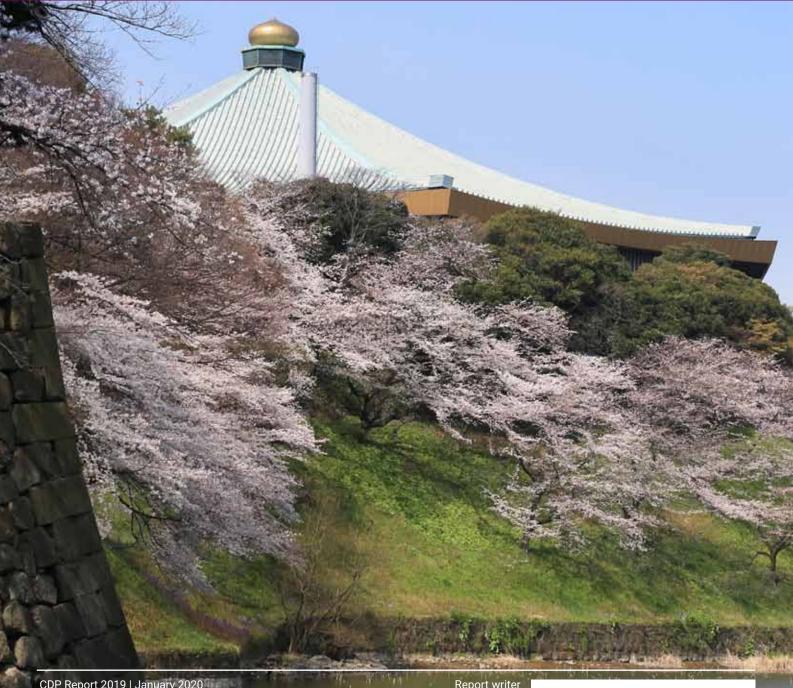




## **CDP Japan 500 Climate Change Report 2019**

On behalf of 525 investors with assets of US\$96 trillion



CDP Report 2019 | January 2020

Report writer



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### **CDP CEO Foreword**



Those who act first on climate will seize the benefits of the transition. CDP will play its part by continuing to set the standard, and providing the tools to help us achieve it together. 2020 must be the year we all play our part to ramp up worldwide ambition on climate without delay.

Climate change is not a distant, potential threat. It is here right now, and already affecting millions of lives across the globe. The Australian bushfires, which started raging in late 2019, have affected nearly 10 million people, including at least 28 human lives that have been lost. This is just one example of recent extreme weather events made more likely by climate change.

The most devastating impact of climate change and extreme weather is always going to be loss of human life, but its impact on ecosystems, communities and the global economy can be dire too. In 2019, CDP analysis found that 215 of the biggest global companies estimate the financial implications of climate risks to be close to US\$1trillion , including US\$250 billion worth of 'stranded assets', at potential risk of being made economically unviable.

The cost of exceeding a temperature rise of 1.5 degrees Celsius – the proposed "guard rail" of safety by the Intergovernmental Panel on Climate Change (IPCC) – could be catastrophic. It would have grave implications on water and food security, living standards, the economy and human health for our generation, and generations to come. In economic terms the difference between 1.5 and 2 degrees is estimated at \$15 trillion in damage. We cannot afford to dither and delay substantive action any longer.

2020 is a critical year. Five years on from the Paris Agreement, the time has come for national governments to upgrade their ambition to reduce emissions through their national plans. This year needs to herald the start of a super decade of climate action, cutting emissions in half, to give any chance of limiting global warming to 1.5°C. And we are already seeing great examples of environmental leadership, with forwardthinking companies proactively taking action. The Science Based Targets initiative has snowballed into a global phenomenon, with more than 750 of the world's biggest companies setting emissions reduction targets that are grounded in climate science. Likewise, corporate demand for renewable power is rapidly growing with 220+ companies now working towards 100% renewable electricity.

Transparency is the foundation for meaningful climate action. In 2019, more companies than ever before – 8,400+ representing over 50% of global market capitalization – disclosed through CDP, enabling them to comply with the Task Force on Climate-related Financial Disclosures (TCFD). Disclosure of quality data leads to smarter decisions and informs investors, companies and governments of the actions they need to take. It's encouraging to see more companies setting longer-term targets; our data will be key to seeing how they are performing against these over time.

But growing corporate action is not enough. Governments must urgently step up their ambition to give business the clarity and confidence they need to invest in the zero-carbon future. Those who act first on climate will seize the benefits of the transition. CDP will play its part by continuing to set the standard, and providing the tools to help us achieve it together. 2020 must be the year we all play our part to ramp up worldwide ambition on climate without delay.

Paul Simpson CEO, CDP

### **Forewords from Report Writers** SGS Japan



Climate action represents a huge opportunity to businesse, and we hope to see Japanese

Japanese companies making the most of it. In recent years, the words 'ESG', 'sustainability' and 'climate change' have become ubiquitous, an unimaginable scenario in the year 2000, when CDP was launched, and Japanese companies are increasingly demonstrating an awareness of their environmental impacts, and the associated risks.

While a few years ago the response rate of Japanese companies lagged far behind their European counterparts, in 2019 we saw the response rate in Japan grow to 63%. For Japanese companies, reporting on ESG has become a fundamental practice, and those who fail to report are increasingly seeing themselves at a major disadvantage.

At SGS Japan, we've watched these changes play out over the past decade. We've seen the number of companies seeking GHG emissions verification increase from just a few, to dozens, and sustainability initiatives being implemented from the top down, as C-suite managers demonstrate an increasing awareness of environmental issues. As our ability to calculate scope 3 emissions grows, we're seeing companies engage with their suppliers to catalyze climate action across the value chain.

That said, we still have a long way to go – companies and policymakers and still failing to take the drastic measures necessary to tackle the climate crisis and hold warming at 1.5°C. According to the United Nations Environment Programme (UNEP)'s annual report, global GHG emissions must be reduced by 7.6% annually by 2030 to hold global average temperature rise at 1.5°C. The report also states that even if emissions reduction measures announced by countries under the Paris Agreement are implemented, global average temperatures may still rise by 3.2°C. One of the crucial actions we must take in Japan is to up investment in renewable energy. Although 30 Japanese companies are currently committed to the RE100, renewable energy generation in Japan currently remains low, at just 15%, half that of coals 30% energy share. Japan, being surrounded by the sea and blessed with geothermal resources, has good conditions for producing renewable energy. However, investing in renewable energy is difficult on an individual company basis, and so it's critical investors and policymakers take steps to encourage the funding of technologies and make the choice of switching to renewable energy an easy one for companies.

The role of non-state actors as a part of the climate solution has never been clearer than at COP25, where the number of delegates from US corporations and local governments outweighed the number of delegates from the federal government. It is clear, then, that the companies reporting to CDP have as much a role to play as policymakers in the climate fight.

UNEP analysis shows that achieving the 1.5°C target requires a \$1.6 to \$3.8 trillion investment annually from 2020 to 2050. Climate action represents a huge opportunity to businesses, and we hope to see Japanese companies making the most of it.

Yuji Takeuchi CBE Director, SGS Japan Inc.

### **Forewords from Report Writers** SOCOTEC Certification Japan



Japanese companies can positively respond to climate change by taking sustainable mitigation & adaptation actions in response to identified risks & opportunities, alongside setting and monitoring long-term goals.



On September 22, 2019, The World Meteorological Organization (WMO) issued a report for the United Nations Climate Action Summit, stating that the gap between climate targets and the reality of actions being taken is widening.

According to this report, 1) The average global temperature for 2015-2019 is on track to be the warmest of any equivalent period on record, and is currently estimated to be approximately 1.1°Celsius above pre-industrial times; 2) Impacts of climate change appear more severe and are happening earlier than predicted 10 years ago; 3) In 2018, Carbon dioxide emissions grew 2% compared to the previous year and reached a record high of 37 billion tonnes; 4) Global GHG emissions are not estimated to peak by 2030 if current climate policies are maintained; 5) To reduce global warming to 2°C, countries need to triple their GHG reductions in their NDCs (Nationally Determined Contributions)To hold warming at to 1.5 °C, they need to increase their reductions by about 5 times; and 6) GHG reductions are essential in all sectors, including energy, food production and land use.

In 2019, large typhoons hit the Kanto region in Japan, and caused heavy damage such as river flooding due to heavy rain. Countries around the world were also experiencing climate-related weather phenomena and natural disasters Venice, known as the city of water, was 85% flooded by storm surges - it's Basilica of San Marco experienced experiencing flooding for the sixth time in 1,200 years, and the fourth time in the last 20 years. Venetian floods are becoming more severe each year, and are said to be caused by rising sea levels associated with warmer climates, excessive pumping of groundwater, and subsidence due to subduction of plates.

These cases also posed significant social risks, seriously impacting the lives of citizens experiencing them, while at the same time representing a significant business threat.

Japan now becomes the country with the largest number of companies in the world that have stated their support for the TCFD recommendations. Japanese companies must respond to climate change by taking sustainable mitigation & adaptation actions in response to identified risks & opportunities, alongside setting and monitoring longterm goals.

CDP provides a platform by which companies can systematically report and assess their climate impacts, risks and opportunities in line with the TCFD recommendations.

We at SOCOTEC Certification Japan have been participating as a Climate Change Scoring Partner since 2018, and sincerely thank CDP for giving us the opportunity to score, analyze and create reports again this year. I would like to take this opportunity to express mygratitude on behalf of the SOCOTEC Group.

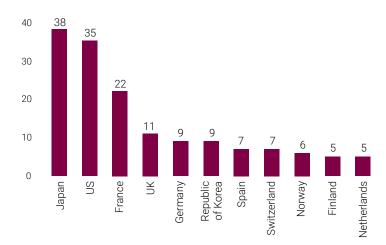
SOCOTEC Certification Japan hopes to continue to encourage and assist Japanese companies in their journey to transparency, as we work towards a climate-secure future.

Seigo Futaba Managing Director, SOCOTEC Certification Japan

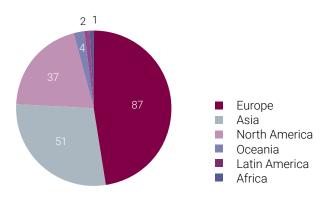
### The Climate A List 2019

- 182 companies have made the Climate Change A List in 2019
- Japan becomes the country with the most A List companies (38 companies)
- CDP scored over 8,000 companies from A to D-; only the top 2% made the A List
- Companies on the climate A List outperform their peers on the stock market by 5.5% per annum according to STOXX

### Number of the A list companies by country (Top 11 countries)



Number of the A list companies by region



Apparel	France
	France
Kering	
Biotech, Health Care & Pharma	
Eisai Co., Ltd.	Japan
Ono Pharmaceutical Co., Ltd.	Japan
AstraZeneca	UK
Baxter International Inc.	USA
Bayer AG	Germany
Johnson & Johnson	USA
Koninklijke Philips NV	Netherlands
Lundbeck A/S	Denmark
Novo Nordisk A/S	Denmark
Food, Beverage & Agriculture	
Asahi Group Holdings, Ltd.	Japan
Japan Tobacco Inc.	Japan
Kirin Holdings Co Ltd	Japan
Sumitomo Forestry Co., Ltd.	Japan
Suntory Beverage & Food	Japan
British American Tobacco	UK
Coca-Cola European Partners	UK
Coca-Cola HBC AG	Switzerland
Danone	France
General Mills Inc.	USA
Grieg Seafood	Norway

Country
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Norway
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Japan Japan Japan Japan
Japan Japan Japan Japan Japan
Japan Japan Japan Japan Spain
Japan Japan Japan Japan Spain Singapore
Japan Japan Japan Japan Spain Singapore Spain
Japan Japan Japan Japan Spain Singapore Spain Brazil

Company	Country
Samsung Engineering	Republic of Korea
Suez	France
Veidekke ASA	Norway
Waste Management, Inc.	USA
Manufacturing	
Fuji Electric Co., Ltd.	Japan
FUJIFILM Holdings Corporation	Japan
Komatsu Ltd.	Japan
Nabtesco Corporation	Japan
Nikon Corporation	Japan
Nissan Motor Co., Ltd.	Japan
Panasonic Corporation	Japan
Sony Corporation	Japan
Toyota Industries Corporation	Japan
Toyota Motor Corporation	Japan
Yokohama Rubber Company, Limited	Japan
Apple Inc.	USA
Brembo SpA	Italy
Constantia Flexibles	Austria
Ford Motor Company	USA
Groupe PSA	France
HP Inc	USA
Hyundai Motor Co	Republic of Korea
INDUS Holding AG	Germany
Kia Motors Corp	Republic of Korea
Klabin S/A	Brazil
Kone Oyj	Finland
Lego Group	Denmark
LG Display	Republic of Korea
LG Electronics	Republic of Korea
LG Innotek	Republic of Korea
Lite-On Technology Corporation	Taiwan
Metsä Board Corporation	Finland
PACCAR Inc	USA
Pirelli	Italy
Schneider Electric	France
Signify NV	Netherlands
Stanley Black & Decker, Inc.	USA
Tessy Plastics	USA
TETRA PAK	Sweden
Valmet	Finland
Materials	
KAO Corporation	Japan
Sumitomo Chemical Co., Ltd.	Japan
Tokyo Steel Manufacturing Co., Ltd.	Japan
Air Liquide	France

Company	Country
Borregaard ASA	Norway
CEMEX	Mexico
FIRMENICH SA	Switzerland
Givaudan SA	Switzerland
HeidelbergCement AG	Germany
International Flavors & Fragrances Inc.	USA
Kingspan Group PLC	Ireland
LANXESS AG	Germany
L'Oréal	France
Owens Corning	USA
Saint-Gobain	France
Sibanye Stillwater	South Africa
Stora Enso Oyj	Finland
Symrise AG	Germany
Unilever plc	UK
UPM-Kymmene Corporation	Finland
Vallourec	France
Power generation	
Centrica	UK
EDF	France
ENEL SpA	Italy
ENGIE	France
Ørsted	Denmark
Pinnacle West Capital Corporation	USA
Vattenfall Group	Sweden
Retail	
Aeon Co., Ltd.	Japan
Askul	Japan
Marui Group Co., Ltd.	Japan
Ricoh Leasing Co., Ltd.	Japan
Best Buy Co., Inc.	USA
Carrefour	France
Cellnex Telecom SA	Spain
Grupo Logista	Spain
H&M Hennes & Mauritz AB	Sweden
J Sainsbury Plc	UK
LG	Republic of Korea
Rexel	France
The Home Depot, Inc.	USA
Walmart, Inc.	USA
Services	
Benesse Holdings, Inc.	Japan
Fujitsu Limited	Japan
MS&AD Insurance Group Holdings, Inc.	Japan
NEC Corporation	Japan
Nomura Research Institute, Ltd.	

