Practical guide to climate leadership for board of directors in Japan

ClientEarth

About ClientEarth

ClientEarth is a non-profit oraganisation that uses the law to create systemic change that protects the Earth for—and with—its inhabitants. We are tackling climate change, protecting nature and stopping pollution, with partners and citizens around the globe. In Asia, we work with the private sector, civil society and government regulators to support the net zero transition through capacity building and legal analysis on topical issues including climate change, sustainability and the environment. From our offices in Europe, Asia and the USA we help build a future for our planet in which people and nature can thrive together.

About AIGCC

Asia Investor Group on Climate Change (AIGCC) is the leading network of investors in Asia focussing on risks and opportunities in climate and nature – which are key to investors' fiduciary duty. Its 80+ members have a combined AUM of $36 trillion and have headquarters in 11 markets across the region. It is a not-for-profit, and its work across finance, business and policy making is underpinned by science, economics, and a deep knowledge of Asian markets and dynamics.

About CCLI

The Commonwealth Climate and Law Initiative (CCLI) is an independent non-profit that connects climate science and economics with existing law to clarify what corporate and investment governance requires in practice. CCLI examines the legal duties of directors, officers, trustees and investor fiduciaries – across more than 34 jurisdictions – to consider, manage, and report on climate change and nature-related risks, opportunities and impacts, and the circumstances in which there may be liability for failing to do so.

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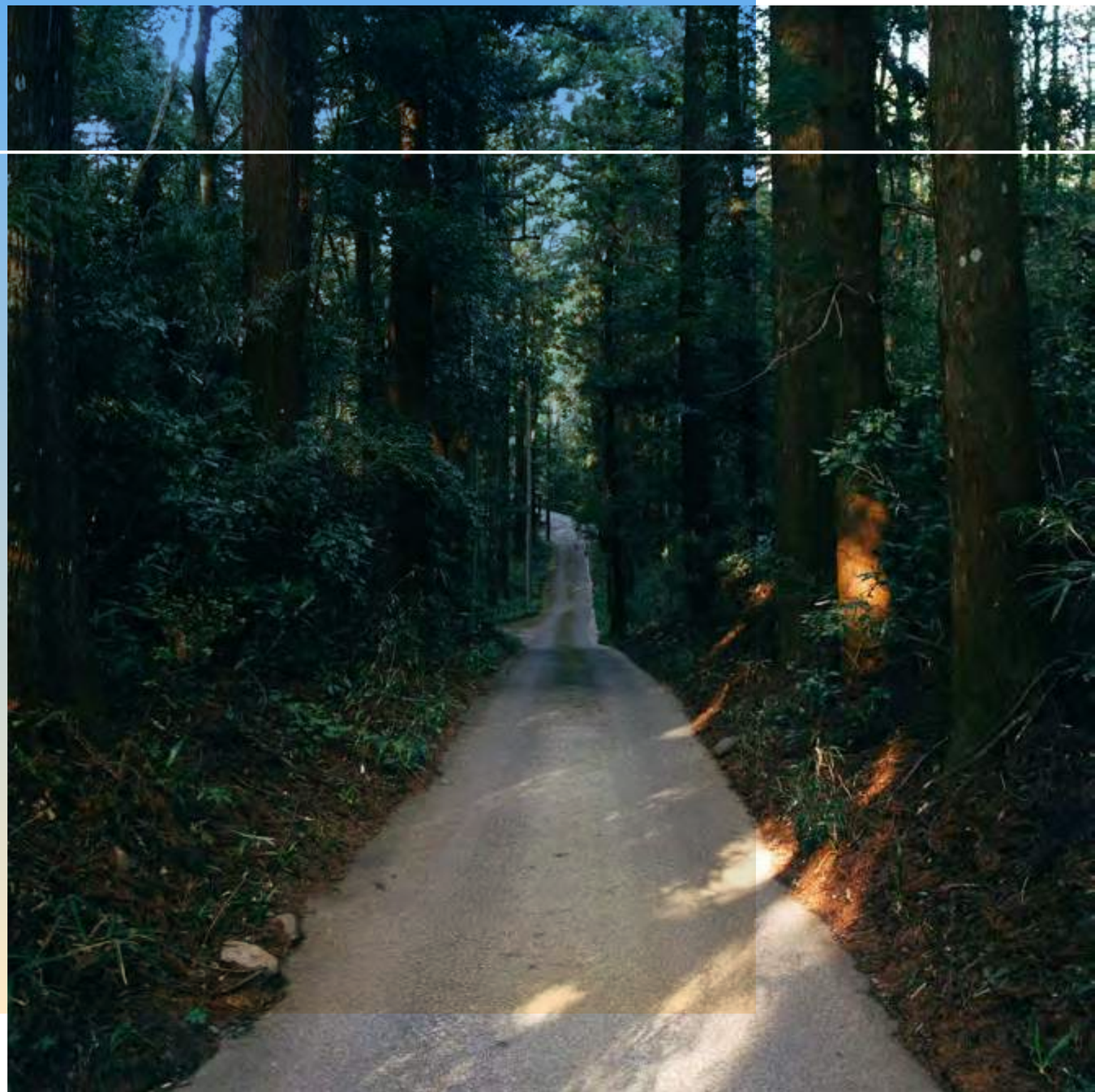
Executive summary



