナリオ分析使用の詳細を記入します。

適用される気候関連シナリオとモデル	詳細
代表濃度経路シナリオ (RCP) 2.6 RCP 8.5 国際エネルギー機関 (IEA) 2□シナリオ (B2DS) IEA 持続可能な発展シナリオ その他、具体的にお答えください IEA The Future of Petrochemicals	At present, the importance of businesses is being analyzed in accordance with the TCFD framework. The significance of seven fields related to the company's businesses (including mobility, petrochemical materials, healthcare, and packaging) is being assessed at production sites in eight areas (Japan, the U.S., China, India, Southeast Asia, Europe, Brazil, and Mexico). The subject periods are until 2030 to 2050, including the scenarios being used. In the importance analysis, risks/opportunities for the shift to a low carbon society and physical risks/opportunities are assessed mainly based on the trends of international discussion, contents of each company's business, area of operation, cases of other companies, and other criteria, with subjects being the operating bases common to the seven subject fields. With regard to external scenarios, RCP2.6 and RCP8.5 were used for the assessment of cases with a great impact and ones with a small impact on global warming attributed to climate change, and 2DS and the IEA Sustainable Development Scenario and IEA The Future of Petrochemicals were used to assess the status of the shift to a low carbon society. Currently, the company is in the phase of importance analysis based on the TCFD framework, that is, reflection on the scenario analysis of the company, the financial impact, and strategies yet to be made. The company plans to do so in the future. One possible example of an assessment based on the importance analysis is the impact of the shift to EVs on the Mobility business. In this case, a reduction in the supply of automobile parts for internal combustion engines is assumed to be a risk, while an increase in the supply of battery electrolytes and other products attributed to the shift to EVs is assumed to be an opportunity.

### C3.1d

**(C3.1d)** 気候関連リスクと機会が御社の戦略に影響を及ぼしたかどうか、どのように及ぼしたかを説明します。

	気候関連リスクと機会がこの分野の御社の戦略に影響を及ぼしましたか?	影響の説明
製品およびサービス	はい	At the company, revenues from the Mobility business accounted for approx. 59% of all revenues in FY2019. It is assumed that risks involved in this business include a decline in demand for internal-combustion engine parts, such as fuel tanks and engine-related equipment, while opportunities include an increase in demand for electrolyte and LIB-related products and the spread of solid state batteries as mainstream batteries. They are expected to have a significant impact on the company's revenues. The expansion of sales of electrolyte and electrolytic films is included in the long-term business strategy of the company. In addition, the company participates in a project to develop solid state batteries. Further, PV diagnosis is factored into the strategy as a next-generation business due to the spread of renewable energy, and products such as resource-saving crop cultivation systems are also a factor, reflecting the decrease in farmland and the need to increase food production associated with climate change. The company has also set a long-term target for the sales ratio of environmentally friendly products (Blue Value products), including ones that contribute to reducing GHG emissions.
サプライチェーンおよび/またはバリューチェーン	はい	The Mitsui Chemicals Group manufactures diverse products using many raw materials. Accordingly, the increase in physical risks of wind and flood damage (such as flooding, rainstorms, and typhoons) related to climate change is very likely to have a significant impact on the Group's production activities with the decline or suspension of production at production sites in the supply chain. Therefore, from the viewpoint of BCP, raw materials are purchased from two companies to avoid risk. In addition, in the fields of electric and electronic products and the health care business, the company anticipates growing demand from the value chain for suppliers' reduction of GHG emissions and for their use of renewable energy as measures to reduce scope 3 emissions.
研究開発への投資	はい	In the Long-Term Business Plan, the company has announced that it will double R&D expenses from the FY2016 level to 70.0 billion yen by FY2025. The expenses cover research related to the shift to a low-carbon society and physical risks. For example, in the Mobility business, the company develops lightweight processed materials to avoid risks and



		acquire opportunities from the shift to EVs, and also develops solid state batteries for EVs. In the Food & Packaging business, the company has developed film for maintaining food freshness by taking advantage of the need to prevent food loss caused by climate change as a business opportunity. Research and development expenses for fiscal 2019 are 36.4 billion yen.
運用	はい	With regard to the risks and opportunities of direct operations related to the manufacturing of the company's products, there are rising risks of flooding in Japan, China, India, and other countries, increased damage from typhoons in Japan and the U.S., and the rising risk of tidal waves in Japan, China, and Thailand attributed to the rising sea levels, which are physical risks at production sites. Risks related to the shift to a low carbon society include the rising price of naphtha attributed to a decline in the demand for oil. These risks are expected to have a significant impact on the direct operations of the company. Moving forward, the company plans to clarify the degree of the impact through scenario analysis of its businesses and reflect the results of the analysis in its strategy.

### C3.1e

(C3.1e) 気候関連リスクと機会が御社の財務計画に影響を及ぼしたかどうか、どのように及ぼしたかを説明します。

	影響を受けた財務計画の要素	影響の説明
行 1	資本支出	Plastics contribute to the resolution of social issues by providing convenience in everyday life, including the reduction of food loss and improvement of energy efficiency, through their functional advancement. On the other hand, plastics also significantly impact the climate, as they are produced using fossil resources and energy, which emit a large amount of GHGs. In addition, marine plastic waste has become a serious problem in recent years. As a group of chemical companies mainly providing plastic products and relevant services, the Mitsui Chemicals Group regards climate change and the problem of plastic waste as significant social issues that it should address seriously. In response to plastics-related issues, the Group has focused its efforts on two strategies taken from the perspective of the overall value chain. The Group aims to promote a circular economy model by accelerating resource recycling through its strategies and also promote measures addressing the problem of marine plastic waste. As a part of these efforts, the Group participates in the Alliance to End Plastic Waste (AEPW), in which it plans to invest 15 million dollars in the coming five years, into projects reducing plastic waste in four fields, the development of waste management infrastructure, the promotion of innovation, education and engagement,

	and clean-up activities. The AEPW as a whole plans to invest a total of 1.5 billion US dollars in its activities.
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### C3.1f

(C3.1f) 気候関連リスクと機会が御社の戦略と財務計画にどのように影響を及ぼしたかに関する追加情報を記入します(任意)。

No additional comments.

## C4. 目標と実績

### C4.1

(C4.1) 報告対象年に適用した排出量目標はありましたか?

総量目標

#### C4.1a

(C4.1a) 御社の総量目標とその目標に対する進捗状況を具体的にお答えください。

目標参照番号

Abs 1

目標を設定した年

2016

目標の対象範囲

全社的

スコープ(またはスコープ 3 カテゴリー)

スコープ 1+2(マーケット基準)

基準年

2005

基準年の対象となる排出量(CO<sub>2</sub> 換算トン)

6,170,000

選択したスコープ(またはスコープ 3 カテゴリー)の基準年総排出量の割合(%)としての基準年の対象とされる排出量

100

目標年

2030

基準年からの目標削減率(%)

27.7

目標年の対象となる排出量(CO2 換算トン)[自動計算されます]

4,460,910

報告年の対象となる排出量(CO2 換算トン)

4,460,000

目標達成度(%) [自動計算されます]

100.0532447092

報告年の目標の状況

達成済み

これは科学的根拠に基づいた目標ですか?

いいえ。しかし、今後 2 年以内に設定する見込み

説明してください(目標の対象範囲を含む)

The target value of 25.4%, the percentage reduction from the FY2005 level to be achieved by 2030, is Japan's Intended Nationally Determined Contribution (INDC). The target value for the base year is the sum of Scope 1 and 2 emissions from Mitsui Chemicals and its domestic consolidated subsidiaries, from which electricity and steam sold to other companies were subtracted (by assuming full operation).

We achieved the target set in the reporting year. However, we believe that we will need to check our production activities in the next fiscal year again because they are influenced by the economic trends. We are planning to commence discussions for setting another target, including revising the target, and will set another target.

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目標参照番号

Abs 2

目標を設定した年

2018

目標の対象範囲

全社的

スコープ(またはスコープ 3 カテゴリー)

スコープ 1+2(マーケット基準)

基準年

2018

基準年の対象となる排出量(CO2 換算トン)

4,490,000

選択したスコープ(またはスコープ 3 カテゴリー)の基準年総排出量の割合(%)としての基準年の対象とされる排出量

85

目標年

2019

基準年からの目標削減率(%)

0.7

目標年の対象となる排出量(CO<sub>2</sub> 換算トン)[自動計算されます]

4,458,570

報告年の対象となる排出量(CO<sub>2</sub> 換算トン)

4,460,000

目標達成度(%) [自動計算されます]

95.4502068088

報告年の目標の状況

達成済み

これは科学的根拠に基づいた目標ですか?