Company	Country
Sompo Holdings, Inc	Japan
Tokio Marine Holdings, Inc.	Japan
Accenture	Ireland
Adobe, Inc.	USA
AENA SME SA	Spain
Alphabet, Inc.	USA
American Express	USA
ASE Technology Holding Co., Ltd.	Taiwan
Atos SE	France
Bank of America	USA
Berner Kantonalbank AG BEKB	Switzerland
BNY Mellon	USA
BT Group	UK
Cap Gemini	France
Cisco Systems, Inc.	USA
Citigroup Inc.	USA
CVS Health	USA
Deutsche Telekom AG	Germany
Dexus Property Group	Australia
DNB ASA	Norway
EVRY ASA	Norway
Gecina	France
Hewlett Packard Enterprise Company	USA
Host Hotels & Resorts, Inc.	USA
IGM Financial Inc.	Canada
ING Group	Netherlands
Intesa Sanpaolo S.p.A	Italy
JCDecaux SA.	France

Company	Country
Koninklijke KPN NV (Royal KPN)	Netherlands
Landsec	UK
LG Uplus	Republic of Korea
Lloyds Banking Group	UK
Macerich Co.	USA
Mercialys	France
Microsoft Corporation	USA
Morgan Stanley	USA
Orange	France
salesforce.com	USA
SGS SA	Switzerland
Shinhan Financial Group	South Korea
Sopra Steria Group	France
Stockland	Australia
Taiwan Mobile Co. Ltd.	Taiwan
Telefónica	Spain
Telstra Corporation	Australia
thyssenkrupp AG	Germany
TUI Group	Germany
Unibail-Rodamco-Westfield	France
Vicinity Centres	Australia
Transportation Services	
Kawasaki Kisen Kaisha, Ltd.	Japan
Deutsche Bahn AG	Germany
Österreichische Post AG	Austria
Panalpina Welttransport Holding AG	Switzerland
La Poste	France

### **CDP Scoring:** A measure of a company's environmental performance

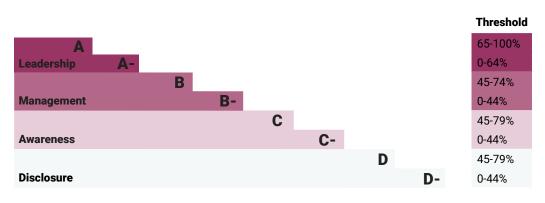
Scoring at CDP is mission-driven, focusing on CDP's principles and values for a sustainable economy and as such scores are a tool to communicate the progress companies have made in addressing environmental issues, and highlighting where risks may be unmanaged. CDP has developed an intuitive approach to presenting scores that highlight a company's progress towards leadership using a 4 step approach: Disclosure which measures the completeness of the company's response; Awareness which intends to measure the extent to which the company has assessed environmental issues, risks and impacts in relation to its business; Management which is a measure of the extent to which the company has implemented actions, policies and strategies to address environmental issues; and Leadership which looks for particular steps a company has taken which represent best practice in the field of environmental management.

Since 2018, CDP's questionnaires have taken a sector focused approach, under this new approach, each of CDP's questionnaires has general questions alongside sectorspecific question aimed at high impact sectors.

The scoring methodology clearly outlines how many points are allocated for each question and at the end of scoring, the number of points a company has been awarded per level is divided by the maximum number that could have been awarded. The fraction is then converted to a percentage by multiplying by 100. In order to better focus on key data points and provide a more detailed breakdown of a company's score, each question falls into a scoring category. Different weightings will be applied amongst sector scoring categories, and the number of points achieved per scoring category are used to calculate the final score for Management and Leadership levels, according the scoring category weighting.

A minimum score and/or the presence of a minimum number of indicators on one level will be required in order to be assessed on the next level. If the minimum score threshold is not achieved, the company will not be scored on the next level. The final letter grade is awarded based on the score obtained in the highest achieved level. For example, Company X achieved 88% in Disclosure level, 82% in Awareness and 65% in Management will receive a B. If a company obtains less than 44% in its highest achieved level (with the exception of Leadership), its letter score will have a minus. For example, Company Y achieved 81% in Disclosure level and 42% in Awareness level resulting in a C-.

Public scores are available in CDP reports, through Bloomberg terminals, QUICK teminals, Google Finance and Deutsche Boerse's website. CDP operates a strict conflict of interest policy with regards to scoring and this can be viewed at https://www.cdp.net/scoring-confictof-interest.



F = Failure to provide sufficient information to CDP to be evaluated for this purpose 1

Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship

# **Kao Corporation**

Chemicals and Cosmetics, Japan

We're facing the greatest threats in history, global challenges like climate change, resource scarcity and plastic pollution are leading consumers around the world to seek a more sustainable way of living. Through our products and presence in everyday life, we know that we have an increasingly important role to play in delivering more sustainable products and empowering consumers to live more sustainable lifestyles.

## Kirei — Making Life Beautiful

# Kao

### Tips for success

- Committing to a consumer-centric ESG strategy (The Kirei Lifestyle Plan) that focuses on both the individual and society as a whole
- Set ambitious long-term commitments that are focused on your material issues and aligned with your corporate purpose.
- Collaborate with key partners to share goals and develop joint initiatives to reduce your emissions and accelerate progress on other targets.
- Support your sustainability strategy with clear targets for each division in your organization, and activities that outline how your employees can contribute towards these
- Commit to research and development to meet the increasing demand for sustainable living.

The world is changing fast, so the way we work needs to change even faster. We're facing the greatest threats in history: global challenges like climate change, resource scarcity and plastic pollution are leading consumers around the world to seek a more sustainable way of living. Through our products and presence in everyday life, we know that we have an increasingly important role to play in delivering more sustainable products and empowering consumers to live more sustainable lifestyles.

Since we were founded in 1887, Kao has been committed to serving people, their families, their communities and our planet, while helping them live more sustainably – we call this philosophy the Kao Way. It's why we have developed and committed ourselves to a new ESG (Environmental, Social, and Governance) strategy called the Kirei Lifestyle Plan. 'Kirei' means beautiful and clean, both on the outside and on the inside.

As part of achieving this, we've developed a highly concentrated liquid detergent with high washing power which means only one rinse cycle is needed, reducing water and cutting energy use. Similarly, we make our dishwashing detergents with foams that lather and rinse quicker, helping our consumers reduce the amount of water they use by 20%.

Working within the beauty and personal care industry, we're also acutely aware of the serious impact of plastics on our natural environment and the need for urgent action to reduce their level of use and ensure that those we do use are always re-used or recycled. That's why we have launched refill packaging for almost 300 of our products, resulting in a 73% decrease in plastic packaging use in personal care and household in 2018, compared to a 'do nothing' scenario.

To decrease our environmental impact and reduce our carbon emissions even further, we're now using 100% renewable electricity in our manufacturing sites across Europe and the US, as well as in Ehime in Japan, and have committed to purchasing 100% renewable electricity supplies across all our sites by 2030. Through such measures, renewable energy now accounts for 20% of our global power consumption. This has resulted in an approximate 65,000-ton annual reduction in our CO2 emissions (2018).

Another key issue we are dedicated to addressing through the Kirei Lifestyle Plan is deforestation. We have already achieved 100% in traceable paper and pulp use in Kao consumer products and packaging. And by 2020, we aim to purchase only recycled or sustainably sourced paper for use in our products, our packaging materials and our offices.

Additionally, we use questions from the CDP programme to assess our suppliers, evaluate the sustainability of their practices and provide consultation to help them improve their management of these commodities. We are now in our second year of this CDP SC Forest assessment process and believe it provides suppliers with concrete ideas for building change.

Moving forward, we will continue improving our operations and reducing our environmental impacts by:

- building innovative partnerships to improve traceability of commodities that are used across our product line, such as palm oil;
- working more closely with the smallholder farmers who supply us to ensure their practices are environmentally responsible and sustainable;
- and driving further innovation in water and materials efficiency through our products, operations and supply chain.

We dedicate all our operations to enabling our consumers to live more sustainably and make a positive contribution to the world, as envisioned by the United Nations Sustainable Development Goals. Through our Kirei Lifestyle Plan, we will continue to realise our commitment to making every day more beautiful, making thoughtful choices for society, and making the world healthier and cleaner.

### Dave Muenz, Executive Officer, ESG Global, Kao Corporation

# Japan Tobacco Inc.

Food, Beverage & Agriculture, Japan

To create a sustainable and inclusive future, we consider the respective interests of consumers, shareholders, employees, and wider society.

### Tips for success

- Consider various stakeholders: our 4S model places the expectations of our stakeholder groups (consumers, shareholders, employees, society) at the heart of everything we do.
- Focus on the important topics: we have identified and prioritized sustainability issues material to our business and our stakeholders.
- Establish a sustainability strategy with long-term targets: we look beyond our usual planning cycle to consider the longevity of our business as well as the future of our planet.
- Develop clear plans and metrics to achieve your strategy: we implemented the JT Group Environment Plan 2030 to further reduce the environmental impacts of our business.
- Promote initiatives by forming cross-functional teams: crossfunctional approaches provide us with different perspectives to address risks and realize opportunities.

JT Group has offices and factories in more than 70 countries and regions and we sell our products in more than 130. In addition to our tobacco business, we have pharmaceutical and processed food businesses.

Our management principles and our approach to sustainability are governed by our 4S model. Through this, we strive to fulfill our responsibilities to our valued consumers, shareholders, employees, and the wider society. We carefully consider the respective interests of these four key stakeholder groups, and exceed their expectations wherever we can. JT Group's CEO, Masamichi Terabatake explains: "Sustainability calls for our management to have a broad long-term perspective, and to ensure the business continues to create value, thus ensuring the sustainability of our business and of society, over the long term."

With sustainability at the heart of our management approach, we reviewed our organizational structure in early 2019. We created a Sustainability Management Division at the JT Group head office in Tokyo and appointed a dedicated Senior Vice President for Sustainability. This followed the launch of our Sustainability Strategy in 2018.

Our strategy is underpinned by three 'absolute requirements' for sustainability which apply to the whole Group: Respect for Human Rights, An Improved Social and Environmental Impact, and Good Governance and Business Standards. We then identified key focus areas through materiality assessments and engagement with stakeholders. Our core business, tobacco, has already set out its four focus areas and specific targets, which provide a solid basis for measuring and benchmarking our sustainability performance, and support the sustainability of the JT Group. As of December 2019, our pharmaceutical division and processed food business are currently defining their respective approaches.

In addition, we have determined how our approach to sustainability is aligned with the United Nations Sustainable Development Goals (SDGs), which form the blueprint for the world to achieve a more sustainable future. We mapped the activities of our tobacco business against all 17 SDGs and concluded that the business contributes most significantly to nine of them. We intend to undertake the same process for the other two businesses in the Group.

To translate into action the absolute requirement for 'Improved environmental impact', we have published a new Group Environmental Policy. This outlines our overall intention and direction in relation to how we manage our environmental impact. In turn, the Policy is supported by our new 'JT Group Environment Plan 2030' which we launched in mid-2019.

To develop the plan, we identified our key environmental risks and opportunities. From these, we established the focus areas, namely "Energy and Emissions", "Natural Resources" (water and forestry) and "Waste". Our Plan contains longer-term objectives for energy and emissions, along with quantified targets to be achieved by 2030 for all focus areas. It also sets out a commitment to transition our operations to net zero carbon energy supply. To help track our performance, we have also set a long-term Greenhouse Gas emissions reduction target, in line with the Paris Agreement and which was validated by the Science Based Targets initiative (SBTi) in February 2019. Going forward, we will be conducting climate scenario analysis to provide a longer-term perspective on risks from climate change and how we need to manage those risks.

Within an organization of the scale and complexity of the JT Group, no single function can implement our Sustainability Strategy and Group Environment Plan alone. We promote cross-functional working in terms of geographies, businesses and departments. By doing this, we better identify our risks and opportunities, implement robust action plans to address these, and share learnings and good practices. These are all essential to deliver on our sustainability commitments.

### **Investor Case Study**

## 

### SMBC - Amundi Climate Action™ Amundi Japan

World's first use<sup>1</sup> of CDP climate change scoring for the selection of investment candidates Launched an investment trust that takes action against climate change

CPR AM, a pioneer of responsible investing and a subsidiary of Amundi, Europe's largest asset manager by assets under management,<sup>2</sup> on December 7, 2018, launched CPR Invest – Climate Action (Luxembourg) as a fund that for the first time<sup>1</sup> in the world used CDP climate change scoring for the selection of investment candidates.

Amundi Japan considers that it is highly significant that through the investment to make societal and environmental impacts and provide Japanese retail investors the opportunity to contribute to the achievement of a sustainable society and the United Nations Sustainable Development Goals (SDGs). Accordingly, on June 14, 2019, it launched SMBC·Amundi Climate ActionTM as a publicly offered domestic fund for which CPR Invest – Climate Action is its primary investment. CPR Invest – Climate Action focuses on companies that have a high CDP climate change scoring and are expected to generate economic value through efforts to take action against climate change.

The objective of SMBC·Amundi Climate ActionTM is to provide opportunities for Japanese retail investors to participate in action against climate change through investment, and thereby enable them to support the achievement of sustainable growth by the investee companies and by society.

#### TM = Trademark registration pending

(https://www.cdp.net/en/articles/investor/cpr-am-and-cdp-launch-climate-fund) 2 Source: Investment & Pensions Europe, "Top 400 Asset Managers" (June 2019 edition; ranked by



Support for sustainable growth of companie taking action against climate change

### Mizuho Eco Finance Mizuho Financial Group

In June 2019, Mizuho Bank, Ltd. and Mizuho Information & Research Institute, Inc. ("MHIR") launched a service entitled Mizuho Environmentally Conscious Finance ("Mizuho Eco Finance") through which we will take action alongside our clients to advance the shift to a low-carbon society.