Objective of this report

Climate change has moved from a siloed sustainability issue to a core board-level financial and legal risk. Unless and until climate policies are tightened, the world is on a trajectory to exceed the "well below 2°C" warming limit set by the Paris Agreement, with material physical, economic and systemic impacts that will clearly have implications for Japan. 78% of Japan's greenhouse gas emissions originate from corporate and public sectors. As such, Japan's large companies are central to the country's climate policies and impacts. Climate impacts now translate directly into asset damage, productivity loss, reduced insurance coverage and balance-sheet risk. Around the world, courts, investors and regulators increasingly treat climate risk as foreseeable, material and decision-relevant. **As such, climate risk is no longer external or long-term. It is an immediate corporate governance issue, affecting shareholder value.**

This publication aims to guide directors in Japan as they make decisions that may be affected by climate-related risks and opportunities. It begins by outlining key climate-related risks and the evolving landscape of climate-related policy developments in Japan. The publication then examines core legal considerations under Japanese law in the context of climate change and corporate governance, including directors' fiduciary duties, the implications of shareholder engagement and best practices for directors in day-to-day business operations. It concludes with a set of practical questions to help directors assess and ensure their compliance with their legal duties.

Under Japanese law and evolving corporate governance expectations, directors are increasingly required to consider climate-related risks as an integral part of fulfilling their fiduciary duties.

Fiduciary duties in the climate context
Given the foreseeable risks of climate change to Japanese society and the economy, directors must consider climate change in fulfilling their fiduciary duties under the Companies Act of Japan, acting in the best interests of the company with due regard to both short-term performance and long-term corporate value. If directors fail to fully discharge their duties, they will be **jointly and severally liable** to the company for any resulting damages.

- **Informed decision-making**
  Although directors have discretion under the business judgment rule, the discretion does not exempt them from the obligation to obtain relevant information and to make reasonable and well-informed decisions. This includes identifying, evaluating and appropriately managing climate-related risks and impacts.
- **Use of reliable scientific knowledge**
  As reflected in the Fukushima Daiichi Nuclear Power Plant litigation, directors are expected to continuously gather and assess highly reliable scientific information—particularly authoritative sources such as the Intergovernmental Panel on Climate Change (IPCC) reports—and to consider and implement appropriate mitigation and preventive measures in a timely manner.
- **Internal controls**
  Directors must design and operate internal controls as an integrated governance function that reflects applicable laws, disclosure regimes and soft-law and administrative guidance.
- **Investor engagement**
  In light of increasing investor engagement —and investors' expectations—on climate-related risks, directors have a corresponding responsibility to engage meaningfully with investors as part of their duty to protect and enhance long-term corporate value.

→ For details on fiduciary duties, internal controls and investor engagement, see Chapters 2, 3 and 4.