いいえ。しかし、今後 2 年以内に設定する見込み

説明してください(目標の対象範囲を含む)

When the target was initially set, it only covered Japan, and the percentage of emissions from the area covered by the target to the total amount of Scope 1 and 2 emissions in Japan was 100%. However, we entered the percentage for the boundary including overseas countries. Our target value is that of emissions calculated by subtracting electricity and steam sold to other companies from Scope 1 and 2 emissions (assuming full-scale operation). The target value has been achieved in this report. However, emissions fluctuate due to economic factors, and we plan to continue with the current target until we set the next target.

## C4.2

(C4.2) 報告年に有効なその他の気候関連目標を設定しましたか?

その他の気候関連目標

## C4.2b

(C4.2b) メタン削減目標を含むその他の気候関連目標の詳細を記入します。

目標参照番号

Oth 1

目標を設定した年

2018

目標の対象範囲

その他、具体的にお答えください

Mother company's works

目標の種類: 絶対値または原単位

原単位

目標の種類: カテゴリーと指標(原単位目標を報告する場合は目標の分子)

エネルギー消費または効率

GJ

目標分母(原単位目標のみ)

製品重量(トン)

基準年

2009

基準年の数値または比率

100

目標年

2019

目標年の数値または比率

90.4

報告年の数値または比率

94.9

目標達成度(%)[自動計算されます]

53.125

報告年の目標の状況

設定中

この目標は排出量目標の一部ですか?

Not part of the emissions target.

この目標は包括的なイニシアチブの一部ですか?

いいえ、包括的なイニシアチブの一部ではありません

説明してください(目標の対象範囲を含む)

Our company's energy conservation target is the target of excellent companies that have continued to reduce long-term energy consumption intensity in accordance with the energy conservation law of Japan. The company has begun to take actions to

achieve the target. In addition, in its Long-Term Business Plan, the company has set a goal of continuing to reduce the five-year average energy consumption intensity by more than 1%.

### C4.3

(C4.3) 報告年内に有効であった排出量削減イニシアチブがありましたか?計画段階または実行段階のものを含みます。

はい

### C4.3a

(C4.3a) 各段階の排出削減活動の総数、実施段階の削減活動については推定排出削減量(CO2 換算)もお答えください。

	イニシアチブの数	CO2 換算トン単位での年間 CO2 換算の推定排出削減総量(*の付いた行のみ)
調査中	16	1,500
実施予定*	72	48,000
実施開始(部分的)*	11	800
実施中*	151	40,000
実施できず	12	1,500

### C4.3b

(C4.3b) 報告年に実施された削減活動を以下の表に具体的にお答えください。

イニシアチブのカテゴリーとイニシアチブの種類

生産プロセスにおけるエネルギー効率

廃熱回収

推定年間 CO2e 排出削減量(CO2 換算トン)

21,000

スコープ

スコープ 1

自発的/義務的

自主的

年間経費節減額 (単位通貨 – C0.4 で指定の通り)

200,000,000

必要投資額 (単位通貨 -C0.4 で指定の通り)

330,000,000

投資回収期間

1~3年

イニシアチブの推定活動期間

1年未満

コメント

While the target scope is Scope 1, the reduction value also includes Scope 2 (market-based) emissions.

Our GHG reduction activities in FY2019 included sharing examples of energy conservation with the Group-wide Energy Committee and energy conservation committee of each factory and quarterly follow-ups (with the results reported to the Management Committee). While our target was to reduce GHG emissions by 30,000 tons by saving energy and taking other initiatives, we achieved a total reduction of 40,000 tons by accumulating small but comprehensive energy-saving activities in our factories, including recovering more heat, improving the efficiency of the refining process, and optimizing the plant operation.

### C4.3c

(C4.3c) 排出量削減活動への投資を促進するために貴社はどのような方法を使用しますか？

方法	コメント
社内カーボンプライシング	Our company makes investment decisions in the following way. First, the financial division shows the medium-term (or annual) amount of investment as a business policy. Then, each division examines and proposes the necessity of investments, ROI, payout time, and other factors before each investment is approved by an approver specified in the internal investment rules (president to general manager). To promote the shift to a low-carbon society, with regard to our investment in activities for reducing CO2 emissions, we have set an internal carbon price, calculate GHG reductions as an advantage, and use it for positive evaluations in the investments. The internal carbon price used by our company is 3,000 yen/t-CO2e.

### C4.5

(C4.5) 御社の製品やサービスに関して低カーボン製品に分類されるものはありますか。もしくは、御社の製品やサービスによって第三者が GHG 排出を削減できますか。

はい

## C4.5a

**(C4.5a)** 低炭素製品に分類している、あるいは第三者が温室効果ガス排出を回避できるようにする御社の製品および/またはサービスを具体的にお答えください。

### 集合のレベル

全社的

### 製品/製品群の内容

Low-carbon products are classified into the following.

- 1) Products that contribute to saving energy in the company's own manufacturing processes: Examples include PP and elastomer resins, which are manufactured using a catalyst with high polymerization activity (metallocene catalyst).
- 2) Products that contribute to saving energy and improving resource efficiency in the processing by customers: Examples include non-paint materials for automobiles, low-temperature sealing film, and film for reducing white printing.
- 3) Products that use biomass materials and reduce the use of fossil resources: Examples include eyeglass lens materials and automotive sheet materials.
- 4) Products that lead to the significant reduction of GHG: Examples include NOx reducing agents for automobiles and resource-saving crop cultivation systems that lead to a significant reduction of fertilizers.

これらは低炭素製品ですか、あるいはこれらによって回避排出量が可能になりますか？

低炭素製品および回避排出量

製品を低炭素として分類する、または削減貢献を算定するために使用した分類法、プロジェクト、または方法

その他、具体的にお答えください

Second version of the Life-cycle Impact Assessment Method based on Endpoint Modeling (LIME2)

報告年における低炭素製品による収益が占めるの比率 (%)

18

### コメント

The Blue Value Index, the original assessment criteria of the company, was made to conform to the items for characterization in LIME2, a lifecycle assessment (LCA) method. Accordingly, qualitative analysis in LCA is possible where needed. In addition, environmental contributions of Blue Value products include GHG reduction, resource conservation, and reduced toxicity of chemical substances. The percentage was calculated by dividing the sales of products, excluding Blue Value products that reduce the toxicity of chemical substances, by the total sales of the company. Because we certify Blue Value products for each product application, it is difficult to include income



from Blue Value products in the aggregation of income. We therefore use the ratio for sales.

## 集合のレベル

全社的

## 製品/製品群の内容

Examples of products that apply to avoided emissions include: 1) products for use as automotive materials that contribute to improving fuel efficiency with reduced weight, such as glass fiber reinforced PP and engineering plastics, which use resins as metal alternatives;  
2) food packaging products that maintain the freshness of food and thereby contribute to reducing food loss, such as film for maintaining food freshness, and;  
3) processed materials for renewable energy (including photovoltaic generation), such as encapsulant sheet materials.

これらは低炭素製品ですか、あるいはこれらによって回避排出量が可能になりますか？

回避排出量

製品を低炭素として分類する、または削減貢献を算定するために使用した分類法、プロジェクト、または方法

Addressing the Avoided Emissions Challenge- Chemicals sector

報告年における低炭素製品による収益が占めるの比率 (%)

45

## コメント

In consideration of a product lifecycle, environmental contributions of Blue Value products are assessed by comparison with targets at each lifecycle stage, which consist of raw material production, production by the company, processing, use of the product, and disposal of the product. Because Blue Value uses the LIME2 characteristics of Life Cycle Assessment, it is possible to calculate GHG emissions similar to ICCA's cLCA. Blue Value can calculate the difference in GHG emissions as an avoid emission in order to determine environmental contribution by comparing our company products with market standards, conventional products on the market, or its own conventional products. The percentage was calculated by dividing the sales of Blue Value products and lightweight products of the Mobility business by the sales of the entire company. Because we certify Blue Value products for each product application, it is difficult to include income from Blue Value products in the aggregation of income. We therefore use the ratio for sales.

## C5. 排出量算定方法

### C5.1

(C5.1) 基準年と基準年の排出量（スコープ 1 および 2）を記入します。

#### スコープ 1

---

基準年開始

4 月 1, 2005

基準年終了

3 月 31, 2006

基準年排出量(CO2 換算トン)

5,280,000

コメント

Base data for GHG emissions reduction target. Domestic production bases and domestic affiliates are covered.

#### スコープ 2(ロケーション基準)

---

基準年開始

4 月 1, 2005

基準年終了

3 月 31, 2006

基準年排出量(CO2 換算トン)

コメント

For scope 2, GHG emissions are calculated using market-based emission factors for domestic production sites and domestic affiliates.

#### スコープ 2(マーケット基準)

---

基準年開始

4 月 1, 2005

基準年終了

3 月 31, 2006

基準年排出量(CO2 換算トン)

1,090,000

コメント

Domestic production bases and domestic affiliates are covered.