As efforts on mitigation and adaptation against climate change have progressed around the world, and given that climate change has the potential to have a significant impact on the business activities of borrowers, we recognize the need for the <Mizuho>, as a financial institution, to evaluate the efforts of our clients to deal with climate change and, in particular, support their further efforts through financing and advice, in addition to reducing greenhouse gas emissions from our own business activities.

The "Mizuho Eco Finance" is a loan program provided by Mizuho Bank to clients whose initiatives meet a certain level on a scoring system based on an environmental assessment model developed by MHIR which incorporates globally reliable environmental verification and evaluation program, such as SBT (Science Based Target) and S&P/JPX Carbon Efficient Index. Through dialogue under this service as a start, we deliver supports in the forms of advices and funds to our client companies on the one hand, including evaluation on whether their GHG reduction targets would be in line with the Paris Agreement goals, as well as to their supply chain, both upstream and downstream, aiming to promote decarbonization of an entire society.



### Efforts to create a sustainable society at banks - Promotion of ESG linked loans – Sumitomo Mitsui Banking Corporation

In 2019, we continued to see frequent occurrences of floods and droughts around the world that were suspected to be linked to climate change, and Japan suffered record damage due to large typhoons and heavy rain. The importance of countermeasures against climate change risk and information disclosure is increasing even more for all companies amid growing concerns over the impact of increasing natural disasters on business activities. In the Japanese financial market, ESG linked loans have started to spread full scale following the expansion of ESG investment in stocks and bonds, in response to the will of investors and financial institutions who want to fulfill the responsibilities necessary to form a sustainable society.

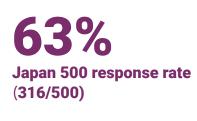
In ESG linked loans, which are indirect financing, I believe it is important for banks that are responsible for ESG linked loans to share issues and goals for the advancement of customers' sustainability management

through engagement, and strengthen efforts for loans in which the use of funds is closely linked to ESG elements, and loans that support customers' ESG measures and information disclosure.

Sumitomo Mitsui Banking Corporation has been providing corporate loan products to support customers' sustainability management. In 2018, we commenced with the arrangement of syndicated loans that come with ESG evaluation reports. The syndicated loans were offered to customers in a wide range of sectors, and we think that ESG linked loans have spread to participating domestic financial institutions. Since December 2019, we have started handling sustainability linked loans that link the status of ESG initiatives and lending conditions using CDP's disclosed information on climate change and data on ESG assessment agencies in cooperation with the Japan Research Institute, our group company with abundant ESG knowledge. We will continue to contribute to the improvement of customer corporate values and the sustainable development of society.



### **Japanese Company response to CDP 2019**



**356** Number of total responding companies



2 In addition to 36 companies, two companies other than Japan 500 have been selected as A-list companies.

3 CDP has developed and adopted a unique sector classification, CDP-ACS (Activity Classification System). Details of the sector classification can be found on the <u>website</u>. 2019 marks CDP's 17th global climate survey, and is the 14th time Japanese companies have been asked to respond. Between 2006-2008 responses were sought from 150 Japanese companies, this number grew in 2009, when 500 companies were selected based on the FTSE Japan Index (hereafter referred to as Japan 500).

This report mainly analyses the status of respondent companies in Japan 500. Since the number of voluntary respondents is increasing year by year, it also includes the response status of firms other than Japan 500. This report focuses on response to some of the most notable questions.

From 2018, the contents of the recommendations of the Task Force on Climate-related Financial Information Disclosure (TCFD) were reflected in CDP's Climate Change Questionnaire. The responses analyzed within this report represent the second round of disclosures since this major revision to the question structure was made.In 2019, 97% of the questions remained unchanged from 2018, with only minor changes. Sectorspecific questionnaires were sent for sectors related to "Agriculture," "Energy," "Materials," and "Transportation," whereas the request for responding to a Finance-sector questionnaire was deferred.

### **Response status**

This year the number of respondents out of the 500 companies questionnaires were sent to - including responses by group companies (SA) - grew to 316, 19 more than in 2018. As such, the response rate of the Japan 500 in 2019 was 63%, increasing from last years 59%. Despite the introduction of a fee-based response in 2018, we're seeing a growth in the number of Japanese companies actively disclosing their efforts on climate change, highlighting the increasing global awareness of the topic.In this report, the analysis is based on a total of 343 companies excluding SA and including Japanese companies other than Japan 500.

#### Scoring

The CDP scoring uses a band system of information disclosure, recognition, management, and leadership. The scores are from A to D from the top to the bottom (A- to D- also exist if each does not reach the reference point). After a quantitative scoring based on a scoring methodology is performed, the final score is determined by a threshold.

The results of Japan 500 selected companies show that 36 companies<sup>2</sup> (12%) scored an A and 58 companies (19%) ranked A- in 2019. The majority of companies (112 companies, representing 37%) scored a B (Figure 1). Encouragingly the number of companies scoring A and A- has increased, while the number scoring C and D has to decreased. Although there are differences between the industries, companies that manage their response to climate change in their own business are gradually beginning to lead the market, and there is a tendency to be polarized with C and D rank companies in terms of disclosure information.

The response rates of Manufacturing and Materials sectors were very high, at 83% and 80%, respectively. Meanwhile the Services and Retail sectors lagged behind, with the lowest response rates (46% and 40% respectively).

Sectors leading the scores are Food, Beverage and Agriculture (A/A- 35% of the 74% response rate), Infrastructure (A/A- 57% of 57%) , and Manufacturing (A/A- 33% of 83%). Their relatively high response rates indicate that the sectors as a whole are taking a strong stance of climate change issues. In the retail sector, the response rate is low at 40%, but 43% of the responding companies are ranked A or A-, suggesting that companies in the sector are polarized in their response to climate change. Meanwhile, the response rate of the power generation sector, which has historically had a low response rate, exceeded 50% in 2018, rising to 70% this year, and it can be said that it is a sector that actively engages in information disclosure (Figure 2).

### Governance

With the introduction of the Corporate Governance Code in Japan and the emphasis on TCFD recommendations, climate governance is a hotbutton topic.

92% (a 1% percentage point increase from 2018) report that their Board of Directors have oversight on climate change issues (C1.1) (Figure 3), with 25% of companies reporting that these issues are covered in all their meetings(Figure 4). 55% of companies responded that they had "some planned meetings", 8% more than last year. Including this, 80% of companies said that they regularly discuss climate change issues with the board of directors. In some Japanese companies, issues related to climate change are being discussed at the board level as a factor of risks and opportunities.

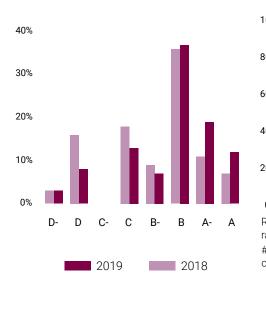
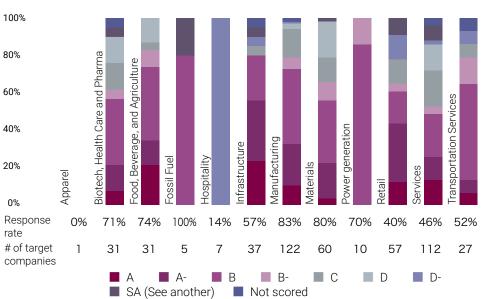


Figure 1. Score distribution of Japan 500<sup>2</sup>

### Figure 2. Score by industrial sector, Japan 500<sup>2</sup>



### Figure 3. Board-level oversight of Climate related issues

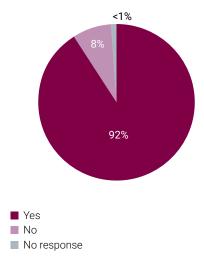


Figure 4. Board's oversight of climaterelated issues - Frequency

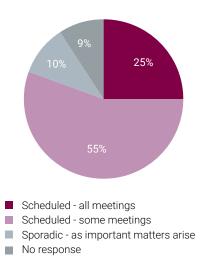
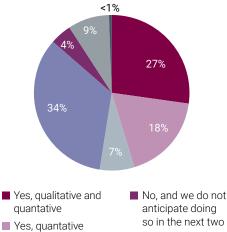


Figure 5. Does your organization use climate-related scenario analysis to inform your business strategy?



Yes, qualitative

two years

No, but we anticipate

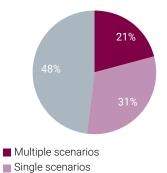
doing so in the next



Not integrated into business strategy

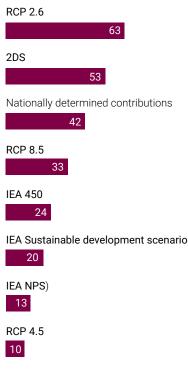


### Figure 6. Use of climate-related scenario



Not using scenarios

### Figure 7. Climate-related scenarios and models applied (Top 10)



### Strategy and scenario analysis

The climate change scenario analysis is a new question added in 2018 based on the TCFD recommendations. In Japanscenario analysis has attracted the interest of companies. When asked if they use climate change-related scenario analysis in their business strategies, more than half of all respondents (53%) reported using qualitative and /or quantitative measures, up 6% from 47% last year. Additionally, 34% of respondents who have not done so yet report that they will do so within two years, and 87% of companies believe that analyzing climate change scenarios is a necessary business strategy (Figure 5).

As for the types of scenarios used in the scenario analysis, RCP2.6 was the most used by companies, followed by 2DS and NDCs. Furthermore, some 21% of companies are conducting analysis using multiple scenarios.(Figure 6). Figure 7 explores the different scenarios companies are analyzing.

### **Risks and opportunities**

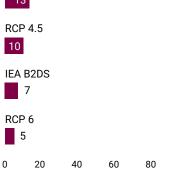
From 2018, risk and opportunity responses are consistent with TCFD recommendations, by detailing their classifications and financial impacts, Risks are classified by physical risks (acute and chronic) and transition risks (regulations, markets, technologies, reputations, etc.) in detail, and five categories have been introduced for opportunities. including resource efficiency, energy sources, products and services, markets, and resilience. Regarding the frequency of assessing these climate change risks. 19% of companies said that they evaluate it once a year, and 69% of companies evaluate it once every six months or more frequently. The percentage of firms that responded with an evaluation frequency of at least once a year is 88%, almost the same as last year's 87%, but the number of companies that evaluate more frequently than half a year or more has increased from 63% last year (Figure 8).

Future risk is the most highly considered risk amongst companies (C2.2a), with 72% of respondents answered that they considered risks beyond a 6 year period, up from 61% last year. 17% of companies do not consider risks beyond a six year period, down by 10% in 2018 and by 37% from 2017. This also seems to be linked to the increasing number of companies that incorporate scenario analysis and strategy development from a long-term perspective accompanying the TCFD recommendations into their organizational structures (Figure 9).

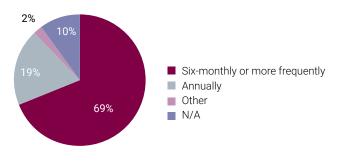
As for risk recognition, more than 80% of companies said all these physical and transition risks were relevant. In terms of the breakdown of risk recognition, 75% of companies say that they always include acute risks and 67% of them include chronic risks as relevant in their assessments. Organizations are most aware of current regulation as a transitional risk, followed by market, emerging regulation, and technology (Figure 10).

This data shows that acute physical risks are highly recognized, as typified by the damage caused by recent large typhoons and river flooding. More than 70% of companies say that any transition risks are always included in the risk assessment as related risks. As mentioned, it appears that the organizational structure that assesses risks related to climate change from a long-term perspective is becoming more pervasive in companies and has led to the practice of scenario analysis.

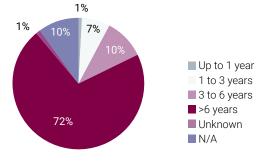
As for the opportunities related to climate change (C2.4a), companies with over 600 employees overwhelmingly view products and services as the greatest opportunity About half of them (311 in 2019 and 297 in 2018) are expanding the development of low carbon products and services (Figure 11).



### Figure 8. Identifying and assessing climate-related risks - Frequency



### Figure 9. Identifying and assessing climate-related risks - How far into the future



### Figure 10. Climate-related risk types considered in risk assessments

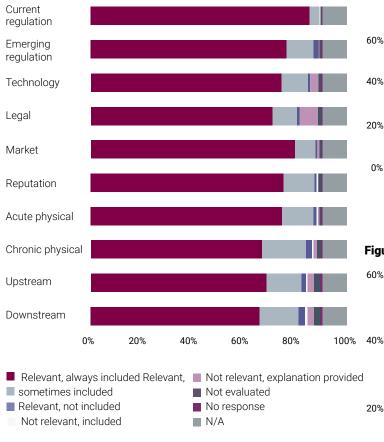
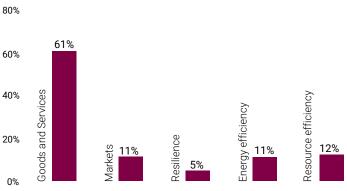
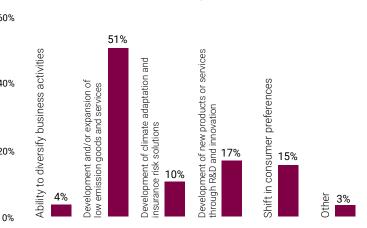


Figure 11. Climate-related opportunity driver



### Figure 12. Climate-related opportunity driver (Goods and Services)



#### **GHG emissions reduction target**

Regarding the Scope 1 and 2 emissions reduction targets, 40% of companies that set absolute emissions targets stated that they are science-based targets (SBT), which is up from 38% in 2018, and has increased 2.5 times from 16% in 2019. In the same manner as last year, 85% of companies responded in the same positively to SBT's, and either intend to incorporate and SBT into their current target, or set one within two years (Figure 13).

14% of companies that set emissions intensity targets have an SBT. The total ratio of the companies is 74% if those which have another target that is science based and those which plan to set within 2 years are added. Although the ratio is slightly lower than the absolute emissions target companies, more than 70% responded positively to SBT's (Figure 13).

Another important point is the target year in the reduction target, in which medium- to long-term target setting is expected. In this regard, 131 companies have relatively short-term target year of 2020 (99 companies in 2018) and 132 companies have medium-term target year of 2030 (83

companies in 2018). 51 companies set the target year of 2050 (38 companies in 2018) (Figure 14). The number of companies that set medium-term targets for 2030 is 60% higher than last year.