In fulfilling their fiduciary duties in the context of climate change, Japanese boards are expected to embed effective climate governance through the following best practices to support long-term value creation and regulatory compliance:

- **Formal mandate**
  Boards should obtain a clear mandate to address climate risks from their shareholders. It should cover strategy, risk management and disclosures.
- **Governance structures**
  To implement this mandate, boards are expected to put in place supporting structures at both board and management levels, with defined roles, reporting lines and coordination mechanisms.
- **Board capability**
  Boards should strengthen their ability to oversee climate matters by ensuring access to relevant expertise, reliable information and effective decision-making processes.
- **Disclosure and transition planning**
  Directors are expected to comply with evolving climate-related disclosure requirements and to design and implement transition plans—engaging the supply chain where appropriate—to enhance resilience and meet investor and regulatory expectations.

→ For details on directors' best practices, see Chapters 5 and 6.

Chapter 1

Understanding climate risks and opportunities

Introduction

As climate change accelerates, Japanese companies face numerous climate-related risks and opportunities. These risks range from **physical risks associated with extreme weather events to transition risks related** to changes in domestic policies, the impact of international frameworks on climate change and the increase in climate-related litigation.

In 2020, the Japanese Government adopted an ambitious policy to achieve net-zero greenhouse gas emissions by 2050. This high-level commitment is supported by a wide-ranging policy agenda, which will have significant implications for the Japanese corporate sector.

Although new opportunities may arise for companies during the net zero transition period, **failure to anticipate physical risks or adapt to new climate-related policies will significantly disrupt companies' daily business operation and performance.**

The imperative of decarbonisation

A word of introduction: the likelihood of mitigating global warming to 1.5°C or 2°C

In 2015, Japan signed the Paris Agreement, which aims "the increase in the global average temperature to well below 2°C above pre-industrial levels" and endeavours "to limit the temperature increase to 1.5°C above pre-industrial levels."[1]

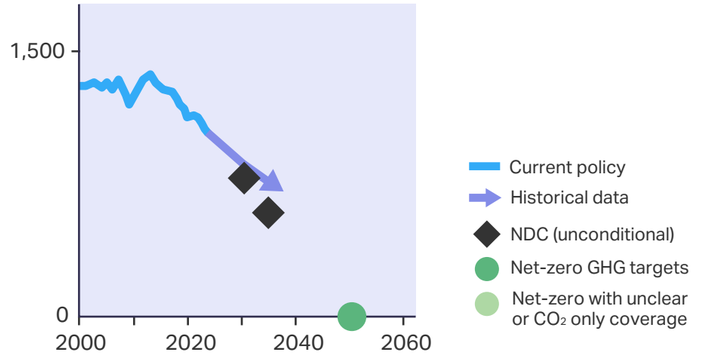
The disparity between mean global warming thresholds of 1.5°C, 2°C and 3°C is critical. Every mitigated increment of warming significantly reduces the probability of triggering irreversible damage to earth systems.

According to the 2025 UNEP emissions gap report, based on policies currently in place, the world is however on a trajectory to reach **2.8°C of warming** over the century. Already, 2024 was the hottest year on record at **1.55°C above pre-industrial levels.**[2]

Nationally Determined Contributions (NDCs) are the greenhouse gas (GHG) emission reduction targets that each country must submit to the United Nations Framework Convention on Climate Change (UNFCCC) and update every five years under the Paris Agreement. Even a full implementation of current unconditional NDCs only lowers this to **2.5°C**.[3]

Under an unconditional NDCs' scenario (which means the emission-reduction commitments that the country pledges to meet regardless of what other countries are achieving), there is a 25% chance of staying below 2°C, while there is a 37% chance of staying below 2°C under a conditional NDCs' scenario (which means the emission-reduction commitments that depend on additional factors such as international support, finance or cooperation).[4]

Japan's decarbonisation is not aligned with its NDC



All net-zero pledges must be achieved to stay below 2°C

	Current policies continuing	Unconditional NDCs continuing	Conditional NDCs continuing	Conditional NDCs + all net-zero pledges
below 3 °C	80% (16-99%)	92% (16-99%)	95% (16-99%)	100% (16-99%)
below 2 °C	8% (0-56%)	25% (0-74%)	37% (1-77%)	78% (36-85%)
below 1.5 °C	0% (0-7%)	1% (0-16%)	3% (0-18%)	21% (2-27%)