## C5.2

(C5.2) 活動データの収集や排出量の計算に使用した基準、プロトコル、または方法論の名前を選択します。

日本の環境省、地球温暖化対策の促進に関する法律の改定による、地球温暖化に対処する対策の促進に関する法律(2005年改訂)

## C6. 排出量データ

### C6.1

(C6.1) 御社のスコープ 1 全世界総排出量はいくらでしたか。(単位: CO2 換算トン)

報告年

スコープ 1 世界合計総排出量(CO2 換算トン)  
3,777,455

コメント

The previous report was 3.77 million t CO2e, No change from the previous report.

### C6.2

(C6.2) スコープ 2 排出量回答に関する御社の方針について回答してください。

行 1

スコープ 2、ロケーション基準

スコープ 2、ロケーション基準を報告しています

スコープ 2、マーケット基準

スコープ 2、マーケット基準の値を報告しています

コメント

We report location base for overseas part.

### C6.3

(C6.3) 御社のスコープ 2 全世界総排出量はいくらでしたか(単位: CO2 換算トン)

報告年

スコープ 2、ロケーション基準

1,280,210

スコープ 2、マーケット基準(該当する場合)

746,984

コメント

Location-based emissions: Domestic and overseas emissions .Market-based emissions: Domestic emissions only . The location figure is about 4% less than the previous report, and the market figure is about 15% less than the previous report.

## C6.4

(C6.4) 御社のスコープ 1 とスコープ 2 報告バウンダリ(境界)内で、開示に含まれない排出源(例えば、特定の温室効果ガス、活動、地理的場所など)はありますか？

いいえ

## C6.5

(C6.5) 除外項目を開示、説明するとともに、御社のスコープ 3 全世界総排出量を説明します。

購入した商品およびサービス

評価状況

関連性あり、計算済み

CO2 換算トン

4,380,633

排出量計算方法

(1) Activity Data: Purchase amount; (2) Emission Factor: National Institute for Environmental Studies, “Embodied Energy and Emission Intensity Data for Japan Using Input-Output Tables (3EID);” (3) Calculation Method: Ministry of the Environment (MOE)/Ministry of Economy, Trade and Industry (METI), “General Guidelines on Supply Chain GHG Emission Accounting Ver. 2.3” (December 2017); and (4) Preconditions, Allocation Method, etc.: No matters of special note.

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

説明してください

16% increase compared to the previous report.

資本財

評価状況

関連性あり、計算済み

### CO2 換算トン

75,951

### 排出量計算方法

(1) Activity date: Value of purchased capital goods (2) Emission factor: Emission Database for Supply Chain Greenhouse Gas Emission Accounting (Ver. 2.6) published by MOE) and METI (3) Calculation method: General Guidelines on Supply Chain Greenhouse Gas Emission Accounting (Ver. 2.3) published by MOE and METI (December 2017) (4) Requirements: No specific requirements (regarding allocation method, etc.).

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

説明してください

19% increase compared to the previous report.

### 燃料およびエネルギー関連活動(スコープ 1 または 2 に含まれない)

---

### 評価状況

関連性あり、計算済み

### CO2 換算トン

205,214

### 排出量計算方法

1) Activity date: Volume of purchased fuel and amount of purchased electricity and steam (2) Emission factor: Emission Database for Supply Chain Greenhouse Gas Emission Accounting (Ver. 2.6) published by MOE and METI, and Basic Carbon Footprint Database (Ver. 1.01, domestic data) (3) Calculation method: General Guidelines on Supply Chain Greenhouse Gas Emission Accounting (Ver. 2.3) published by MOE and METI (December 2017) (4) Requirements: Calculation boundaries include companies operating on the premises of our works with which we have signed a memorandum on integrated energy management.

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

説明してください

4% increase compared to the previous report.

### 上流の輸送および物流

---

### 評価状況

関連性あり、計算済み

**CO2 換算トン**

53,923

**排出量計算方法**

(1) Activity date: Volume and distance shipped according to each mode of transport  
(2)(3) Emission factor/Calculation method: Manual on Greenhouse Gas Emission Accounting and Reporting (Ver. 4.4, Jul. 2019) published by MOE and METI, (4) Requirements: No specific requirements (regarding allocation method, etc.).

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

説明してください

9% increase compared to the previous report..

**操業で発生した廃棄物**

---

**評価状況**

関連性あり、計算済み

**CO2 換算トン**

38,344

**排出量計算方法**

(1) Activity date: Volume of waste processed offsite, according to type, (2) Emission factor: Emission Database for Supply Chain Greenhouse Gas Emission Accounting (Ver. 2.6) published by MOE and METI, (3) Calculation method: General Guidelines on Supply Chain Greenhouse Gas Emission Accounting (Ver. 2.3) published by MOE and METI (December 2017), and (4) Requirements: No specific requirements (regarding allocation method, etc.).

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

説明してください

1% increase compared to the previous report.

**出張**

---

**評価状況**

関連性あり、計算済み

**CO2 換算トン**

5,221

### 排出量計算方法

(1) Activity date: Amount paid in travel and accommodation expenses according to mode of transport at home and abroad, (2) Emission factor: Emission Database for Supply Chain Greenhouse Gas Emission Accounting (Ver. 2.6) published by MOE and METI, (3) Calculation method: General Guidelines on Supply Chain Greenhouse Gas Emission Accounting (Ver. 2.2, March 2015), and (4) Requirements: As there is no specific category for the amount paid in domestic travel expenses according to mode of transport, we conduct sample surveys to determine percentages for travel by air, train, bus, taxi, etc.

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

説明してください

1% increase compared to the previous report.

### 雇用者の通勤

---

#### 評価状況

関連性あり、計算済み

#### CO2 換算トン

4,945

### 排出量計算方法

(1) Activity date: Amount paid according to commuting area, (2) Emission factor: Emission Database for Supply Chain Greenhouse Gas Emission Accounting (Ver. 2.6) published by MOE and METI, (3) Calculation method: General Guidelines on Supply Chain Greenhouse Gas Emission Accounting (Ver. 2.3) published by MOE and METI (December 2017), and (4) Requirements: No specific requirements (regarding allocation method, etc.).

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

説明してください

4% reduction from the previous report.

### 上流のリース資産

---

#### 評価状況

関連性あり、計算済み

#### CO2 換算トン

894

### 排出量計算方法

(1) Activity date: Amount of power and air conditioning used by tenants of the head office and branch offices, (2)(3) Emission factor/Calculation method: Manual on Greenhouse Gas Emission Accounting and Reporting (Ver. 4.3.2 Jun. 2018) published by MOE and METI, and (4) Requirements: As our offices are partially occupied by affiliates, the floor space used has been allocated accordingly.

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

説明してください

5% increase compared to the previous report.

### 下流の輸送および物流

---

#### 評価状況

関連しているが、算定していない

説明してください

Based on the B-to-B relationships we have with our customers, we undertake the upstream transportation of our products. As we operate in the materials industry, we deal with a high proportion of intermediate products, which often makes it hard for us to understand exactly how our products are distributed to end users. For this reason, it is not possible to figure out the quantitative amount of our products actually shipped in a rational manner. Not applicable as we have no data regarding the shipment volume.

### 販売製品の加工

---

#### 評価状況

関連しているが、算定していない

説明してください

As we operate in the materials industry, we deal with a high proportion of intermediate products, which helps to create a wide range of potential demand from our customers. It is hard, though, to gather data from our customers regarding the details of process work done by the companies involved in the value chain as well as their CO2 emission basic units. Further, it is not possible at this point in time to infer conclusions from the secondary data with a reasonable degree of accuracy. We therefore chose not to provide any specific data for this particular item.

### 販売製品の使用

---

#### 評価状況

関連性あり、計算済み

**CO2 換算トン**

3,620,605.832



### 排出量計算方法

(1) Activity Date: Sales amount of fuels, electricity and heat, quantity of our products sold for domestic automotive materials; (2) Emission Factor: MOE and METI, "Calculation and Response Manual of Greenhouse emission burden (Ver. 4.4. Jul.2019)," etc.; (3) Calculation Method: MOE and METI, "General Guidelines on Supply Chain GHG Emission Accounting Ver. 2.3" (December 2017); and (4) Preconditions, Allocation Method: Calculation is made under the assumption that CO2 emissions from the use of automobiles are allocated according to the weight of materials.

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

説明してください

1% reduction from the previous report.

### 販売製品の生産終了処理

---

#### 評価状況

関連性あり、計算済み

#### CO2 換算トン

2,455,110.184

### 排出量計算方法

(1) Activity Date: Sales amount of products which are rendered as plastic products by us or customers; (2) Emission Factor: MOE and METI, Data for Supply Chain GHG Emission Accounting Ver. 2.5;" (3) Calculation Method: MOE and METI, "General Guidelines on Supply Chain GHG Emission Accounting Ver. 2.3" (December 2017); and (4) Preconditions, Allocation Method, etc.: No matters of special note.

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

説明してください

5% increase compared to the previous report.

### 下流のリース資産

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#### 評価状況

関連性がない。理由の説明

説明してください

Not applicable as we have no relevant assets.