### **Disclosure of Scope 2 & 3 emissions**

The calculation method of Scope 2 emissions (location-based, market-based) following the revision of the GHG protocol has been adopted for four years. Until now, the number of companies reporting on a market basis has gradually increased, and in 2019, about 80% of companies reported emissions on a market basis, a further increase of about 10% from 70% in 2018. The number of companies reporting on location basis is 81%, up from 76% last year. (Figure 15).

For the calculation status of Scope 3, 157 companies selected any of "Relevant, calculated," "Not relevant, calculated," and "Not relevant, explanation provided" (66 companies in 2015, 101 companies in 2016, 109 companies in 2017, and 157 companies in 2018). Approximately half of the respondents performed anevaluation for all 15 categories. It's clear companies are beginning to calculate not only their own emissions, but the emissions of their supply chain.

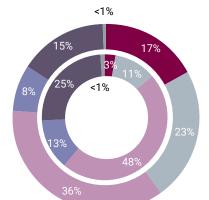
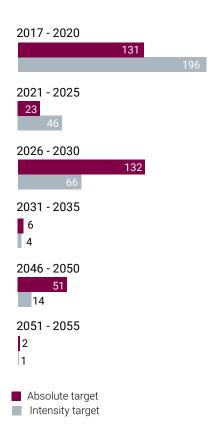


Figure 13. Science Based Target (Outer;

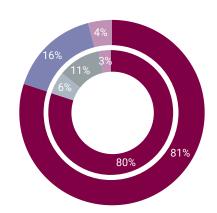
Absolute target, Inner: Intensity target)

- Yes, this target has been approved as science-based by SBTi
- Yes, we consider this a science-based target, but this target has not been approved as science-based by SBTi
- No, but we anticipate setting one in the next 2 years
- No, but we are reporting another target that is science-based
- No, and we do not anticipate setting one in the next 2 years
- No response

### Figure 14. Target year (Scope 1, 2 emissions)



### Figure 15. Scope 2 reporting (Outer: Location based, Inner: Market based)



We are reporting

- We have no operations where we are able to access electricity supplier emission factors or residual emission factors and are unable to report a Scope 2, marketbased figure
- We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope2, marketbased figure
- We are not reporting a Scope 2, locationbased figure
- No response

#### Trend for third-party verification (assurance) Proportion of companies with third-party verification

The number of companies that undertook thirdparty verification has been increasing, as shown in Figure 17. Of the responding companies, the proportion of companies that undertook thirdparty verification is 65% for Scope 1 and Scope 2, and 52% for Scope 3. The growth rates from the previous year were 14% for Scope 1 (203 -> 231), 14% for Scope 2 (203 -> 232), and 19% for Scope 3 (154 -> 184). The proportion of companies with third-party verification worldwide is 63.4% for Scope 1, 62% for Scope 2, and 47% for Scope 3, so there is no major difference in comparison to Japan.

Figure 18 shows the status of third-party verification in the top 15 countries' GHG emissions. The ratios for China and the United States, which rank first and second in GHG emissions, were lower than the global average. On the other hand, in Germany, France and Italy, we're seeing a high number of companies reporting seeking third-party verification.

In terms of response rates, Japanese companies had the highest response rate, and also demonstrated a higher than average rate of thirdparty verification, confirming that awareness in Japan is improving overall. South Korea, Mexico and Brazil have high ratios of third-party verification, however response rates were low, indicating that only a small number of conscious companies are responding.

### Verification standards

The adopted verification standard was  $44\%^4$  for ISO 14064-3, 19\%^4 for ISAE 3000, 18%<sup>4</sup> for ISAE 3410. These proportions are large, accounting for 80% of the whole (Figure 19).

Figure 20 shows the global situation. As in Japan, verification standards were centered around ISO 14064-3, ISAE 3000, and ISAE 3410, accounting for 73% in total. We can see that Tokyo Metropolitan and Saitama emissions trading scheme, which account for about 10%, differ from the worldwide average.

The number of companies that undertook thirdparty verification for 70% or more of their gross emissions was 191 (83%) for Scope 1 and 189 (82%) for Scope 2. Here Japanese companies are lagging slightly behind the rest of the world, where the global average 87% for Scope 1 and 85% for Scope 2.

As mentioned above, in Japan nearly 10% selected Tokyo and Saitama prefectural verification standards. This is one of the reasons why there is a higher number of companies with third-party verification scope under 70% compared to the rest of the world.

203

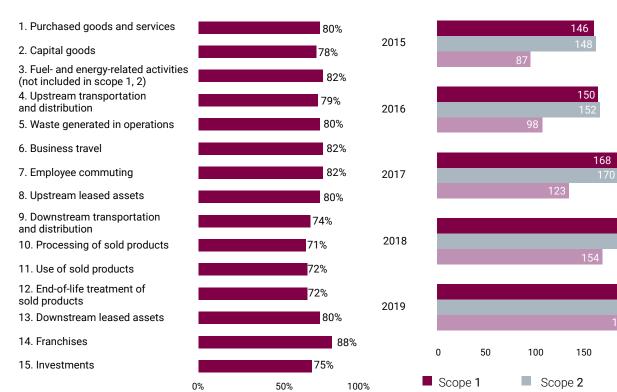
200

Scope 3

231

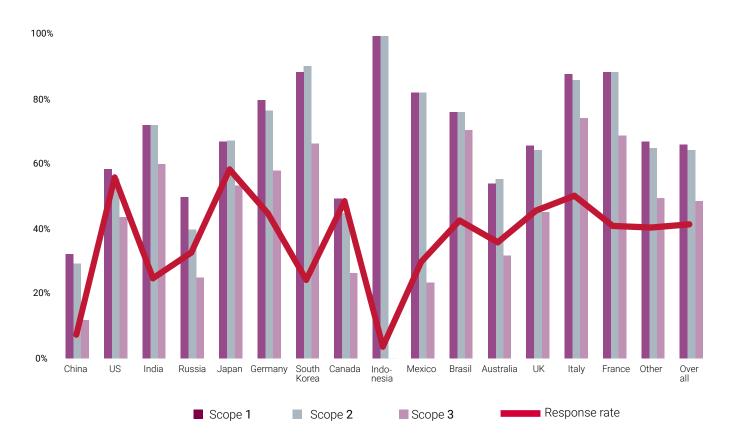
250

4 Weighted average of Scope 1 and 2 responses



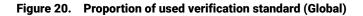
#### Figure 16. Evaluated scope 3 categories

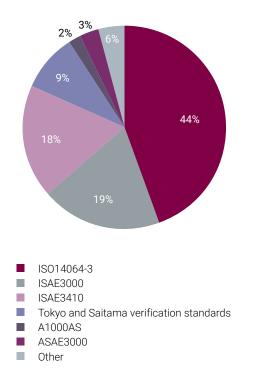
## Figure 17. The number of companies with third-party verification or assurance

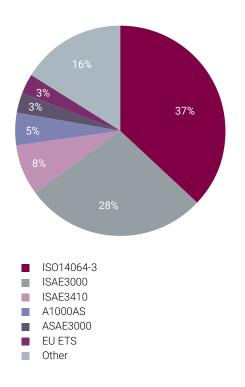


### Figure 18. Ration of companies with third-party verification or assurance in descending order of emissions by country

Figure 19. Proportion of used verification standard (Japan)







#### Climate change information disclosure

An increasing number of companies are considering the financial impact of climate change, and including climate related risks and opportunities in other reports, including their financial reporting.

190 companies are releasing information in their voluntary sustainability reports (169 in 2018), fwhile 148 companies publish it in mainstream reports, which is a significant increase from 108 companies last year. In the meantime, 114 firms report in voluntary communications (118 in 2018).

For mainstream reports, 27 companies (7 companies in 2018) disclosed based on TCFD recommendations, and 7 companies (14 companies in 2018) replied that the disclosure was based on the CDSB (Figure 21). showing the increasing number of companies that have indicated support for the TCFD recommendations.

#### Conclusion and future prospects

In 2019 the response rate of the Japan 500 was the highest it has ever been, exceeding 60% for the first time. However, the rate differs significantly between sectors, and is under 40% in some sectors. It's clear then that, while the response rate is gradually increasing, we're seeing a polarized response from sectors, and must continue to target non-responders..

In sectors where the response rate to CDP is high and the disclosure rate is increasing, we can see that climate actions such as responses to TCFD recommendations, strategies, and efforts to reduce  $CO_2$  has been converging at a faster speed.

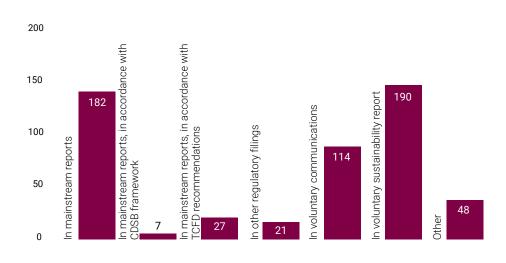
With ESG investment receiving more attention, it is becoming increasingly important for companies to disclose ESG information to investors, and some companies are demonstrating in their response an increased awareness of the importance of taking actions such as disclosing via TCFD recommendations, formulating strategies based on scenario analysis.

In 2019, 38 Japanese companies were on the A list, up 18 (1.9 times) from last year. Leadership points can be scored only when management issues on climate change are actively monitored by the board level; risks and opportunities are appropriately identified and evaluated, and they are reflected in the organization's strategy including scenario analysis; and certain criteria are met, such as setting ambitious targets and indicators, measuring outcomes, and having emissions verified by a third party.With the rise in A List companies in mind, it's positive to see the number of organizations submitting high-quality disclosures and addressing climate change issues steadily increasing year on year.

Considering the increase in the number of Japanese companies that have expressed support for the TCFD recommendations, it is expected that the number of companies disclosing to CDP and working to address their climate impact will continue to increase.

As discussions of climate change issues continue to make their way onto Japanese companies' board agendas, and the rate of scenario analysis continues to grow, we can expect to see the management strategies of Japanese companies change dramatically as they become more strongly aware of climate change.

As companies increasingly come under pressure from investors, employees and citizens to address their climate impact, and ESG reporting continues to move further into the mainstream for Japanese companies, we expect to see Japanese companies step up their efforts, and work to build a sustainable business model that benefits both society, and their businesses.



### Figure 21. Published information

### **Message from Non-State Actor**





"You will lose if you do not have 100% commitment." is one of my action guidelines.

I hope that Japan will once again take actions on Climate Change with 100% commitment and that Japan is an innovative leader in this field.

Net zero greenhouse gas emissions in 2050 at the latest, and, 1.5°C goal are globally becoming new consensuses. Investors also have responded these and launched the Net-Zero Asset Owner Alliance this year. Additionally, in the US and Europe, companies in a wide range of fields from heavy industries to retail industries have set ambitious targets.

### - What is happening in Japan?

### To all in Japan, a message from a rugby player

First of all, I would like to congratulate the success of Japan team at the Rugby World Cup 2019. Also, I would like to appreciate the wonderful tournament management.

When I was young, I was a rugby player. And I learned a lot through rugby. One of them is that you will lose if you do not have 100% commitment. This is a lesson far beyond rugby and still one of my action guidelines.

Then, in the late 1990s, I entered society as a young engineer. And, the first thing I learned was the Japanese manufacturing industry, especially its production process represented by Japanese words, "Kanban", "Kaizen", and "Genba-Kanri". Now, it is called "lean production system" in modern business administration.

This was given birth by the oil crisis in the 1970s. Rising raw material prices had demanded companies save energy, and Japanese companies had tried to overcome this challenge with 100% commitment and created "lean production system". This was an important innovation in the production process.

Consequently, Japanese manufacturing industry won and swept the world market in the 1990s. Even now, in North America, half of running cars are made in Japan.

Two decades have passed since then. What is happening now? I think that there are big changes in following four areas: science, politics, life, and technology.

Scientifically, the impact of carbon dioxide emissions on climate change is becoming clearer and clearer, and it is reported that controlling the rise below 2 °C is not enough in terms of the impact of climate change on our lives. Now, we are required to handle the rise below 1.5 °C.

In politics, you can see the change in grass-roots level movements. Young people are becoming more conscious for environmental affairs and taking actions like Fridays For Future. They are going to be important voters from now on. With respect to lives, we need to recognize that the issue of climate change is not a problem in the distant future but a problem that is directly related to our lives today. Probably, people in Japan can easily understand this point from the devastating damage of this year's typhoons.

Technically, thanks to innovations that continue one after another, the production cost of renewable energy is coming down significantly. Offshore wind power is one of such typical examples. Also, it is not in the distant future that internal combustion engines will be replaced by batteries in cars.

In response to these changes, net zero greenhouse gas emissions in 2050 at the latest, and, 1.5°C goal are globally becoming new consensuses. Investors also have responded these and launched the Net-Zero Asset Owner Alliance this year. Additionally, in the US and Europe, companies in a wide range of fields from heavy industries to retail industries, such as ArcelorMittal, Daimler, and Amazon, have set ambitious targets.

On the other hand, what is happening in Japan? I think that Japan is lagging behind. The government has not set the net zero in 2050, nor is it trying to stop companies to invest in stranded assets such as coal. Also, it is difficult to say that the private side has set more ambitious targets than its competitors in the West.

As I said at the beginning, you will lose if you do not have 100% commitment. I hope that Japan will once again take actions to this World Cup on Climate Change with 100% commitment and that Japan is an innovative leader in this field.

### **Nigel Topping**

High-Level Climate Action Champion for COP26 UK Presidency

# Message from Japan Ministries



### Message for CDP Climate Change Report 2019 SUZUKI Keisuke, State Minister for Foreign Affairs, Japan



There has been a tendency to assess coal-related businesses as risks in terms of corporate value. With regard to exports, international financial institutions have successively decided not to lend to coal related businesses. demanding the transition to the decarbonized society. On the other hand, these rising demands are also a growing demand for technology that contributes to decarbonization. and I think this is a chance for Japan.

### As we enter 2020, full implementation of the Paris Agreement has begun. At this important time, I am very pleased and encouraged that the CDP Climate Change Report 2019 was published in Japan, with the participation of many Japanese companies that make the core of non-state actors.

In 2019, the Government of Japan released "the Long-term Strategy under the Paris Agreement", in which we announced the ambitious goal to accomplish a decarbonized society as early as possible in the second half of this century, submitting the Strategy to the United Nations. Furthermore, based on this Long-term Strategy, Japan, as the Presidency in 2019, led G20 to commit to global decarbonization, focusing on innovation, accelerating a virtuous cycle of environment and growth and promoting efforts at climate change.