From UNEP, 'Emissions Gap Report 2025' (November 2025) at pp.20 & 38. [5]

Beyond 2°C: escalating risks and irreversible damage to earth systems

The IPCC is an intergovernmental body of the UN composed of scientists appointed by their governments. It exists to provide accurate—and consensual—scientific information to governments. In its latest report from 2023 (AR6), the IPCC states that "risks and projected adverse impacts and related losses and damages from climate change will escalate with every increment of global warming (very high confidence). They are higher for global warming of 1.5°C than at present, and even higher at 2°C (high confidence)."[6]

Based on the IPCC's latest published report, 3°C of global warming would result in significantly greater harm to human society and biodiversity. The Japan Meteorological Agency finds that Japan would be particularly vulnerable to a warmer world, in terms of extreme heat and floods.[7]

Exceeding 2°C of global warming also increases the risk of reaching some tipping points, which would cause irreversible change—and damage—to Earth systems.

Comparing risks from rising temperatures

	1.5°C	2°C (Tipping point)	3°C	1.5°C vs 2°C	1.5°C vs 3°C
BIODIVERSITY LOSS Maximum percentage of species at high risk of extinction across forests and land	14%	18%	29%	1.3x WORSE	2.1x WORSE
DROUGHT Dryland population exposed to water stress, heat stress and desertification	0.95B PEOPLE	1.15B PEOPLE	1.29B PEOPLE	200M MORE PEOPLE	340M MORE PEOPLE
FOOD SECURITY Costs for adaptation and residual damage to major crops	$63 BILLION US	$80 BILLION US	$128 BILLION US	$17B MORE	$65B MORE
FIRES Increases in burnt area across Mediterranean Europe	40–54%	62–87%	96–187%	1.6x WORSE	3.0x WORSE
EXTREME HEAT Significant risk in Japan Increase in number of days per year with a maximum temeprature above 35°C	45–58	52–68	66–87	1.2x WORSE	1.5x WORSE
EXTREME HEAT Increase in annual number of heatwaves in Southern Africa	2–4 TIMES	4–8 TIMES	8–12 TIMES	2.0x WORSE	3.3x WORSE
SEA LEVEL RISE Global mean sea level rise by 2100	0.28–0.55m	0.33–0.61m	0.44–0.76m	1.1x WORSE	1.4x WORSE
FLOODS Significant risk in Japan Increase in global population exposed to flooding	24%	30%	NO DATA AVAILABLE	1.3x WORSE	NO DATA AVAILABLE
CORAL REEFS Further decline in coral reefs	70–90%	99%	NO DATA AVAILABLE	1.2x WORSE	NO DATA AVAILABLE

Note: For climate risks with projected ranges, we used the midpoints of the ranges to compare risks at different temperature thresholds. Sea level rise projections correspond to SSP1-1.9, SSP1-2.6, SSP2-4.5, which are roughly approximate to global warming of 1.5°C, 2°C and 3°C, respectively.

From World Resources Institute, '10 Big Findings from the 2023 IPCC Report on Climate Change' (20 March 2023)[8]

Impact of Japan's NDCs on the largest corporate emitters

Japan's heightened climate targets place large corporate emitters at the centre of national decarbonisation. With 78% of emissions linked to the corporate and public sectors, boards are no longer peripheral—they are pivotal to Japan's climate success.

Background

In February 2025, the Cabinet approved a revised Global Warming Countermeasures Plan, which outlines Japan's forthcoming NDC targets.

The Cabinet indicates that these targets are aligned with the 1.5°C goal and are characterised by heightened ambition: a **60%** reduction in GHG emissions from the 2013 level by 2035 and a **73%** reduction by 2040.[9]

The impact

Japan's heightened climate targets place large corporate emitters at the centre of national decarbonisation, as they account for 78% of the total emissions.