### フランチャイズ

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### 評価状況

関連性がない。理由の説明

### 説明してください

Not applicable as we have no relevant assets.

## 投資

---

### 評価状況

関連性あり、計算済み

### CO2 換算トン

853,558

### 排出量計算方法

(1) Activity Date: CO2 emissions of consolidated subsidiaries home and abroad; (2) Emission Factor: MOE and METI, "Calculation and Response Manual of Greenhouse emission burden (Ver. 4.4. Jul. 2019);" (3) Calculation Method: MOE and METI, "General Guidelines on Supply Chain GHG Emission Accounting Ver. 2.3" (December 2017); and (4) Preconditions, Allocation Method: CO2 emissions of the relevant companies were allocated according to the ratio of investment equity.

サプライヤーまたはバリューチェーン・パートナーから得たデータを用いて計算された排出量の割合

0

### 説明してください

20% reduction from the previous report.

## その他(上流)

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### 評価状況

関連性がない。理由の説明

### 説明してください

No additional data for this moment.

## その他(下流)

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### 評価状況

関連性がない。理由の説明

### 説明してください

No additional data for this moment.

## C6.7

(C6.7) 二酸化炭素排出は御社に関連する生体炭素からのものですか?

いいえ

## C6.10

(C6.10) 報告年のスコープ 1 と 2 の組みみ合わせ全世界総排出量について、単位通貨総売上あたりの CO<sub>2</sub> 換算トン単位で詳細を説明し、御社事業に当てはまる追加の原単位指標を記入します。

原単位数値

0.00000378

指標分子(スコープ 1 および 2 の組みみ合わせ全世界総排出量、CO<sub>2</sub> 換算トン)

5,062,635

指標の分母

売上額合計

分母：総量

1,339,000,000,000

使用したスコープ 2 の値

ロケーション基準

前年からの変化率

7.5

変化の増減

増加

変化の理由

Emissions (numerator) decreased by 3% and sales (denominator) decreased by 9.7%, resulting in a increase in intensity.

## C7. 排出量内訳

### C7.1

(C7.1) 貴社では、温室効果ガスの種類別のスコープ 1 排出量の内訳を作成していますか？

はい

### C7.1a

(C7.1a) スコープ 1 総排出量の内訳を温室効果ガスの種類ごとに回答し、使用した地球温暖化係数 (GWP) それぞれの出典も記入してください。

温室効果ガス	スコープ 1 排出量(CO2 換算トン)	GWP 参照
CO2	3,744,749	その他、具体的にお答えください Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)
CH4	2,757	その他、具体的にお答えください Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)
N2O	13,620	その他、具体的にお答えください Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)
HFCs	635	その他、具体的にお答えください Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)
PFCs	0	その他、具体的にお答えください Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)
SF6	42	その他、具体的にお答えください Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)
NF3	15,653	その他、具体的にお答えください Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

## C7.2

(C7.2) スコープ 1 総排出量の内訳を国別/地域別で回答してください。

国/地域	スコープ 1 排出量(CO2 換算トン)
インド	31
インドネシア	10,533

シンガポール	138,710
タイ	3,778
マレーシア	123
メキシコ	380
中国	152
米国	7,477
日本	746,983

## C7.3

(C7.3) スコープ 1 排出量の内訳として、その他に回答可能な分類方法があれば回答してください。

施設別

### C7.3b

(C7.3b) 事業施設別のスコープ 1 全世界総排出量の内訳を示します。

施設	スコープ 1 排出量(CO2 換算トン)	緯度	経度
Mother company's works	3,550,109	35	139
Domestic Subsidiaries & Affiliates	66,162	35	139
Overseas Subsidiaries & Affiliates	161,184	13	100

## C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) 御社のグローバルでのスコープ 1 排出量の内訳をセクター生産活動別に CO2 換算トン単位で回答してください。

	スコープ 1 総排出量(単位: CO2 換算トン)	コメント
化学品生産活動	3,777,455	There are no production activities other than chemical substance production activities.

## C7.5

(C7.5) スコープ 2 排出量の内訳を国/地域別で回答してください。

国/地域	スコープ 2、ロケーション基準 (CO2 換算トン)	スコープ 2、マーケット基準 (CO2 換算トン)	購入または消費した電力、熱、蒸気、または冷却量(MWh)	スコープ 2 マーケット基準の手法において考慮した、低炭素電

				力/熱/蒸気/冷却の購入量および消費量(MWh)
日本	742,012	746,983	1,859,572	118,732
インド	7,317		7,558	0
インドネシア	15,623		16,271	0
シンガポール	356,146		253,931	0
タイ	52,490		99,225	0
マレーシア	2,138		3,259	0
メキシコ	13,030		29,614	0
中国	31,156		39,580	0
米国	60,298		112,706	0

## C7.6

(C7.6) スコープ 2 全世界総排出量の内訳のうちのどれを記入できるか示します。  
施設別

### C7.6b

(C7.6b) 事業施設別にスコープ 2 全世界総排出量の内訳を示します。

施設	スコープ 2、ロケーション基準 (CO2 換算トン)	スコープ 2、マーケット基準 (CO2 換算トン)
Mother company's works	614,228	604,988
Domestic Subsidiaries & Affiliates	127,785	141,996
Overseas Subsidiaries & Affiliates	538,198	

## C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) 御社のスコープ 2 全世界総排出量の内訳をセクター生産活動別に回答してください(単位: CO<sub>2</sub> 換算トン)。

	スコープ 2、ロケーション基準(CO <sub>2</sub> 換算トン)	スコープ 2、マーケット基準(該当する場合)、CO <sub>2</sub> 換算トン	コメント
化学品生産活動	1,280,210	746,984	There are no production activities other than chemical substance production activities.

## C-CH7.8

(C-CH7.8) 御社のスコープ 3、カテゴリー1 排出量を購入化学原料別に開示してください。

購入原料	スコープ 3、カテゴリー 1 の割合 購入原料による tCO <sub>2</sub> e	計算方法の説明
ガソリン	0	The GHG emissions of Scope 3 category 1 are 4,380,663 t CO <sub>2</sub> e and the GHG emissions from purchased gasoline are 187 t CO <sub>2</sub> e. The ratio was calculated to be 0.004%.

## C-CH7.8a

(C-CH7.8a) 温室効果ガスである製品の販売量を回答してください。

	販売量 (単位: t)	コメント
二酸化炭素 (CO <sub>2</sub> )		Mitsui Chemicals sells by-product carbon dioxide as crude carbon dioxide. The sales volume is a trade secret.
メタン(CH <sub>4</sub> )	0	Mitsui Chemicals does not sell this product.
亜酸化窒素 (N <sub>2</sub> O)	0	Mitsui Chemicals does not sell this product.
ハイドロフルオロカーボン (HFC)	0	Mitsui Chemicals does not sell this product.
ペルフルオロカーボン(PFC)	0	Mitsui Chemicals does not sell this product.

六フッ化硫黄 (SF6)	0	Mitsui Chemicals does not sell this product.
三フッ化窒素 (NF3)		Mitsui Chemicals sells NF3 to electric and electronic industries. The sales volume is a trade secret. Production capacity of SHIMONOSEKI MITSUI CHEMICALS, INC(Japan) 1500 t / Y

## C7.9

(C7.9) 報告年における排出量総量(スコープ 1+2)は前年と比較してどのように変化しましたか?

減少

### C7.9a

(C7.9a) 世界排出総量(スコープ 1 と 2 の合計)の変化の理由を特定し、理由ごとに前年と比較して排出量がどのように変化したかを示します。

	排出量の変化(CO2換算トン)	変化の増減	排出量(割合)	計算を説明してください
再生可能エネルギー消費の変化	0	変更なし	0	Items not applicable due to changes from the previous year
その他の排出量削減活動	30,000	減少	0.57	The total value of SCOPE1 + SCOPE2 reported in the previous report was 5.22 million t CO2e, and GHG emissions decreased by 30000 t through energy conservation activities such as the introduction of energy-efficient equipment and optimization of manufacturing processes. The result is $\Delta 30000/5.22 \text{ million} * 100 = \Delta 0.57\%$
投資引き上げ	175,000	減少	3.35	Excluding two overseas affiliates. The total value of SCOPE1 + SCOPE2 reported in the previous report was 5.22 million t CO2e, and GHG emissions decreased by 175000 t. The result is $\Delta 175000/5.22 \text{ million} * 100 = \Delta 3.35\%$
買収	0	変更なし	0	Items not applicable due to changes from the previous year



合併	0	変 更 な し	0	Items not applicable due to changes from the previous year
生産量 の変化	57,500	増 加	1.1	The total value of SCOPE1 + SCOPE2 reported in the previous report was 5.22 million t CO <sub>2</sub> e, and GHG emissions increased by 57500 tons due to an increase in production at overseas production sites..The result is $57500/5.22 \text{ million} * 100 = 3.35\%$
方法論 の変更	0	変 更 な し	0	Items not applicable due to changes from the previous year
境界の 変更	0	変 更 な し	0	Items not applicable due to changes from the previous year
物理的 操業条 件の変 化	0	変 更 な し	0	Items not applicable due to changes from the previous year
特定し ていな い	4,000	増 加	0.08	The total value of SCOPE1 + SCOPE2 reported in the previous report was 5.22 million t CO <sub>2</sub> e, and GHG emissions increased by 4000 tons .The result is $4000/5.22 \text{ million} * 100 = 0.08\%$
その他	11,000	減 少	0.21	The total value of SCOPE1 + SCOPE2 reported in the previous report was 5.22 million t CO <sub>2</sub> e, and GHG emissions decreased by 11000 t due to a change in GHG emission factor of electricity at one domestic production site. The result is $\Delta 11000/5.22 \text{ million} * 100 = \Delta 0.21\%$

## C7.9b

(C7.9b) C7.9 および C7.9a の回答の根拠となる排出量数値は、ロケーション基準手法のスコープ 2 もしくはマーケット基準手法のスコープ 2 のどちらを使用していますか?