Here, I quote the G20 Osaka Leaders' Declaration:

"We strive to foster inclusive finance for sustainable development, including public and private financing mobilization and alignment between them, as well as innovation in a wide range of areas for low emissions and resilient development. Climate actions at all levels with broad participation, including by non-state actors, will be the key to realizing such a paradigm shift."

Private finance, especially sound capital market decisions, can make even greater impact on corporate behavior than state regulation. When an investor determines the business profitability of a company in the long term, whether a company takes into

consideration various environmental changes surrounding the business and takes measures to appropriately avoid a large risk in the business or not, will be a crucial factor in the "healthy" capital market. We think that the CDP Climate Change Report will meet institutional investors' demands for disclosure on climate-related information, and strongly support their judgements. The Ministry of Foreign Affairs will actively support CDP activities and Japanese companies who disclose information through the CDP platform.

Recently, there has been a tendency to assess coal-related businesses as risks in terms of corporate value. With regard to exports, international financial institutions have successively decided not to lend to coal related businesses, demanding the transition to the decarbonized society. On the other hand, these rising demands are also a growing demand for technology that contributes to decarbonization. and I think this is a chance for Japan. As mentioned in our long-term strategy, we will contribute to the promotion of global decarbonization by shedding light on innovation and accelerating the virtuous cycle of environment and growth, while utilizing our ODA and other resources.

# Appendix



## **CDP Climate Change 2019 - Japanese Company**

Company <sup>a</sup>	Primary Questionnaire Sector <sup>b</sup>	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported <sup>f</sup>	SBT <sup>a</sup>	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing <sup>i</sup>	Scenario analysis <sup>j</sup>
Apparel										
Wacoal Holdings Corp.	General	F	F							
Biotech, Health Care and Pharma										
Asahi Intecc Co Ltd	General	F	F							
Astellas Pharma Inc.	General	В	B	82093	M: 112280	15	Approved	Yes	Yes	gual
Chugai Pharmaceutical Co., Ltd.	General	В	С	49240	L: 62108	7	2 years	Yes	No	2 years
Daiichi Sankyo Co., Ltd.	General	В	В	100503	L: 120046 M: 114140	15	Approved	Yes	Yes	2 years
Eisai Co., Ltd.	General	А	В	48260	L: 93188 M: 93039	15	Approved	Yes	No	2 years
GLOBAL ENGINEERING Co., Ltd.	EU	D	D-	14.14	M: 0.04	0		No	2 years	
Hisamitsu Pharmaceutical Co., Inc.	General	F	F							
Hoya Corporation	General	D	F	22379	L: 383391	0	No	No	No	
Kaken Pharmaceutical Co., Ltd.	General	F	F							
Kissei Pharmaceutical Co., Ltd.	General	F	F							
KYORIN Holdings, Inc.	General	N/S	F			Noi	n-public			
Kyowa Hakko Kirin Co., Ltd.	General	SA	SA							
Mitsubishi Tanabe Pharma Corporation	General	В	SA	33415.54	L: 62884.76 M: 62442.71	11	Not approved	Yes	2 years	2 years
Mochida Pharmaceutical Co., Ltd.	General	F	F			1.0			-	
Nihon Kohden Corporation	General	B-	B-	14048.73	L: 8553.26	10	Not approved	No	2 years	2 years
Nippon Shinyaku Co., Ltd.	General	D	F			Noi	n-public			
Nipro Corporation	General	F	F						_	
Olympus Corporation	General	A-	В	16211	L: 84703 M: 77541	15	2 years	Yes	2 years	2 years
Ono Pharmaceutical Co., Ltd.	General	А	А	8990.68	L: 18590.3 M: 19650.19	15	Approved	Yes	Yes	qual
Otsuka Holdings Co., Ltd.	General	В	В	382372	L: 457836 M: 460119	14	Not approved	Yes	2 years	2 years
Rohto Pharmaceutical Co., Ltd.	General	F	F							
Santen Pharmaceutical Co., Ltd.	General	С	С	17018	L: 17142	13	No	No	No	qual
Sawai Pharmaceutical Co., Ltd.	General	С	D	18495.45	L: 59525.51 M: 51694.13	14	No	No	No	
Shimadzu Corporation	General	С	D			Nor	n-public			
Shionogi & Co., Ltd.	General	A-	С	41952	L: 48800 M: 43660	15	2 years	Yes	2 years	qual
Sumitomo Dainippon Pharma Co., Ltd.	General	В	С	19844	L: 38906	14	2 years	No	No	2 years
Sysmex Corporation	General	В	С	4447	M: 19385	15	Not approved	No	No	quant/ qual
Taisho Pharmaceutical Holdings Co., Ltd.	General	F	F							
Takara Bio Inc	General	F								
Takeda Pharmaceutical Company Limited	General	A-	A-	159610	L: 217939 M: 170184	14	Not approved	Yes	Yes	quant
Terumo Corporation	General	В	В	58646.59	L: 230256.24 M: 216685.76	15	No	No	No	quant
Tsumura & Co.	General	D	D	32072.17	M: 55334.1	3	2 years	No	No	2 years
Food, Beverage and Agriculture										
Ajinomoto Co.Inc.	FBT	В	A-	1196969	L: 1026764 M: 1015723	15	Not approved	Yes	Yes	quant/ qual
Ariake Japan	FBT	F	F							
Asahi Group Holdings, Ltd.	FBT	А	А	462598	L: 423401 M: 418724	15	Approved	Yes	2 years	quant/ qual
Calbee, Inc.	FBT	D	D			Nor	n-public			
Coca-Cola Bottlers Japan Holdings Inc.	FBT	В	B-	224332	L: 191614	15	2 years	No	No	2 years
Ezaki Glico Co., Ltd.	FBT	F	F							
FUJI OIL HOLDINGS INC.	FBT	A-	В	215606	L: 206832	15	Not approved	Yes	2 years	qual
HOUSE FOODS GROUP INC.	FBT	F	F		1.12104					
Ito En, Ltd.	FBT	B-	D	23450	L: 13194 M: 11507	4	No	No	2 years	2 years
Itoham Yonekyu Holdings	FBT	F	F							

Company ª	Primary Questionnaire Sector	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported <sup>f</sup>	SBT <sup>a</sup>	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing	Scenario analysis <sup>j</sup>
Japan Tobacco Inc.	FBT	A	A-	360922.5	M: 353520.56	15	Approved	Yes	Yes	quant/ qual
Kagome Co., Ltd.	FBT	В	B-	105097	L: 55166 M: 54109	15	Not approved	No	2 years	quant/ qual
Kewpie Corporation	FBT	D	D	81572	L: 147365	5	2 years	Yes	Yes	2 years
Kikkoman Corporation	FBT	A-	B-	89988	L: 64768 M: 74978	15	2 years	Yes	Yes	qual
Kirin Holdings Co Ltd	FBT	A	A-	411747	L: 586245 M: 574169	15	Approved	Yes	2 years	quant/ qual
Maruha Nichiro Corp	FBT	F								quui
Meiji Holdings Co Ltd	FBT	A-	С	262705	L: 378339 M: 368361	15	2 years	Yes	No	qual
MEGMILK SNOW BRAND Co.,Ltd.	FBT	D	D	119237	M: 111303	1	No	Yes	No	No
Morinaga & Company Ltd	FBT	В	F	23951.11	L: 56860.11 M: 52686.19	15	No	Yes	No	No
Morinaga Milk Industry Co., Ltd.	FBT	С	N/S	247690	L: 97500 M: 105700	0	No	No	No	qual
NH Foods Ltd.	FBT	B-	С	347288	L: 303238 M: 303238	15	2 years	No	No	2 years
Nichirei Corporation	FBT	В	В	101104.22	L: 311731 M: 299356	15	No	Yes	No	2 years
Nissin Foods Holdings Co., Ltd.	FBT	В	F	227403	L: 174547 M: 170200	15	2 years	Yes	No	2 years
Nisshin Seifun Group Inc.	FBT	В	F	59139.5	L: 226002 M: 217735	15	Not approved	Yes	2 years	qual
Nippon Suisan Kaisha Ltd	FBT	D	D			No	n-public			
Sapporo Holdings Limited	FBT	В	С	105655	L: 149735	15	2 years	Yes	Yes	qual
Sumitomo Forestry Co., Ltd.	PF	А	А	264011	L: 118947 M: 117602	15	Approved	Yes	No	quant/ qual
Suntory Beverage & Food	FBT	А	A-	238717	L: 222229 M: 222007	15	Approved	Yes	2 years	quant/ qual
Takara Holdings Inc.	FBT	F	F							
The Nisshin OilliO Group,Ltd.	FBT	D	-			No	n-public			
Toyo Suisan Kaisha, Ltd. Yakult Honsha Co Ltd.	FBT	F	F	37893	L: 41410	7	No	Yes	No	qual
				37093	M: 48901	/		163	110	quai
Yamazaki Baking Co., Ltd. Fossil Fuels	FBT	F	F							
Cosmo Energy Holdings Co., Ltd.	0&G	В	С	5914200	M: 428000	10	Not approved	No	No	quant
Idemitsu Kosan Co., Ltd.	0&G	B	Private	3914200	101. 428000		n-public	NU	NU	quant
Inpex Corporation	0&G	B	C	5050599.77	L: 2328.01 M: 38320.98	15	2 years	Yes	Yes	qual
JXTG Holdings, Inc.	O&G	В	D	26403803	L: 825 M: 3114670	14	No	Yes	No	quant/ qual
Showa Shell Sekiyu K. K.	0&G	SA	С							400
Hospitality		-								
Heiwa Corporation	General	F	F							
Kyoritsu Maintenance	General	F								
McDonald's Holdings Company (Japan), Ltd.	General	SA	SA							
Oriental Land Co Ltd.	General	D-	F			No	n-public			
Resorttrust Inc	General	F	F							
Seibu Holdings Inc.	General	F	F							
Skylark Co., Ltd.	General	F	F							
Zensho Holdings Co., Ltd.	General	F	F							
Infrastructure										
Aeon Mall Co., Ltd.	General	В	В	15858	M: 232249	11	Approved	Yes	No	qual
Comsys Holdings Corporation	General	F	F							
Daikyo Incorporated Daito Trust Construction Co., Ltd.	General General	F	F	36091.02	L: 24226.01	15	Approved	Yes	Yes	2 years
- ,					M: 25331.08			-		· ·

Company ª	Primary Questionnaire Sector	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported <sup>f</sup>	SBT®	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing <sup>i</sup>	Scenario analysis <sup>j</sup>
Daiwa House Industry Co., Ltd.	General	А	А	257509.01	L: 245530.35 M: 244184.48	15	Approved	Yes	Yes	quant/ qual
Haseko Corporation	General	F	F		111.211101.10					quui
Hulic Co., Ltd.	General	F	F							
Ichigo Group Holdings Co Ltd	General	F	F							
lida Group Holdings	General	N/S	F			0				
JENEX Co., LTD.	General	С	N/S	54.87	L: 52.51 M: 52.51	14	Not approved	No	No	2 years
JGC Corporation	General	F	F							
Kajima Corporation	General	В	В	204571	L: 61903 M: 59597	15	Not approved	Yes	No	2 years
Kandenko Co., Ltd	General	F	N/S							
Keihan Electric Railway Co., Ltd.	General	F	F							
Kinden Corporation	General	D-	D-			0		No	No	No
Kumagai Gumi Co Ltd	General	В		76441.1	L: 19220.1 M: 19800.5	15	Not approved	Yes	2 years	2 years
KYUDENKO	General	F	F							
MAEDA CORPORATION	General	С	F	75048	M: 19018	14	2 years	Yes	Yes	2 years
Maeda Road Construction Co.,Ltd	General	F	F							
Mitsubishi Estate Co., Ltd.	General	A-	В			No	n-public			
Mitsui Fudosan Co., Ltd.	General	В	С			No	n-public			
Miyakoda Construction Co Ltd	General	N/S	N/S	95.6	L: 117.7 M: 113	5	Not approved			
Nippo Corporation	General	F	F							
Nippon Gas Co Ltd	General	F								
Nishimatsu Construction Co Ltd	General	A-	В	32074.98	L: 22167.67 M: 23402.5	15	Not approved	No	2 years	quant/ qual
Nomura Real Estate Holdings, Inc.	General	В	F			No	n-public			
NTT Urban Development Corporation	General	SA	С							
Obayashi Corporation	General	A-	B-	127609	L: 68155 M: 64542	15	Not approved	Yes	No	quant
Open House Co Ltd	General	F								
Osaka Gas Co., Ltd.	General	A-	A-	4888261	L: 270278 M: 185216	15	No	Yes	Yes	quant/ qual
Penta-Ocean Construction Co Ltd	General	F								
Sekisui Chemical Co., Ltd.	General	А	А	189791.32	M: 694049.04	15	Approved	Yes	Yes	quant
Sekisui House, Ltd.	General	А	А	72967	L: 42669 M: 58475	15	Approved	Yes	Yes	quant/ qual
Shimizu Corporation	General	A-	В	238193	M: 64089	15	Approved	Yes	Yes	quant/ qual
Sumitomo Realty & Development Co., Ltd.	General	F	F							quui
Taisei Corporation	General	A-	A-	285222	L: 78399 M: 78394	15	Approved	Yes	Yes	quant/ qual
Toda Corporation	General	A	A	50926	L: 25470	15	Approved	Yes	Yes	quant/
Toho Gas Co., Ltd.	General	A-	D		M: 24635	No	n-public			qual
Tokyo Gas Co., Ltd.	General	A-	В	3902000	L: 305000	15	No	Yes	Yes	quant/
Tokyo Tatemono Co., Ltd.	General	В	В	4066	M: 287000 L: 44444 M: 41259	9	No	Yes	No	qual No
Tokyu Construction Co., Ltd.	General	B-		33083.5	L: 12632.5 M: 12651.7	15	Not approved	No	No	2 years
Toshiba Plant Systems & Services Corporation	General	F			IVI. 12001./					
Manufacturing										
Advantest Corporation	General	С	С	4374	M: 324323	15	2 years	No	No	2 years
Aisin Seiki Co., Ltd.	General	A-	D				n-public			_ ; caro
ALPS ALPINE CO., LTD.	General	C	C	19524.94	L: 300969.95 M: 98364.56	6	No	Yes	2 years	2 years
Amada Holdings, Ltd.	General	В	В		WI. 20004.00	No	n-public			
		_			L: 11991		1.1.1.7			quant/