To achieve the NDC targets, policy measures will be organised around four thematic pillars: energy transformation; industry, business and transport; regional and lifestyle initiatives; and cross-sectoral approaches.[10]

Notably, business groups and independent think tanks are questioning whether Japan's current NDCs are sufficient to achieve the goal of limiting global warming to 1.5°C.[11]

GHG emissions in Japan

- Japan's energy-related CO_2 emissions accounted for **2.7%** of the global total in 2023, positioning the country as the fifth-largest emitter worldwide.[12]
- According to data released in April 2025 detailing emissions for the fiscal year 2023 (adjusted for electricity and heat allocation), emissions attributable to the corporate and public sectors comprised **78.4%** of the national total.[13]
- Energy transformation sectors (i.e. electricity / gas / heat suppliers) are the largest contributor, followed by the manufacturing and construction sectors; together, these sectors account for approximately **60%** of Japan's total GHG emissions.[14]
- The GX-ETS scheduled to commence in the fiscal year 2026 is expected to cover **approximately 300 to 400 entities**, whose combined emissions represent an estimated **60%** of Japan's total GHG output.[15] These large-scale emitters are therefore anticipated to play a pivotal role in achieving national emissions reductions.

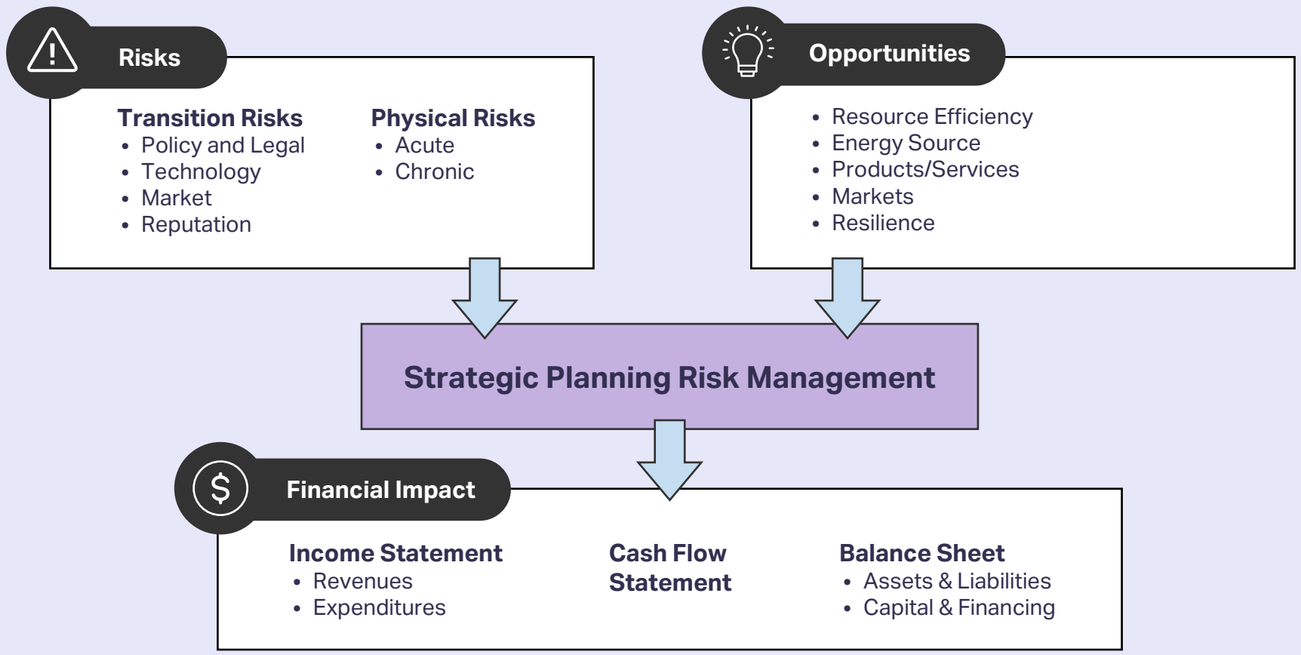
Climate-related risks

Identifying, naming and quantifying financial impact of different types of climate-related risks and opportunities at company level

Corporations need to assess and disclose how climate change brings financial risks and opportunities.