マーケット基準

## C8. エネルギー

### C8.1

(C8.1) 報告年の事業支出のうち何%がエネルギー使用によるものでしたか?

5%超、10%以下

## C8.2

(C8.2) 御社がどのエネルギー関連活動を行ったか選択してください。

	御社が報告年に次のエネルギー関連活動を実践したかどうかを示します。
燃料の消費(原料を除く)	はい
購入または獲得した電力の消費	はい
購入または獲得した熱の消費	いいえ
購入または獲得した蒸気の消費	はい
購入または獲得した冷却の消費	いいえ
電力、熱、蒸気、または冷却の生成	はい

## C8.2a

(C8.2a) 御社のエネルギー消費量合計(原料を除く)を MWh 単位で報告してください。

	発熱量	再生可能エネルギー源からのエネルギー量 (単位：MWh)	非再生可能エネルギー源からのエネルギー量 (単位：MWh)	総エネルギー量(再生可能と非再生可能) MWh
燃料の消費(原料を除く)	HHV (高位発熱量)	0	18,235,035	18,235,035
購入または獲得した電力の消費		0	2,113,099	2,113,099
購入または獲得した蒸気の消費		118,732	970,412	1,089,144
自家生成非燃料再生可能エネルギーの消費		0		0
合計エネルギー消費量		118,732	21,318,546	21,437,278

## C-CH8.2a

**(C-CH8.2a)** 化学品生産活動に関する御社のエネルギー消費量合計(原料を除く)を MWh 単位で報告します。

	発熱量	総エネルギー量 (単位 : MWh)
燃料の消費(原材料を除く)	HHV (高位発熱量)	18,235,035
購入または獲得した電力の消費		2,113,099
購入または獲得した蒸気の消費		1,089,144
自家生成非燃料再生可能エネルギーの消費		0
合計エネルギー消費量		21,437,278

## C8.2b

**(C8.2b)** あなたの組織の燃料消費の用途を選択します。

	御社がこのエネルギー用途の活動を行うかどうかを示してください
発電のための燃料の消費量	はい
熱生成のための燃料の消費量	はい
蒸気生成のための燃料の消費量	はい
冷却生成のための燃料の消費量	いいえ
コージェネレーションまたはトリジェネレーションのための燃料の消費	はい

## C8.2c

**(C8.2c)** 御社が消費した燃料の量(原料を除く)を燃料の種類別に MWh 単位で示します。

燃料(原料を除く)

アスファルト

発熱量

HHV (高位発熱量)

組織によって消費された燃料合計(MWh)

831,300

電力の自家生成のために消費された燃料(MWh)

0

熱の自家発生のために消費された燃料(MWh)

0

蒸気の自家発生のために消費された燃料(MWh)

0

自家トリジェネレーションのために消費された燃料(MWh)

831,300

排出係数

0.0763

単位

CO2 トン/GJ

排出係数の情報源

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superseded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

コメント

no comment

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燃料(原料を除く)

原油、重質

発熱量

HHV (高位発熱量)

組織によって消費された燃料合計(MWh)

784,637

電力の自家生成のために消費された燃料(MWh)

0

熱の自家発生のために消費された燃料(MWh)

0

蒸気の自家発生のために消費された燃料(MWh)

0

自家トリジェネレーションのために消費された燃料(MWh)

784,637

排出係数

0.0704

単位

CO2 トン/GJ

排出係数の情報源

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures toCope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

コメント

- ・ Fuel oil A:0.0693tCO2/GJ
- ・ Fuel oil B, C:0.0715tCO2/GJ

reference : Japan Ministry of the Environment, Law Concerning the Promotion of the Measures toCope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

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燃料(原料を除く)

液化石油ガス(LPG)

発熱量

HHV (高位発熱量)

組織によって消費された燃料合計(MWh)

83,415

電力の自家生成のために消費された燃料(MWh)

0

熱の自家発生のために消費された燃料(MWh)

0

蒸気の自家発生のために消費された燃料(MWh)

0

自家トリジェネレーションのために消費された燃料(MWh)

83,415

排出係数

0.059

単位

CO2 トン/GJ

排出係数の情報源

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superseded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

コメント

no comment

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**燃料(原料を除く)**

液化天然ガス(LNG)

**発熱量**

HHV (高位発熱量)

**組織によって消費された燃料合計(MWh)**

2,433,253

**電力の自家生成のために消費された燃料(MWh)**

0

**熱の自家発生のために消費された燃料(MWh)**

0

**蒸気の自家発生のために消費された燃料(MWh)**

0

**自家トリジェネレーションのために消費された燃料(MWh)**

2,433,253

**排出係数**

0.0495

**単位**

CO2 トン/GJ

**排出係数の情報源**

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superseded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

コメント

no comment.

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**燃料(原料を除く)**

その他の石油ガス

**発熱量**

HHV (高位発熱量)

**組織によって消費された燃料合計(MWh)**

127,962

**電力の自家生成のために消費された燃料(MWh)**

0

**熱の自家発生のために消費された燃料(MWh)**

0

**蒸気の自家発生のために消費された燃料(MWh)**

0

**自家トリジェネレーションのために消費された燃料(MWh)**

127,962

**排出係数**

0.0521

**単位**

CO2 トン/GJ

**排出係数の情報源**

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superseded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

**コメント**

no comment

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**燃料(原料を除く)**

天然ガス

**発熱量**

HHV (高位発熱量)

**組織によって消費された燃料合計(MWh)**

560,617

**電力の自家生成のために消費された燃料(MWh)**

0

**熱の自家発生のために消費された燃料(MWh)**

0

蒸気の自家発生のために消費された燃料(MWh)

0

自家トリジェネレーションのために消費された燃料(MWh)

560,617

排出係数

0.051

単位

CO2 トン/GJ

排出係数の情報源

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superseded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

コメント

no comment.

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燃料(原料を除く)

工業用一般炭

発熱量

HHV (高位発熱量)

組織によって消費された燃料合計(MWh)

1,015,279

電力の自家生成のために消費された燃料(MWh)

0

熱の自家発生のために消費された燃料(MWh)

0

蒸気の自家発生のために消費された燃料(MWh)

0

自家トリジェネレーションのために消費された燃料(MWh)

1,015,279

排出係数

0.0898

単位

CO2 トン/GJ



**排出係数の情報源**

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures toCope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

**コメント**

no comment.

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**燃料(原料を除く)**

その他、具体的にお答えください  
by-product Fuel Oil

**発熱量**

HHV (高位発熱量)

**組織によって消費された燃料合計(MWh)**

2,525,646

**電力の自家生成のために消費された燃料(MWh)**

0

**熱の自家発生のために消費された燃料(MWh)**

0

**蒸気の自家発生のために消費された燃料(MWh)**

0

**自家トリジェネレーションのために消費された燃料(MWh)**

2,525,646

**排出係数**

0.0686

**単位**

CO2 トン/GJ

**排出係数の情報源**

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures toCope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment).

**コメント**

no comment.

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**燃料(原料を除く)**

その他、具体的にお答えください  
by-product Fuel Gas

**発熱量**

HHV (高位発熱量)

**組織によって消費された燃料合計(MWh)**

9,605,455

**電力の自家生成のために消費された燃料(MWh)**

0

**熱の自家発生のために消費された燃料(MWh)**

0

**蒸気の自家発生のために消費された燃料(MWh)**

0

**自家トリジェネレーションのために消費された燃料(MWh)**

9,605,455

**排出係数**

0.0521

**単位**

CO2 トン/GJ

**排出係数の情報源**

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superseded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment).

**コメント**

no comment.