Company <sup>a</sup>	Primary Questionnaire Sector <sup>b</sup>	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported <sup>f</sup>	SBT	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing <sup>i</sup>	Scenario analysis <sup>j</sup>
Asics Corporation	General	В	В	4064	L: 25307 M: 20879	15	Approved	Yes	2 years	quant/ qual
Azbil Corporation	General	A-	С	4640	L: 16720 M: 22427	15	Approved	No	No	qual
Bridgestone Corporation	General	A-	A-	1884902	L: 2362089 M: 2264331	15	2 years	Yes	Yes	qual
Brother Industries, Ltd.	General	В	В	21622.48	L: 120199.18 M: 122598.96	15	Approved	Yes	Yes	quant/ gual
Calsonic Kansei Corporation	General	В	В			No	n-public			4
Canon Inc.	General	A-	A-	160439	L: 1021199 M: 965720	15	Not approved	Yes	Yes	quant/ qual
Casio Computer Co., Ltd.	General	С	С	5670.14	L: 30926.9 M: 29613.5	13	Not approved	No	No	
Citizen Watch Co.,Ltd.	General	B-	B-	21608.88	L: 148483.05	15	Not approved	3 years	2 years	2 years
Daifuku Co., Ltd.	General	A-	A-	8325	L: 33594 M: 31940	14	2 years	Yes	2 years	quant/ qual
Daihatsu Motor Co., Ltd.	OEMs	A-	D			Noi	n-public			
Daiichikosho Co.,Ltd.	General	F	F							
Daikin Industries, Ltd.	General	В	В	694045.96	L: 745492.36 M: 635485.06	15	Not approved	Yes	Yes	qual
Denso Corporation	General	B-	B-				n-public			
DISCO Corporation	General	В	С	6413	L: 41974	15	Not approved	Yes	Yes	2 years
DMG Mori Seiki Co., Ltd. Ebara Corporation	General General	F	F	90262	L: 97986	12	2 years	Yes	No	qual
Ene-Vision Corporation	EU	C	N/S	20.28	M: 94488 L: 24.1	0	2 900.0	No	No	
· .				20.20	M: 22.94		a public			
EXEDY Corporation	General	B-	B-		L: 117296		n-public			
Fanuc Corporation	General	B-	D	25213.2	M: 108563.6	15	2 years	No	No	
Foster Electric Company, Limited	General	B-		1953	L: 70483 M: 760	15	2 years	No	No	2 years
Fuji Electric Co., Ltd.	General	А	В	251718	L: 247153 M: 247010	15	Not approved	Yes	No	qual
FUJIFILM Holdings Corporation	General	А	В	593656	L: 567212 M: 511685	15	Approved	Yes	Yes	qual
Fujikura Ltd.	General	A-	В	28040	M: 132822	13	Not approved	Yes	Yes	quant/ qual
Fujitsu General Limited	General	С	Private			No	n-public			
Furukawa Electric Co., Ltd.	General	В	B-	196724	L: 646390 M: 646390	15	Approved	No	2 years	quant/ qual
Glory Ltd.	General	В	В	1023.02	L: 15323.92 M: 14111.57	15	2 years	Yes	No	2 years
GS Yuasa Corporation	General	В	B-	99495.29	L: 564787.43	6	2 years	No	No	2 years
Hamamatsu Photonics K.K.	General	В	B-	12044.86	L: 48399.32 M: 45902.24	15	No	No	No	qual
Hino Motors, Ltd.	OEMs	С	B-	152400	L: 237804	15	2 years	Yes	2 years	2 years
Hirose Electric Co., Ltd.	General	F	F							. /
Hitachi Construction Machinery Co., Ltd.	General	A-	В	107873.99	L: 211150.91 M: 287226.96	15	Approved	Yes	Yes	quant/ qual
Hitachi High-Technologies Corporation	General	В	С	7120.37	L: 8860.15 M: 44043.54	13	2 years	No	2 years	2 years
Hitachi, Ltd.	General	A-	A-	1922097	L: 2600904 M: 3074093	15	Not approved	Yes	Yes	quant/ qual
Honda Motor Co., Ltd.	OEMs	В	A-	1380000	L: 3690000 M: 4090000	15	No	Yes	No	quant/ qual
Hoshizaki Electric Co., Ltd.	General	F	F		10.100000					4001
HORIBA, Ltd.	General	B-	С	4264	L: 7508 M: 5336	5	2 years	No	2 years	2 years
Ibiden Co., Ltd.	General	D	С	144390	L: 656070	9	No	Yes	No	No
IHI Corporation	EPM	В	В	85255	L: 241869 M: 254314	15	2 years	Yes	No	2 years
Isuzu Motors Limited	OEMs	A-	A-	127860	L: 99702 M: 92528	15	2 years	Yes	2 years	2 years

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Japan Display Inc.	General	С	С	119821.4	L: 549576.15 M: 588071	1	2 years	No	No	
JTEKT Corporation	General	A-	A-	112500	L: 694800 M: 628800	15	2 years	Yes	Yes	2 years
JVC KENWOOD Corporation	General	С		1196	L: 47226	12	Not approved	3 years	2 years	
Kawasaki Heavy Industries, Ltd.	General	В	С	162200	M: 311331	12	2 years	No	No	2 years
Keyence Corporation	General	F	F							
Kioxia Holdings Corporation	General	В		453144	L: 1622672 M: 1609036	12	2 years	Yes	2 years	2 years
Koito Manufacturing Co., Ltd.	General	С	С			No	n-public			
Kokuyo Co., Ltd.	General	С	С	9401.46	L: 36259.65 M: 35843.31	13	Not approved	Yes	Yes	No
Komatsu Ltd.	General	А	А	114392	L: 356593 M: 411532	15	Approved	Yes	Yes	quant/ qual
Konica Minolta, Inc.	General	A-	A-	169942.08	L: 196635.15 M: 210515.85	15	Approved	Yes	Yes	quant
Kubota Corporation	General	A-	A-	315880	L: 382574 M: 330678	14	No	Yes	Yes	quant/ qual
Kurita Water Industries Ltd.	General	С	С	37983.08	L: 8879.86 M: 175778.3	0	No	No	No	2 years
Kyocera Corporation	General	A-	A-	135747	L: 897555 M: 875349	15	Approved	Yes	Yes	quant/ qual
Mabuchi Motor Co., Ltd.	General	F	F							4
Makita Corporation	General	D	F			No	n-public			
Mazda Motor Corporation	OEMs	A-	В	132290	L: 584740	15	2 years	Yes	No	quant/ qual
Meidensha Corporation	General	В	С	18137	L: 27212 M: 25573	15	Not approved	3 years	2 years	2 years
MinebeaMitsumi Inc.	General	В	В	47243	L: 728980	5	2 years	Yes	2 years	2 years
Mitsubishi Electric Corporation	General	A-	А	296139	L: 1020067 M: 981022	15	Not approved	Yes	Yes	quant/ qual
Mitsubishi Heavy Industries, Ltd.	General	A-	В	186752	L: 614192 M: 609759	10	No	Yes	2 years	qual
Mitsubishi Motors Corporation	OEMs	В	В	66417	L: 418992 M: 451318	15	2 years	Yes	2 years	qual
Mitsui Mining & Smelting Co., Ltd.	General	D	D	762485	M: 903945	5	2 years	Yes	No	2 years
Miura Co., Ltd.	General	F	F	-	1.1210007					
Murata Mfg. Co.	General	В	В	311647	L: 1319997 M: 1287752	13	Not approved	Yes	2 years	quant
Nabtesco Corporation	General	А	А	8780.79	L: 64866.52 M: 61394.57	15	Approved	Yes	Yes	quant
NGK Insulators, Ltd.	General	A-	В	_		No	n-public			
NGK Spark Plug Co., Ltd.	General	В	D	70092.38	L: 255601 M: 236123	14	2 years	3 years	No	No
NHK Spring Co., Ltd.	General	F	F							
Nidec Corporation	General	D	D	74630.16	L: 633680.32	6	2 years	No	2 years	2 years
Nifco Inc. Nintendo Co., Ltd.	General	C F	N/S F	427	L: 8219	15	2 years	No	No	
Nikon Corporation	General General	A	A-	38327.26	L: 201236.96	15	Not approved	Yes	2 years	qual
Nissan Motor Co., Ltd.	OEMs	A	A-	889444	M: 195423.87 L: 2539607 M: 2339883	15	Not approved	Yes	Yes	quant/
Nisshinbo Holdings Inc.	General	С	С	322756	L: 236040 M: 183804	15	2 years	3 years	2 years	quant
Nippon Electric Glass Co., Ltd.	General	F	F		IVI. 103004					
Nippon Light Metal Holdings Company, Ltd	General	С	С	353000	L: 532000	11	No	Yes	No	2 years
NOK Corporation	General	В	С	7256	L: 185893 M: 252774	12	2 years	3 years	2 years	qual
Noritz Corporation	General	В	С	11077	L: 30768	15	2 years	Yes	2 years	quant/ qual
NSK Ltd.	General	В	В	142137	L: 836288 M: 855638	12	Not approved	Yes	Yes	2 years
NTN Corporation	General	В	В	105284	L: 568711	14	Other	No	No	2 years

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Oji Holdings Corporation	PF	В	В	6596209	L: 1326335 M: 1335321	15	No	Yes	2 years	quant/ qual
Oki Electric Industry Co., Ltd	General	Private			101.1000021	No	n-public			444
Okuma Corporation	General	F	F				•			
OMRON Corporation	General	A-	В	43826	L: 56727 M: 134004	15	Not approved	3 years	Yes	quant/ qual
OSG Corporation	General	F	F							
Panasonic Corporation	General	А	A-	406873	L: 1920072	15	Approved	No	2 years	qual
Renesas Electronics Corporation	General	F	F							
Rengo Co., Ltd.	PF	В	B-	924361	M: 386848	15	2 years	Yes	No	No
Ricoh Co., Ltd.	General	A-	A-	137500	L: 237248 M: 224825	15	Approved	Yes	Yes	quant/ qual
Rinnai Corporation	General	F	D-						-	
Rohm Co., Ltd.	General	В	B	145942.7	L: 579437.6	13	2 years	No	2 years	2 years
Sankyo Co., Ltd.	General	F	F F	_		N	e se de li e			
Sanwa Holdings Corporation	General	N/S			L: 44221		n-public			quant/
SCREEN Holdings CO., Ltd.	General	В	В	11617	M: 38949	13	2 years	No	2 years	qual
Seiko Epson Corporation	General	В	С	127737	L: 443978 M: 374347	15	Approved	Yes	Yes	quant
Sharp Corporation	General	С	С	265051	L: 858616 M: 812039	15	2 years	No	No	quant/ qual
Shimano, Inc.	General	F	F							
SMC Corporation	General	D-	N/S		1 1100507.04	Noi	n-public			
Sony Corporation	General	А	А	187123.63	L: 1189507.24 M: 1177588.42	15	Approved	Yes	Yes	qual
Stanley Electric Co., Ltd.	General	F	F			_			_	
SUBARU CORPORATION	OEMs	В	В	344850	M: 333988.99	15	No	No	No	quant/ qual
Sumco Corporation	General	С	F	21000	M: 703000	3	Not approved	No	No	
Sumitomo Electric Industries, Ltd.	General	В	В	177433	M: 1258905	8	Not approved	No	No	quant/ qual
Sumitomo Heavy Industries. Ltd.	General	В	B-	36993	L: 161601 M: 145845	15	2 years	Yes	No	2 years
Sumitomo Rubber Industries, Ltd.	General	В	С	400371	L: 700580	14	2 years	No	No	quant/ qual
Suzuki Motor Corporation	OEMs	В	С	597347	L: 644898 M: 611835	15	2 years	No	No	2 years
Tadano Ltd	General	N/S	F			No	n-public			
Taiyo Yuden Co., Ltd.	General	F	F					-		
TANAX, INC.	General	С	D	1511	L: 1930 M: 1937	5	Not approved	No	No	quant/ qual
TDK Corporation	General	A-	D	120978	L: 1566113 M: 1548755	15	2 years	No	2 years	qual
The Japan Steel Works, Ltd.	General	F	F							
THK Co., Ltd.	General	С	D	36737.46	M: 208213.64	7	2 years	3 years	2 years	2 years
Tokai Rika Co., Ltd.	General	С	С	134115	L: 117098 L: 143172	8	No	No	2 years	2 years
Tokyo Electron Ltd.	General	В	B-	23516	M: 150278	12	Not approved	Yes	Yes	quant/ qual
Topcon Corp	General	F	F		1 000 105					14
Toshiba Corporation	General	В	В	335339	L: 898425 M: 839397	14	2 years	Yes	Yes	quant/ qual
Toto Ltd.	General	В	В	179911	M: 176760	15	No	Yes	Yes	quant/ qual
Toyoda Gosei	General	A-	В	145195	L: 411336	15	Not approved	Yes	Yes	2 years
Toyota Boshoku Corporation	General	В	В		1 710004	No	n-public			
Toyota Industries Corporation	General	A	А	244963	L: 718894 M: 692198	15	2 years	3 years	Yes	qual
Toyota Motor Corporation	OEMs	А	A-	2554576.66	L: 5238108.05	15	2 years	Yes	2 years	quant/ qual
Toyo Seikan Group Holdings, Ltd.	General	B-	С	480964	L: 1130455 M: 1166882	15	2 years	Yes	No	2 years
Toyo Tire Corporation	General	B-	B-	306337.71	L: 318902.71	15	Not approved	Yes	No	qual