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**燃料(原料を除く)**

都市ガス

**発熱量**

HHV (高位発熱量)

**組織によって消費された燃料合計(MWh)**

168,363

**電力の自家生成のために消費された燃料(MWh)**

0

熱の自家発生のために消費された燃料(MWh)

0

蒸気の自家発生のために消費された燃料(MWh)

0

自家トリジェネレーションのために消費された燃料(MWh)

168,363

排出係数

0.0499

単位

CO2 トン/GJ

排出係数の情報源

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures to Cope with Global Warming, Superseded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

コメント

no comment.

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燃料(原料を除く)

その他、具体的にお答えください

Gasoline, kerosene

発熱量

HHV (高位発熱量)

組織によって消費された燃料合計(MWh)

99,108

電力の自家生成のために消費された燃料(MWh)

0

熱の自家発生のために消費された燃料(MWh)

0

蒸気の自家発生のために消費された燃料(MWh)

0

自家トリジェネレーションのために消費された燃料(MWh)

99,108

排出係数

0.0184

## 単位

CO<sub>2</sub> トン/GJ

## 排出係数の情報源

Japan Ministry of the Environment, Law Concerning the Promotion of the Measures toCope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

## コメント

- ・ Gasoline:0.0183 tCO<sub>2</sub>/GJ
- ・ Kerosene, C:0.0185 tCO<sub>2</sub>/GJ

reference : Japan Ministry of the Environment, Law Concerning the Promotion of the Measures toCope with Global Warming, Superceded by Revision of the Act on Promotion of Global Warming Countermeasures (2005 Amendment)

## C8.2d

(C8.2d) 御社が報告年に生成、消費した電力、熱、蒸気および冷水に関する詳細を記入します。

	総生成量 (MWh)	組織によって消費される生成量 (MWh)	再生可能エネルギー源からの総生成量 (MWh)	組織によって消費される再生可能エネルギー源からの生成量(MWh)
電力	1,393,470	1,074,944	0	0
熱	0	0	0	0
蒸気	4,141,357	3,522,903	0	0
冷水	0	0	0	0

## C-CH8.2d

(C-CH8.2d) 御社が、化学品生産活動用に生成、消費した電力、熱、蒸気および冷却に関する詳細を記入します。

	化学品セクター境界内部の総発電量 (MWh)	化学品セクター境界内部で消費される発電量 (MWh)
電力	1,393,470	1,074,944
熱	0	0
蒸気	3,098,479	2,494,635

冷水	0	0
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## C8.2e

(C8.2e) C6.3 で報告したマーケット基準スコープ 2 の数値におけるゼロ排出係数について説明した電力、熱、蒸気、および/または冷却量に関する詳細を記入します。

### 調達方法

電力購入契約(PPA)、第三者が所有したオンサイト/オフサイト発電機あり、送配電グリッドなし(直接供給系統)

### 低炭素技術の種類

バイオマス

### 低炭素電力、熱、蒸気、または冷却の消費の国/地域

日本

### ゼロ排出係数時の算定された消費エネルギー量(MWh)

118,732

### コメント

The company purchases biomass boiler steam using wood chip from Energy Service Company.

## C-CH8.3

(C-CH8.3) 御社は、化学品生産活動の原料として燃料を消費しますか？

はい

## C-CH8.3a

(C-CH8.3a) 化学品生産活動のための原料として燃料の御社の消費に関する詳細を開示します。

### 原料として使用される燃料

その他、具体的にお答えください

feedstock

### 総消費量

1,093,269

### 総消費量単位

メートルトン

原料の固有二酸化炭素排出係数(単位: CO<sub>2</sub> トン/消費量単位)

3.16

原料の発熱量、MWh/消費量単位

13.6

発熱量

HHV

コメント

As the information on raw materials for chemical products is confidential, the CO<sub>2</sub> emission coefficient and calorific value of raw materials are calculated from the total weight of raw materials, the total calorific value of raw materials, and the total carbon dioxide emission.

## C-CH8.3b

(C-CH8.3b) 御社の化学品原料に使用する一次資源の質量での割合を示します。

	総化学品原料のうちの割合(%)
石油	89
天然ガス	11
石炭	0
バイオマス	0
廃棄物 (非バイオマス)	0
化石燃料(石炭、ガス、石油を区別できない場合)	0
供給源不明または細分類できない	0

## C9. 追加指標

### C9.1

(C9.1) 御社事業に関連がある、その他の気候関連評価基準を回答してください。

詳細

廃棄物

指標値

0.01

## 指標分子

Off-site landfill(t)

## 指標分母（原単位のみ）

Waste generated(t)

## 前年からの変化率

0

## 変化の増減

変更なし

## 説明してください

The Mitsui Chemicals Group aims to minimize the industrial waste produced by its production sites in Japan and its affiliated companies in other countries. The target volume of final disposal (landfill) is 1% or less on average. In fiscal 2019, the Group succeeded in minimizing industrial waste from its production sites in Japan, including those of its affiliated companies. It has continued its efforts to minimize industrial waste for the eight consecutive years since fiscal 2011. The amount of industrial waste going into landfills from affiliated companies outside Japan has been kept at 1% or lower for the ten consecutive years since fiscal 2009.

## 詳細

その他、具体的にお答えください

Blue Value™ sales ratio

## 指標値

18

## 指標分子

Blue Value™ sales

## 指標分母（原単位のみ）

Companywide sales

## 前年からの変化率

13

## 変化の増減

増加

## 説明してください

Evaluating the Group's products and services by application using unique criteria, we certify those with high environmental contribution value and high quality of life (QOL) improvement contribution value as Blue Value™ and Rose Value™ products, respectively.

We set the ratios to net sales of Blue Value™ products as one of the environmental key performance indicators (KPIs) under our 2025 Long-term Business Plan.

Net sales of Blue Value™ products (numerator) decreased from around 250.0 billion yen to around 237.0 billion yen. However, the rate of decrease of net sales of the overall company (denominator) is high, and the value for the indicator increased relatively speaking.

## C-CH9.3a

(C-CH9.3a) 御社の化学品製品を具体的にお答えください。

---

### 生産製品

高価値化学物質(水蒸気分解)

生産量(メートルトン)

能力(メートルトン)

612,000

直接排出量原単位(CO<sub>2</sub> 換算トン/製品重量(トン))

電力原単位(MWh/製品重量(メートルトン))

蒸気原単位(MWh/製品重量(メートルトン))

回収された蒸気/熱(MWh/製品重量(メートルトン))

コメント

Ethylene production at 100% capacity is shown.

---

### 生産製品

高価値化学物質(水蒸気分解)

生産量(メートルトン)

能力(メートルトン)

100,000



直接排出量原単位(CO2 換算トン/製品重量(トン))

電力原単位(MWh/製品重量(メートルトン))

蒸気の原単位(MWh/製品重量(メートルトン))

回収された蒸気/熱(MWh/製品重量(メートルトン))

コメント

Ethylene oxide production at 100% capacity is shown.

---

生産製品

アンモニア

生産量(メートルトン)

能力(メートルトン)

310,000

直接排出量原単位(CO2 換算トン/製品重量(トン))

電力原単位(MWh/製品重量(メートルトン))

蒸気の原単位(MWh/製品重量(メートルトン))

回収された蒸気/熱(MWh/製品重量(メートルトン))

コメント

Ammonia production capacity at 100% is shown.

---

生産製品

芳香族抽出

生産量(メートルトン)

能力(メートルトン)

309,000

直接排出量原単位(CO2 換算トン/製品重量(トン))

電力原単位(MWh/製品重量(メートルトン))

蒸気/熱の原単位(MWh/製品重量(メートルトン))

回収された蒸気/熱(MWh/製品重量(メートルトン))

コメント

BTX production capacity at 100% is shown.

---

生産製品

ポリマー

生産量(メートルトン)

能力(メートルトン)

490,000

直接排出量原単位(CO2 換算トン/製品重量(トン))

電力原単位(MWh/製品重量(メートルトン))

蒸気/熱の原単位(MWh/製品重量(メートルトン))

回収された蒸気/熱(MWh/製品重量(メートルトン))

コメント

The figure shows polyethylene production capacity of 100%.

---

生産製品

その他、具体的にお答えください

Nonwoven fabric raw material

生産量(メートルトン)

能力(メートルトン)

109,000

直接排出量原単位(CO<sub>2</sub> 換算トン/製品重量(トン))

電力原単位(MWh/製品重量(メートルトン))

蒸気の原単位(MWh/製品重量(メートルトン))

回収された蒸気/熱(MWh/製品重量(メートルトン))

コメント

Nonwoven fabric raw material production capacity at 100% is shown.

---

生産製品

ポリマー

生産量(メートルトン)

能力(メートルトン)

1,050,000

直接排出量原単位(CO<sub>2</sub> 換算トン/製品重量(トン))

電力原単位(MWh/製品重量(メートルトン))

蒸気の原単位(MWh/製品重量(メートルトン))

回収された蒸気/熱(MWh/製品重量(メートルトン))

コメント

100% production capacity of PP compound is shown.

## C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) 貴社は、セクター活動に関連した低炭素製品またはサービスの研究開発(R&D)に投資しますか？

	低炭素 R&D への投資	コメント
行 1	はい	Mitsui Chemicals has declared it will contribute to the establishment of a recycling-based economy by working on the climate change and plastics problems as a part of its company-wide strategy. Accordingly, the company has invested in research and development regarding recycling and the use of biomass for plastics.

### C-CH9.6a

(C-CH9.6a) この 3 年間の化学品生産活動に関する低炭素 R&D への貴社による投資の詳細を記入します。

技術領域	報告年の開発の段階	この 3 年間にわたる R&D 総投資額の平均比率(%)	報告年の R&D 投資額(任意)	コメント
その他、具体的にお答えください Oil substitution technologies	応用研究開発	20%以下		The company invests in technologies which enhance its lineup of products using recycled materials, as a way of applying recycled materials in its businesses. The goals are to achieve technologies that replace a part of the oil-derived raw materials with raw materials derived from waste plastics or biomass to diversify the sources of raw materials and break away from oil resources, and to realize a recycling-based economy. The amount of the investment is approx. 1% of research and development costs.

バイオテクノロジー	パイロット実証	20%以下		Mitsui Chemicals, Inc. plans to conduct the world's first verification test for the industrial production of bio-based polypropylene (bio-PP) to assess it multilaterally in terms of technology, quality, economic efficiency, effect on reducing GHG emissions, and other aspects. The Mitsui Chemicals Group will push forward with these efforts to study the commercialization of bio-PP. (Production will begin in 2024 at the earliest.)
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## C10. 検証

### C10.1

(C10.1) 報告した排出量に対する検証/保証の状況を回答してください。

	検証/保証状況
スコープ 1	第三者検証/保証を実施中
スコープ 2(ロケーション基準またはマーケット基準)	第三者検証/保証を実施中
スコープ 3	第三者検証/保証を実施中

### C10.1a

(C10.1a) スコープ 1 排出量に対して実施した検証/保証の詳細を記入し、それらの声明書を添付します。

検証/保証の実施サイクル

年 1 回のプロセス

報告年における検証/保証取得状況

報告年の検証/保証を取得中で完了していない - 昨年の検証書類を添付

検証/保証の種別

限定的保証

声明書を添付

 GHG 検証意見書 英文.pdf

ページ/章

1page

関連する規格

ISO14064-3

検証された報告排出量の割合(%)

90

## C10.1b

(C10.1b) スコープ 2 排出量に対して行われた検証/保証の詳細を記入し、関連する声明書を添付します。

---

スコープ 2 の手法

スコープ 2、ロケーション基準

検証/保証の実施サイクル

年 1 回のプロセス


報告年における検証/保証取得状況

報告年の検証/保証を取得中で完了していない - 昨年の検証書類を添付

検証/保証の種別

限定的保証

声明書を添付

 GHG 検証意見書 英文.pdf

ページ/章

1page

関連する規格

ISO14064-3

検証された報告排出量の割合(%)

80

## C10.1c

(C10.1c) スコープ 3 排出量に対して行われた検証/保証の詳細を記入し、関連する声明書を添付します。

---

スコープ 3 カテゴリー

スコープ 3:資本財

検証/保証の実施サイクル

年 1 回のプロセス


**報告年における検証/保証取得状況**

報告年の検証/保証を取得中で完了していない - 昨年の検証書類を添付

**検証/保証の種別**

限定的保証

**声明書を添付**

 GHG 検証意見書 英文.pdf

**ページ/章**

1page

**関連する規格**

ISO14064-3

**検証された報告排出量の割合(%)**

0.6


## C10.2


**(C10.2) C6.1、C6.3、および C6.5 で報告した排出量値以外に、CDP 開示で報告する気候関連情報を検証していますか？**

はい

## C10.2a

**(C10.2a) CDP 開示した情報のうち、どのデータポイントを検証しましたか、そしてそれはどの検証基準を使用しましたか？**

関連する検証の開示モジュール	検証したデータ	検証基準	説明してください
C9. 追加指標	その他、具体的にお答えください  Amount of industrial waste sent to landfill	AA1000AS	We have obtained third-party assurance regarding sustainability activities as indicated in the Sustainability Report and on the relevant website. As for the boundary of the data, it will be the base including domestic and overseas, and the verification will be carried out every fiscal year in the future.   1

C7. 排出量内訳	その他、具体的にお答えください NOx emissions	AA1000AS	We have obtained third-party assurance regarding sustainability activities as indicated in the Sustainability Report and on the relevant website. As for the boundary of the data, it will be the base including domestic and overseas, and the verification will be carried out every fiscal year in the future.  1
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 1 ASSURANCE STATEMENT\_英文.pdf

## C11. カーボンプライシング

### C11.1

(C11.1) 御社の操業や活動はカーボン プライシング システム (ETS、キャップ・アンド・トレード、炭素税) によって規制されていますか?

はい

#### C11.1a

(C11.1a) 御社の操業に影響を及ぼすカーボンプライシング規制を選択してください。

日本炭素税

#### C11.1c

(C11.1c) 規制を受ける税金システムごとに、以下の表を記入します。

日本炭素税

期間開始日

4 月 1, 2019

期間終了日

3 月 31, 2020

税の対象とされるスコープ 1 総排出量の割合

23.6

支払った税金の合計金額

258,000,000

コメント

Domestic purchases of LNG, heavy oil, and coal are covered.



## C11.1d

(C11.1d) 規制を受けている、あるいは規制を受けると見込んでいる制度に準拠するための戦略はどのようなものですか？

Collect information on carbon pricing etc. in each country, grasp the impact on cost to each product, each business department in charge of the product will consider the response, but consider the countermeasure if the impact on business activities is significant And reflect it in the business strategy.

## C11.2

(C11.2) 御社は報告対象期間内にプロジェクトベースの排出権を創出または購入しましたか？

いいえ

## C11.3

(C11.3) 御社は社内カーボンプライス(炭素価格)を使用していますか？

はい

## C11.3a

(C11.3a) 御社が導入している内部炭素価格を具体的にお答えください。

内部炭素価格を実施する目的

低炭素投資の推進

温室効果ガススコープ

スコープ 1

スコープ 2

用途

The company assumes that the reduction of CO2 emissions will become mandatory to prevent global warming. To promote the rationalization investments that contribute to reducing CO2 emissions, the company makes it a rule to describe the effect of such investment projects on reducing the cost of emission credits.

使用された実際の価格 (通貨/トン)

3,000

使用される価格の差額

A uniform price has been set. However, the price will be revised in the case of a significant environmental change.

内部炭素価格の種類

暗示的価格

影響および意味合い

Subjects and costs were clarified to create the FY2017 investment and loan budget. Accordingly, the impact on business has yet to be seen.

## C12. エンゲージメント

### C12.1

(C12.1) 気候関連問題に関してバリューチェーンと協働していますか？

はい、サプライヤーと

はい、バリューチェーンの他のパートナーと

#### C12.1a

(C12.1a) 気候関連のサプライヤー協働戦略を具体的にお答えください。

---

#### 協働の種類

情報収集（サプライヤー行動の把握）

#### 協働の具体的内容

その他、具体的にお答えください

The company requests its suppliers submit a SAQ. Based on their SAQ responses, the company provides suppliers with feedback and supports their improvement.

#### 数値ごとのサプライヤーの割合

44

#### 調達総支出額の割合（直接および間接）

90

#### C6.5 で報告したサプライヤー関連スコープ 3 排出量の割合

37

#### 協働の対象範囲の根拠

The company has selected applicable suppliers based on its purchasing history over the three-year period since fiscal 2014. Tabulating purchasing amounts by first-tier supplier, the company has selected suppliers covering 90% of its spending, ordered by the amount of spending they represent and requested that these suppliers respond to the SAQ in fiscal 2017. By fiscal 2018, the company had received answers from 307 companies, or approx. 90% of the selected suppliers.

#### 成功の評価を含む協働の影響

In fiscal 2018, the company created a guidebook to assist suppliers who scored less than 70% on the sustainable procurement SAQ, helping them deepen their understanding of the SAQ and make improvements. In addition, the company visited suppliers who scored less than 40% to provide guidance and help them understand the sustainability initiatives so that this new understanding could be reflected in the SAQ. As a result, the scores of all of the suppliers that the company visited were improved to 40% or higher. The company has also requested that these suppliers continue their activities toward the next step. The company has set the response rate of the SAQ (in terms of transactions with the overall Mitsui Chemicals Group) as one of its KPIs in the 2025 Long-Term Business Plan as the sustainable procurement ratio. The 2025 target sustainable procurement ratio is 70%.