Company <sup>a</sup>	Primary Questionnaire Sector <sup>b</sup>	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported <sup>f</sup>	SBT <sup>a</sup>	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing	Scenario analysis <sup>j</sup>		
TS Tech Co.,Ltd.	General	A-	В	7569	L: 85169	15	2 years	No	No	2 years		
ULVAC, Inc.	General	F	F									
Uni-Charm Corporation	PF	В	В	29485	M: 453171	15	Approved	Yes	2 years	qual		
Unipres Corporation	General	B-	С	292268.32	L: 161901.31 M: 160587.69	13	No	Yes	No	2 years		
Ushio Inc.	General	С	С	3975	L: 33618	15	Other	Yes	No	2 years		
Yaskawa Electric Corporation	General	В	В	6480	L: 42614 M: 43309	12	2 years	Yes	No	2 years		
Yamaha Corporation	General	В	В	21960	L: 138855 M: 143349	14	Approved	No	Yes	quant/ qual		
Yamaha Motor Co., Ltd.	OEMs	В	В	146167	L: 383346 M: 409737	15	2 years	Yes	Yes	quant		
Yokogawa Electric Corporation	General	В	В	15015	L: 72484 M: 68871	15	Not approved	No	No	quant/ qual		
Yokohama Rubber Company, Limited	General	А	В	370809	L: 348870 M: 311247	15	2 years	Yes	2 years	quant		
Materials												
AGC Inc.	General	В	В	5332000	L: 5559000 M: 5370000	15	2 years	Yes	2 years	2 years		
Aica Kogyo Co Ltd	СН	D	D	69887	L: 82602	8	2 years	No	No	2 years		
Air Water Inc.	СН	A-	B-			No	n-public					
Asahi Kasei Corporation	СН	A-	A-	3150478	L: 1084056 M: 1078060	15	2 years	Yes	Yes	quant/ qual		
Ciz Holdings Co Ltd	General	F										
Daicel Corporation Daido Steel Co., Ltd.	CH	B F	D F	Non-public								
Denka Company Limited	СН	A-	В	1683286	L: 566721 M: 583631	14	2 years	Yes	Yes	2 years		
DIC Corporation	СН	В	В	268634	L: 363467 M: 360582	15	2 years	3 years	2 years	qual		
Dowa Holdings Co., Ltd.	M&M	С	D		111.000002	No	n-public					
Fancl Corporation	General	F		P · · · ·								
FP Corporation	СН	В	С	43594	L: 188590 M: 196246	15	2 years	No	2 years	2 years		
FUJIMORI KOGYO CO.,LTD	СН	D		32179		0	Approved	No	No	2 years		
Hitachi Chemical Company, Ltd.	СН	В	B-	183292	L: 671562 M: 651181	15	Not approved	No	Yes	quant/ qual		
Hitachi Metals, Ltd.	ST	B-	В			No	n-public					
JFE Holdings, Inc.	ST	В	D			No	n-public					
JSR Corporation	СН	B-	В	443176	L: 635656 M: 634567	15	2 years	No	Yes	2 years		
Kaneka Corporation	СН	B-	В			No	n-public					
Kansai Paint Co., Ltd.	СН	F	F		1.427205	_						
KAO Corporation	General	А	A-	651825	L: 437305 M: 386102	15	Approved	Yes	Yes	quant		
Kobayashi Pharmaceutical Co., Ltd.	General	<u>C</u>	F	3837	M: 16813	0	Not approved	Yes	No	-		
Kobe Steel., Ltd. KOSE Corporation	ST General	D B	D N/S	16368967 7774	L: 1016217 M: 13763.5	3	2 years	No No	No 2 years	2 years 2 years		
Kuraray Co., Ltd.	CH	C	D	2000000	L: 1929000 M: 1188000	9	No	No	No	No		
Lintec Corporation	СН	D	D	94787.3	L: 121315.82	9	No	3 years	Yes	No		
Lion Corporation	General	В	В	53603	M: 124543.96 M: 97781	15	2 years	Yes	2 years	2 years		
LIXIL Group Corporation	General	A-	В	569282	L: 616005 M: 583296	15	Approved	Yes	Yes	quant/ qual		
Maruichi Steel Tube Ltd.	M&M	F	F		WI. 000290					quai		
Mitsubishi Chemical Holdings Corporation	СН	A-	В	6690000	L: 7550000 M: 7550000	15	No	Yes	2 years	quant/ qual		
Mitsubishi Gas Chemical Company, Inc.	СН	B-	В	790008	L: 672308 M: 676242	15	2 years	Yes	2 years	2 years		
Mitsubishi Materials Corporation	M&M	В	В	9816065	L: 1734974 M: 1670942	15	2 years	Yes	2 years	2 years		

Company ª	Primary Questionnaire Sector <sup>b</sup>	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported <sup>f</sup>	SBT°	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing <sup>i</sup>	Scenario analysis <sup>j</sup>
Mitsui Chemicals, Inc.	СН	В	В	3777849	L: 1327558 M: 883975	13	2 years	Yes	Yes	qual
Nippon Kayaku Co., Ltd.	СН	B-	B-	39552	L: 114681 M: 114681	14	2 years	3 years	2 years	qual
Nippon Sheet Glass Company, Ltd	General	В	В		101.111001	No	n-public			
Nippon Shokubai Co., Ltd.	CH	С	D				n-public			
Nippon Paint Holdings Co., Ltd.	СН	F	F				•			
Nippon Paper Industries Co Ltd	PF	D	D			Nor	n-public			
NIPPON STEEL CORPORATION	ST	В	В			Noi	n-public			
Nissan Chemical Industries, Ltd.	СН	В	В	253785	L: 115485 M: 128647	15	2 years	Yes	No	2 years
Nitto Denko Corporation	СН	В	В	366163	L: 423896 M: 446647	15	2 years	Yes	Yes	
Noevir Holdings	General	F								
NOF CORPORATION	СН	F	F							
Pigeon Corp	General	F	F							
Pola Orbis Holdings Inc.	General	A-	В	4365.1	L: 13296 M: 12111.2	14	2 years	3 years	No	quant/ qual
Shin-Etsu Chemical Co., Ltd.	СН	С	С	1679192	L: 4652696	15	2 years	No	No	2 years
Shiseido Co., Ltd.	General	A-	В	33150	L: 46307 M: 46072	15	2 years	Yes	2 years	quant/ qual
Showa Denko K.K.	СН	В	В	3450000	L: 973000 M: 851000	15	2 years	Yes	Yes	quant/ qual
Sumitomo Bakelite Company Limited	СН	В		90643	L: 153649 M: 145869	11	Not approved	Yes	2 years	quant/ qual
Sumitomo Chemical Co., Ltd.	СН	А	А	6065453	L: 1088215 M: 1192953	15	Approved	Yes	Yes	quant/ qual
Sumitomo Metal Mining Co., Ltd.	M&M	В	В	1838536	L: 37957 M: 932843	11	No	Yes	No	2 years
Sumitomo Osaka Cement Co., Ltd.	CE	D	D	8188587	L: 147277	1		No	No	2 years
Taiheiyo Cement Corporation	CE	D	D			Nor	n-public			
Taiyo Nippon Sanso Corporation	CH	SA	SA							
TBM,. LTD	General	В	С	332	M: 770.8	7	2 years	Yes	2 years	qual
Teijin Ltd.	СН	D	D	711628	L: 763846 M: 763765	9	2 years	Yes	2 years	2 years
Toda Kogyo Corp	CH	С	D	13793	M: 56725	2	2 years	No	No	2 years
Tokai Carbon Co., Ltd.	CH	F				N	1.15			
Tokuyama Corporation	CH	С	D	_	L: 937425	INOI	n-public			
Tokyo Steel Manufacturing Co., Ltd.	ST	A	A-	324323	M: 941207	15	2 years	3 years	Yes	qual
Toray Industries, Inc.	СН	A-	В	3399479	L: 2295505 M: 2235788	15	Other	Yes	Yes	quant/ qual
Tosoh Corporation	СН	A-	С	7797254	L: 390433 M: 403268	15	No	Yes	Yes	2 years
Toyobo Co., Ltd.	СН	F	D	_						
Ube Industries, Ltd.	СН	D	D	11250000	L: 760000 M: 750000	15	No	Yes	Yes	2 years
VALQUA,LTD.	СН	С	С	1955.79	L: 18626.87	11	2 years	No	No	2 years
Yamato Kogyo Co., Ltd.	ST	F	F							
Zeon Corporation	CH	D	D	539170	L: 55244	7	Other	No	No	2 years
Power Generation										
Chubu Electric Power Co., Inc.	EU	В	D	53128465	L: 66562 M: 63339	15	No	Yes	Yes	quant/ qual
Electric Power Development Co.,Ltd (J-POWER)	EU	B-	С	53987576	L: 109304	14	No	Yes	Yes	qual
Hokkaido Electric Power Co., Inc.	EU	F	F							
Hokuriku Electric Power Company	EU	F	F							
Kyushu Electric Power Co Inc	EU	F	В							
Shikoku Electric Power Co., Inc.	EU	В	F			Nor	n-public			
The Chugoku Electric Power Company	EU	В	F	20343309	L: 49 M: 36	15	No	Yes	Yes	2 years
The Kansai Electric Power Co., Inc.	EU	В	D	28655906.49	L: 6273.25 M: 6276.38	15	No	Yes	Yes	quant/ qual

Company ª	Primary Questionnaire Sector <sup>b</sup>	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported <sup>†</sup>	SBT	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing	Scenario analysis <sup>j</sup>
The Tokyo Electric Power Company Holdings, Inc (TEPCO)	EU	В	В	84335000	L: 3400000 M: 3500000	14	No	Yes	Yes	quant
Tohoku Electric Power Co., Inc.	EU	В	В	32767500	L: 0 M: 0	15	No	Yes	Yes	2 years
Retail										
ABC-Mart, Inc.	General	F	F							
Aeon Co., Ltd.	General	А	В	230620	L: 2868973	15	Approved	Yes	2 years	qual
Ain Holdings Inc	General	F	F							
Alfresa Holdings Corporation	General	D-	N/S	36059	M: 40873	0				
Aoyama Trading Co., Ltd.	General	D	N/S	63.96	M: 74517	3	2 years	No	No	2 years
Askul	General	А	A-	3558	L: 23458 M: 16289	15	Approved	3 years	2 years	quant/ qual
Autobacs Seven Co., Ltd.	General	F	F		111110203	_				
Bic Camera Inc	General	D-	D-		L: 113191	0	2 years	Yes	No	
Canon Marketing Japan Inc.	General	SA	SA		L. 110151		2 years	103	110	
COSMOS Pharmaceutical Corporation	General	F	F							
Don Quijote Holdings Co., Ltd.	General	С	N/S			No	n-public			
Fast Retailing Co., Ltd.	General	A-	В	12419	L: 137857 M: 134721	15	2 years	Yes	No	2 years
H20 Retailing Corporation	General	D-	F	6620	L: 74152	0	No			
Hikari Tsushin, Inc.	General	F	F	0020	2.74102		110			
Isetan Mitsukoshi Holdings Ltd.	General	A-	В	24233.79	L: 176901.93 M: 172185.47	15	2 years	Yes	2 years	quant/ qual
ITOCHU Corporation	General	В	В		WI. 172100.47	No	n-public			quai
Izumi Co., Ltd.	General	F	F			110				
Japan Airport Terminal Co., Ltd.	General	F	F							
J. Front Retailing Co., Ltd.	General	A-	D-	15960	M: 166605	15	Not approved	3 years	2 years	2 years
K's Holdings Corporation	General	 F	F	13900	101. 100003		Not approved	5 years	2 years	2 years
Kusuri No Aoki Holdings	General	F	F							
Lawson, Inc.	General	F	F							
Marubeni Corporation	FBT	A-	B			No	n-public			
Marui Group Co., Ltd.	General	A	A	15109	L: 102643 M: 96232	15	Approved	Yes	Yes	quant/ qual
Matsumotokiyoshi Holdings Co., Ltd.	General	F	F		111 90202					
MEDIPAL Holdings CORPORATION	General	F	F				· · · · · · · · · · · · · · · · · · ·			
Misumi Group Inc.	General	F	F							
Mitsubishi Corporation	General	В	С	6274107	L: 2553912 M: 2405911	13	No	Yes	Yes	qual
Mitsubishi Shokuhin Co., Ltd. Mitsubishi UFJ Lease & Finance Co.,	FBT	SA	SA							
Ltd.	General	F	F							
Monotaro Co Ltd	General	F	F				1.12			
Nagase & Co., Ltd.	General	C	D			No	n-public			
Nitori Holdings Co., Ltd.	General	F	F							
Odakyu Electric Railway Co., Ltd.	General	F	F							
Paltac	General	F	F							
Pilot Corp	General	F	F		1 00051 (					
Rakuten,Inc.	General	В	D	1152.3	L: 23051.6 M: 22328.7	15		Yes	2 years	quant
Ricoh Leasing Co., Ltd.	General	А	В	405.5	M: 593.7	15	Not approved	Yes	No	quant/ qual
Ryohin Keikaku Co., Ltd.	General	F	F							
Sanrio Company, Ltd.	General	F	F							
Seven & I Holdings Co., Ltd.	General	A-	С	128819.67	L: 3239089.57 M: 3175832.58	15	No	Yes	No	qual
Shimachu Co., Ltd.	General	F	F							
Shimamura Co., Ltd.	General	F	F							
Sojitz Corporation	General	A-	В	659251	L: 76818	14	No	Yes	Yes	quant/ qual

	Primary Questionnaire Sector	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported '	SBT®	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing	Scenario analysis <sup>j</sup>
Company <sup>a</sup>				<u>e N</u>	<u> </u>	# ώ Έ	<u></u>	ÖĽ	두강로	a v
Sotetsu Holdings, Inc.	General	F	F					-		
Start Today Co., Ltd.	General	F	F							
Sugi Holdings Co., Ltd.	General	F	F							
Sumitomo Corporation	General	В	В	1447288	L: 630494 M: 630412	5	2 years	Yes	2 years	2 years
Sundrug Co., Ltd.	General	F	F							
Suzuken Co., Ltd.	General	F	F		- 400004	_				
Takashimaya Company, Limited	General	С	F	12153	L: 132081 M: 119468	15	2 years	Yes	2 years	2 years
Toho Co., Ltd.	FBT	F	F	0001	1 10007	15		N	N	
Tokyo Century Corporation	General	B-	D	2091	L: 16667	15	2 years	No	No	2 years
Toyota Tsusho Corporation	General	A-	B			Nor	n-public			
Tsuruha Holdings Inc.	General	F	N/S	_						
USS Co., Ltd.	General	F	F							
Welcia Holdings Co Ltd	General	F	F							
Yaoko Co Ltd	General	F								
Yamada Denki Co., Ltd.	General	F	F							
Services										
Acom Co., Ltd.	General	F	F							
AEON Financial Service Co., Ltd.	General	SA	SA							
Aflac Life Insurance Japan Ltd.	General	SA								
AIFUL Corporation	General	F	F							
Aozora Bank, Ltd.	General	F	F							
Aplus Financial Co., Ltd.	General	F	F							
BANDAI NAMCO Holdings Inc.	General	D	D	1990	M: 57559	0	2 years	No	No	
Benefit One	General	F								
Benesse Holdings, Inc.	General	А	А	119.49	L: 5478 M: 7477	15	Not approved	3 years	No	quant/ qual
Capcom Co., Ltd.	General	F	N/S							
Credit Saison Co., Ltd.	General	F	F							
Concordia Financial Group	General	F	F					_	_	
CyberAgent, Inc.	General	D-	D-			0		No	No	
Dai-ichi Life Holdings, Inc.	General	В	В	12500	L: 142800	14	2 years	No	No	quant/ qual
Dai Nippon Printing Co., Ltd.	General	A-	A-	247840	L: 688739 M: 713021	15	Approved	Yes	Yes	quant/ qual
Daiwa Securities Group Inc.	General	С	С	944.24	L: 36008.27 M: 30763.58	12	Not approved	No	2 years	quant
DeNA Co., Ltd.	General	F	F							
Dentsu Inc.	General	A-	C	4981	L: 54839 M: 39130	14	Approved	Yes	2 years	quant/ qual
FamilyMart UNY Holdings Co., Ltd.	General	B	N/S	48685	M: 1397604	14		No	No	2 years
FUJI MEDIA HOLDINGS, INC. Fujitsu Limited	General General	F	F	147000	L: 808000	15	Approved	Yes	Yes	quant/
Fukuoka Financial Group, Inc.	General	F	F		M: 771000					qual
Fuyo General Lease Co Ltd	General	C	D	707	L: 1331 M: 1230	9	No	No	No	No
GMO Internet, Inc	General	F			101. 1230					
GMO Payment Gateway	General	 F	F							
GungHo Online Entertainment, Inc.	General	 F	F							
Hakuhodo DY Holdings Incorporated	General	B	B	435	L: 11380 M: 10147	15	2 years	Yes	No	qual
H.I.S.Co.,Ltd.	General	F	F		WI. 10147					
										 quant/
Hitachi Capital Corporation Hokuhoku Financial Group, Inc.	General General	C F	B- F	2506	L: 5259	15	Not approved	3 years	2 years	qual
Itochu Techno-Solutions Corporation	General	F SA	F SA							
	General	F	F							
Japan Exchange Group	General	r	F							

Company <sup>a</sup>	Primary Questionnaire Sector <sup>b</sup>	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported <sup>(</sup>	SBT <sup>a</sup>	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing <sup>i</sup>	Scenario analysis <sup>j</sup>
Japan Post Bank	General	D	SA	3571.2	M: 46929.8	6	No	No	No	
Japan Post Holdings	General	С	Private	319845.2	L: 684657.6 M: 650418.2	13	No	Yes	No	2 years
Japan Post Insurance	General	F	F							
Japan Real Estate Investment	General	В	В			Nor	n-public			
Japan Retail Fund Investment	General	В	С	14783	L: 163851 M: 163779	7	2 years	Yes	2 years	2 years
Kakaku.com, Inc.	General	F	N/S							
Kansai Mirai Financial Group	General	F								
KDDI Corporation	General	В	С	25195	L: 464880 M: 1067416	15	No	Yes	2 years	quant/ qual
Kintetsu Group Holdings Co.,Ltd.	General	В	С	57884	L: 551456 M: 450212	14	2 years	No	2 years	quant/ qual
Konami Holdings Corporation	General	F	F							
Kyowa Exeo Corporation	General	F								
Kyushu Financial Group	General	F	F							
LINE Corporation	General	F	F						-	
M3, Inc.	General	F	F							
Matsui Securities Co., Ltd Mebuki Financial Group Inc	General	F	F							
Miraca Holdings Inc.	General General	C	F	7954	M: 19329.18	15	No	No	No	2 years
Mitsubishi UFJ Financial Group, Inc.	General	c	С	17052	L: 216210	8	No	No	Yes	2 years
Mitsui & Co., Ltd.	General	B	B-		M: 216210		n-public			
Mizuho Financial Group, Inc.	General	В	B-	15844.96	L: 205009.73 M: 191729.95	15	2 years	Yes	No	2 years
Mori Building Co, Ltd.	General	В				Nor	n-public			
MS&AD Insurance Group Holdings,	General	A	A	25508	M: 71897	15	Not approved	Yes	2 years	qual
Inc. NEC Corporation	General	A	A-	53923	L: 403535	15	Approved	Yes	Yes	quant/
				00920	M: 384494			res	res	qual
NEXON Co., Ltd.	General	N/S	F			Nor	n-public			
Nihon M&A Center Inc	General	F	F							
Nihon Unisys, Ltd.	General	F	0.4						-	
Nippon Prologis REIT Inc Nippon Telegraph & Telephone	General	SA	SA		L: 5192272					
Corporation (NTT)	General	В	В	195030	M: 5189334	15	No	Yes	No	qual
Nippon Television Holdings	General	F	F							
Nishi-Nippon Financial Holdings, Inc.	General	F	F							
Nissha Co., Ltd.	General	В	В			Nor	n-public			
Nomura Holdings, Inc.	General	A-	A-	2859	L: 65058 M: 54575	15	Not approved	Yes	Yes	2 years
Nomura Research Institute, Ltd.	General	А	В	1704.88	L: 65047.03 M: 64694.1	15	Approved	Yes	Yes	qual
NS Solutions Corporation	General	F	F							
NTT Data Corporation	General	A-	A-	5746	L: 275378 M: 275622	15	2 years	Yes	2 years	2 years
NTT DOCOMO, INC.	General	В	A-	54171	L: 1569838 M: 1506589	15	2 years	Yes	No	qual
OBIC Business Consultants Co., Ltd.	General	F	F							
OBIC Co., Ltd.	General	F	F							
Oracle Corporation Japan	General	SA	SA							
Orient Corporation	General	F	F							
ORIX Corporation	General	F	D							
Otsuka Corporation	General	F	F							
PARK24 Co., Ltd.	General	F	F							
PeptiDream Inc	General	F	F							
Persol Holdings Co Ltd	General	F	F							
Relo Group, Inc Recruit Holdings Co.,Ltd.	General General	⊢ B-	⊢ Private			No	n-public			
	General	-0	FIIVale			INOI	i public			

Company <sup>a</sup>	Primary Questionnaire Sector <sup>b</sup>	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported <sup>f</sup>	SBT <sup>a</sup>	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing	Scenario analysis <sup>j</sup>
Resona Holdings, Inc.	General	В	В	6499	L: 73396 M: 65507	14	2 years	Yes	No	2 years
SBI Holdings, Inc.	General	D	F		M: 2128	4		No	No	
SCSK Corporation	General	C	C	149	M: 43483	15		Yes	No	No
Secom Co., Ltd.	General	A-	В	62510.86	L: 128650.19 M: 118687.24	15	Not approved	Yes	Yes	qual
Sega Sammy Holdings Inc.	General	С	D-		111.110007.21	No	n-public			
Seven Bank, Ltd.	General	F	F							
Shiga Bank, Ltd.	General	N/S	D			Noi	n-public			
Shinsei Bank Ltd	General	F	F							
Shochiku Co., Ltd.	General	F	F							
SKY Perfect JSAT Holdings Inc.	General	F	F							
SoftBank Group Corp	General	D	F			0	Not approved	Yes	No	2 years
Sohgo Security Services Co., Ltd.	General	С	D	20166	M: 14072	4	2 years	3 years	2 years	qual
Sompo Holdings, Inc	General	А	А	21968	L: 74481 M: 68971	15	Not approved	Yes	No	quant
Sony Financial Holdings Inc.	General	SA	SA							
SQUARE ENIX Holdings CO.,Ltd.	General	F	F							
Sumitomo Mitsui Financial Group	General	D	С	14467.71	L: 138049.12	11	No	3 years	No	qual
Sumitomo Mitsui Trust Holdings, Inc.	General	С	С	4362.18	L: 30428.3 M: 29142.34	4	2 years	Yes	Yes	qual
Sun Messe Co., Ltd.	General	С	С	2006.4	L: 6999.2	13	Not approved	Yes	2 years	qual
T&D Holdings, Inc.	General	B-	В	1893	M: 48453	5	2 years	No	No	2 years
Tecmo Koei Holdings	General	F	F							
The 77 Bank, Ltd.	General	F	F							
The Bank of Kyoto, Ltd.	General	F	F							
The Bank of Yokohama, Ltd.	General	D	D-	793	M: 19480	0	No	No	No	
The Chiba Bank, Ltd.	General	F	F							
The Chugoku Bank, Ltd.	General	F	F							
The Daishi Bank, Ltd.	General	F	F							
The Gunma Bank, Ltd.	General	F	F							
The Hachijuni Bank, Ltd.	General	В	В	2755	M: 8800	15	2 years	No	2 years	2 years
The Hiroshima Bank, Ltd.	General	F	F							
The Iyo Bank, Ltd.	General	F	F							
The Shizuoka Bank, Ltd.	General	F	F							
TIS Inc.	General	D	F			Noi	n-public			
Tokio Marine Holdings, Inc.	General	А	В	15007	L: 67203 M: 63868	15	Approved	Yes	Yes	quant/ qual
Tokyo Broadcasting System Holdings, Inc.	General	F	F							
Tokyu Fudosan Holdings Corporation	General	A-	A-			Noi	n-public			
Toppan Printing Co., Ltd.	General	В	В	382652	M: 885619	14	Approved	Yes	Yes	quant
Trend Micro Incorporated.	General	F	F				protou			
TV Asahi Holdings Corporation	General	F	F							
Yahoo Japan Corporation	General	D	F	56	M: 81170	3	2 years	Yes	No	qual
Yamaguchi Financial Group, Inc.	General	F	F							
Zenkoku Hosho Co Ltd	General	F	F							
Transportation services										
ANA Holdings Inc.	TS	В	В	11520000	L: 92000	7	2 years	Yes	No	quant/
Central Japan Railway Company	TS	В	B-		M: 92000	No	n-public			qual
East Japan Railway Company	TS	B	В	1390000	L: 1290000	13	No	Yes	Yes	2 years
Fukuyama Transporting Co., Ltd.	TS	F	F		M: 1330000					
Hankyu Hanshin Holdings, Inc.	TS	C	Private			No	n-public			
Hitachi Transport System, Ltd.	TS	F	F							
Japan Airlines Corporation	TS	В	D	9345335	L: 51928 M: 49553	12	2 years	Yes	Yes	quant/
Kamigumi Co., Ltd.	TS	F	F		IVI. 49000					qual
Karniyunn GO., Llü.	13	Г	F							

Company <sup>a</sup>	Primary Questionnaire Sector <sup>b</sup>	2019 Score °	2018 Score <sup>d</sup>	Scope 1 emissions	Scope 2 emissions °	# of Scope 3 categories reported <sup>f</sup>	SBTa	Carbon pricing regulation <sup>h</sup>	Internal carbon pricing <sup>i</sup>	Scenario analysis <sup>j</sup>
Kawasaki Kisen Kaisha, Ltd.	TS	А	А	12536134	L: 27306 M: 23135	15	Approved	Yes	Yes	quant/ qual
Keikyu Corporation	TS	F	F							
Keio Corporation	TS	F	F							
Keisei Electric Railway Co., Ltd.	TS	F	F							
Kyushu Railway	TS	F	N/S							
Mitsubishi Logistics Corporation	TS	F	F							
Mitsui O.S.K. Lines Ltd	TS	В	В	16347858.33	L: 46686.97	14	Other	No	2 years	quant
Nagoya Railroad Co., Ltd.	TS	F	F							
Nankai Electric Railway Co., Ltd.	TS	В	В	98196	L: 194404 M: 165168	15	2 years	Yes	No	2 years
Nippon Express Co., Ltd.	TS	B-	В	663338.75	L: 211099.7 M: 209858.22	15	Not approved	Yes	No	quant/ qual
Nippon Yusen Kaisha Line	TS	A-	А	14090784.5	L: 53538.93 M: 51274.87	14	Approved	Yes	2 years	quant/ qual
Nishi-Nippon Railroad Co., Ltd.	TS	F	F							
Sankyu Inc.	TS	F	N/S				•			
Seino Holdings Co., Ltd.	TS	F	F				·			
SG Holdings	TS	N/S				No	n-public			
Tobu Railway Co., Ltd.	TS	F	F							
Tokyu Corporation	TS	D-	N/S	645693	L: 645693	0		No	No	2 years
West Japan Railway Company	TS	B-	B-	86925	M: 1629385	14	No	No	No	2 years
Yamato Holdings Co., Ltd.	TS	В	D	663979.54	L: 277861.77 M: 269769.6	13	2 years	Yes	2 years	2 years

#### a Alphabetical order

- b CH: Chemicals
  - CE: Cement FBT: Food, Beverage & Tobacco EPM: Transport Engine Part Manufacturers EU: Electric Utilities M&M: Metals & Mining O&G: Oil & Gas OEMs: Transport Original Equipment Manufacturer PF: Paper & Forestry TS: Transport Services
- c N/S: Not Scored Private: Score is not public SA: See Another
- d Blank; Not targeted in 2018
- e L: Location-based emissions M: Market-based emissions
- f Number of the Scope 3 categories that companies responded as: -'Relevant, calculated' and report evaluation methodology and emission data. -'Not relevant, calculated' and report evaluation methodology and emission data. -'Not relevant, explanation provided' and explain why not relevant.

- g Approved: Approved as SBT Not approved: Not approved as SBT Other: Other target is approved as SBT 2 years: haven't set SBT but setting one in the next two years No: don't set SBT or anticipate setting one in the next two years
- Yes: regulated by a carbon pricing system.
   years: not regulated by a carbon pricing system, but anticipate to be so in the next three years.
   No: not regulated, and not anticipate to be so in the next three years.
- Yes: use an internal price on carbon
   2 years: don't use an internal price on carbon, but anticipate to do so in the next two years.
   No: don't use an internal price on carbon, and not anticipate to do so in the next two years.
- j quant/qual: use scenario analysis quantitatively and qualitatively.
   quant: use scenario analysis quantitatively.
   qual: use scenario analysis qualitatively.
   2 years: don't use scenario analysis but anticipate doing so in the next two years.
   No: don't use scenario analysis, and don't anticipate doing so in the next two years.

Report writer and Scoring partner



Scoring partner



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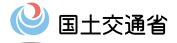








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