#### コメント

The format that Mitsui Chemicals Group has adopted for the sustainable procurement SAQ that it requests its suppliers fill out is a CSR procurement self-assessment questionnaire form created by the supply chain subcommittee of the UN Global Compact Network Japan. The Group requests that its suppliers follow the Sustainable Procurement Guidelines, and believes that the SAQ makes the content of the guidelines explicit. Items in the SAQ include items on the reduction of GHG emissions, which is related to climate change, and items on biodiversity. Regarding the reduction of GHG emissions, it is clearly stated that a voluntary reduction target should be set and worked toward.

## C12.1d

**(C12.1d)** バリューチェーンのその他のパートナーとの気候関連協働戦略の詳細を示します。

**Collaborations that the Mitsui Chemicals Group has engaged in with its value chain partners are as described below.**

#### **1) Distribution**

**Concerning the distribution environment, times have changed and transportation companies and similar entities now select cargoes and cargo owners. Therefore, being a cargo owner capable of being selected by distribution partners and shipping lines is essential for realizing sustainable distribution. The Mitsui Chemicals Group works to ensure stable transportation in comprehensive consideration of work environment improvement from the perspectives of distribution, CO2 reduction, BCP, and others.**

**- Joint distribution of small-lot products with other companies in the same industry**  
Since 2016, the company has been involved in joint distribution in the Keiyo district of Japan. Specifically, cargo is collected from the plants of neighboring manufacturers and delivered to individual customers via common transportation routes. Previously, cargo was transported together with general cargo by consolidated cargo service providers, which involved multiple transshipment points. Now a transportation company specialized in chemical products is used, which has resulted in fewer transshipment points and a reduction in quality problems such as breakage. Further, the improvement of the loading ratio has reduced CO2 emissions.

#### **2) Activities to eradicate malaria**

**BASF, Bayer, Mitsui Chemicals, Sumitomo Chemical Company, and Syngenta, which are five world-leading agrochemical companies, support the research, development, and supply of innovative products to eradicate malaria by 2040. The five companies have established the ZERO by 40 initiative for reducing malaria cases to zero by 2040 with support from the Bill & Melinda Gates Foundation and the Innovative Vector Control Consortium (IVCC). While the increase of malaria-carrying mosquitoes that are resistant to existing insecticides has become a problem, the five companies are engaged in initiatives to eradicate malaria through the full use of their expertise and chemical technologies to develop and supply solutions effective in addressing the problem of insecticide-resistant mosquitoes. Initiatives taken by the Bill & Melinda Gates Foundation, the IVCC and the five companies have achieved progress in the development and practical application of technologies to tackle malaria. Moving forward, these entities will strengthen their cooperation further.**

### **3) The problem of marine plastic waste**

The problem of marine plastic waste is caused by plastics that have escaped from the resource recycling system. The most important point to focus on is not allowing plastic waste to flow into rivers or oceans. Because waste management and collection requires the development of social infrastructure that cannot be handled fully by individual companies, the company participates in international alliances, such as the Alliance to End Plastic Waste (AEPW), to tackle this problem.

#### **- Alliance to End Plastic Waste (AEPW)**

Global companies involved in the plastics value chain, such as chemical companies, plastic processing companies, retailers, and waste management companies, participate in this alliance. To reduce plastic waste, the AEPW has set a goal of contributing to achieving a sustainable society by investing a total of 1.5 billion US dollars in the coming five years in the four fields of developing waste management infrastructure, promoting innovation, education and engagement, and clean-up activities. (As of July 2019, there are 39 members of the AEPW.)

## **C12.3**

**(C12.3)** 以下のいずれかを通じて、気候変動問題に対して直接的または間接的のいずれかで影響を及ぼす可能性がある活動に携わっていますか？

業界団体を通して

## **C12.3b**

**(C12.3b)** 御社は業界団体の理事会メンバーに属していますか、もしくは会費以外に団体に投資していますか？

はい

## **C12.3c**

**(C12.3c)** 気候変動に関する法律に対して業界団体が示す可能性の高い立場の詳細を入力します。

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## 業界団体

Japan Chemical Industry Association

気候変動に対する御社の立場は、業界団体の立場と一致していますか

一貫性がある

業界団体の立場を説明してください

The Japan Chemical Industry Association expresses opinions and makes recommendations on regulations and policy measures through participation in various policymaker and government committees to ensure that feasible policy measures that enable the industry to contribute to a low carbon society are formulated. The company has also signed Keidanren's "Commitment to a Low Carbon Society" action plan and set the CO2 emission reduction targets for 2020 and 2030, respectively. It gathers, reports and publishes data on greenhouse gas reductions in the chemical industry, including records of international contribution and innovative technology development, with the aim of achieving reduction targets.

御社は業界団体にどのように影響を与えていますか、または与えようとしていますか？

As a key member of the JCIA, we oversee industry-wide efforts as chair, or serve as members, of various different committees, enabling us to offer opinions and submit proposals regarding policies.

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## 業界団体

International Council of Chemical Association

気候変動に対する御社の立場は、業界団体の立場と一致していますか

一貫性がある

業界団体の立場を説明してください

ICCA is an international council in which chemical manufacturers from all over the world participate. Its mission is "to help the global chemical industry improve its financial performance and reputation by tackling global issues and by helping the industry to improve its performance continuously through Responsible Care® and other programs." ICCA serves as the main channel of communication between global chemical manufacturers and various international entities focused on developing sound global health and environmental policy, including the United Nations Environment Programme (UNEP), the United Nations Institute for Training and Research (UNITAR), the World Trade Organization (WTO) and the Organisation for Economic Co-operation & Development (OECD). Concerning climate change, ICCA believes that the chemical industry and innovations in chemistry are part of the solution. As a significant manufacturing sector, ICCA is continuously improving the energy efficiency and intensity of its own operations. It is also putting its brightest minds to work developing

transformational technologies that cut emissions, improve energy efficiency and enable a socially, environmentally and economically sustainable future.

御社は業界団体にどのように影響を与えていますか、または与えようとしていますか？

We serve as the sponsor, CEO, and chair of the ICCA Energy & Climate Leadership Group and promote activities by focusing mainly on the evaluation of GHG emissions from the chemical industry, carbon lifecycle assessment, verification of GHG reduction effects in the lifecycles of chemical products, and the development of innovations for achieving the two-degree target.

We also participated in COP24 as the UNFCCC official NGO and carried out advocacy activities by explaining ICCA's initiatives for tackling climate change in various side events.

## C12.3f

**(C12.3f)** 政策に影響を及ぼす直接的および間接的活動のすべてがあなたの組織の気候変動戦略と一致するように、どのようなプロセスを実践していますか？

We lobby policymakers through our membership of the JCIA.

JCIA examines the essential details of policy proposals via a series of committees. In addition to being a key active member of the JCIA, we share information on proposals and policy trends within the company, and reflect them in our own strategies so they are in line with government policy .

## C12.4

**(C12.4)** CDP へのご回答以外で、本報告年の気候変動および温室効果ガス排出量に関する御社の回答についての情報を公開しましたか？公開している場合は該当文書を添付してください。

### 出版物

自主的な開示書類

### ステータス

作成中 - 前年分を添付

### 文書の添付

 Mitsui Chemicals Group ESG Report2019web.pdf

### 関連ページ/セクション

Relevant section names and pages are listed below.  
The 2025 Long-term Business Plan

- P32 Environmental and Social Targets  
Climate Change and Problems With Plastic
- P49 Management System
- P54 Climate Change Policy
- P56 Supporting the Recommendations of the TCFD  
Responsible Care
- P139 GHG Emissions and Energy Consumption

## 内容

ガバナンス  
戦略  
リスクおよび機会  
排出量数値  
排出量目標

## コメント

Plans are in place to issue the Mitsui Chemicals Group ESG Report 2020 by October 2020. This report will contain details posted on the Company's Sustainability site. Users of the site are advised that the Sustainability site may also be frequently updated from October 2020.

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## 出版物

自主的に作成するサステナビリティレポートで

## ステータス

作成中 - 前年分を添付

## 文書の添付

 Mitsui Chemicals Report2019web.pdf

## 関連ページ/セクション

P30 -33 Climate Change and Problems With Plastic

## 内容

ガバナンス  
戦略  
リスクおよび機会  
排出量数値  
排出量目標

## コメント

Basically, the matters related to climate change that are described in the ESG Report and the Annual Report are similar to each other. In January 2019, the company

approved the TCFD recommendations. It began to disclose information following the TCFD recommendations in the previous fiscal year. The progress made in fiscal 2019 will be disclosed on the website and in the ESG Report and the Annual Report, one by one, starting in October 2020.

## C15. 最終承認

### C-FI

**(C-FI)** この欄を使用して、燃料があなたの組織の回答に関連していることの追加情報または状況を記入します。この欄は任意で、採点されないことにご注意ください。

No additional comments.

### C15.1

**(C15.1)** 御社の CDP 気候変動の回答に対して署名(承認)した人物の詳細を記入します。

	役職	職種
行 1	The director in charge of the Corporate Sustainability Committee is the responsible officer.	その他の経営幹部 役員