In 2017, the industry-led Task Force on Climate Related Financial Disclosures (TCFD), chaired by Michael Bloomberg, issued a groundbreaking set of recommendations on how the corporate sector should disclose an entity's climate-related financial risks and climate governance to investors and other stakeholders.[16] The TCFD framework categorised climate-related risks and opportunities into physical and transition risks, and translated them into actual financial impacts.

Climate-related risks, opportunities and financial impact



From TCFD, 'Recommendations of the Task Force on Climate-related Financial Disclosures (Final Report)' (June 2017) at p.8.[19]

This distinction between **transition risk** and **physical risk** is enshrined in the International Sustainability Standards Board (ISSB) S2 (see p.5 on IFRS Sustainability Disclosure Standard),[17] which has been adopted by the Sustainability Disclosure Standards of the Sustainability Standards Board of Japan (SSBJ) in March 2025 (see more details in Chapter 6).[18]

Physical risks: what directors should know

Physical risks arise from extreme weather events like heatwaves and floods as well as chronic events including rising sea levels.

They may lead to direct damage to assets, which can reduce collateral value and disrupt production. They may also lead to balance sheet write-downs, weaken creditworthiness and increase capital costs and insurance expenses, which affect annual revenues.

According to recent **UN reports**, direct economic losses resulting from climate disasters now have reached an average of USD 202 billion (JPY 30 trillion) a year.[20]

By 2050s, the annual financial impact of climate physical risk is projected to total USD 1.2 trillion (JPY 180 trillion) for S&P Global 1200 Index companies globally, absent adaptation.[21] The total exceeds USD 2.3 trillion (JPY 350 trillion) when cascading effects and ecosystem damage are included.[22]

The increase of climate-related physical risks also impacts the insurance sector globally. Japan tends to follow the global trend of not insuring assets located in regions highly exposed to extreme weather.

The **Financial Services Agency** found that most Japanese insurers would raise premiums, revise policy conditions (such as lifting deductibles) and reduce the maximum insurance period in response to the increasing severity of natural disasters.[23]

This would significantly restrict the affordability and availability of insurance for companies and individuals.

Physical risks: financial impacts of floods and extreme heat

The Bank of Japan has found that the physical damages from floods weaken GDP even if the direct damages are insured.[26]

As floods destroy capital stock, firms will produce less output, which in turn reduces firms' ability to pay back their loans. The balance sheets of firms and financial institutions disrupt financial intermediation, which weakens GDP further. Because the downward pressure on GDP endogenously deteriorates the corporate balance sheets, this effect will be present even if direct damages have been insured.

The increasing climate-related physical risks also disrupt the labor market in Japan as demonstrated by reduced labor productivity and food insecurity as a result of **extreme heat**.[27]

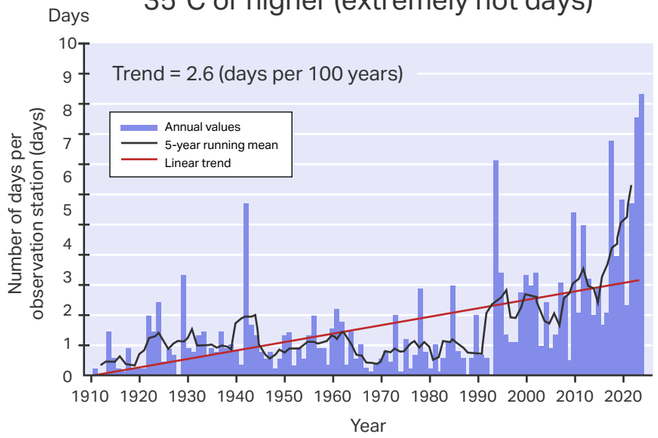
More than half of the prefectures and designated cities have already marked days with temperatures above 35 °C as non-working days for public work projects.

Moreover, the 2019 amendment to the Construction Business Act prohibits setting excessively short project deadlines without considering non-working days due to extreme heat.[28]

The Japan Meteorological Agency projects that in a 4 °C warming scenario, there will be +17.5 days per year 35 °C or above (and 2.9 days in a 2 °C warming scenario).[29]

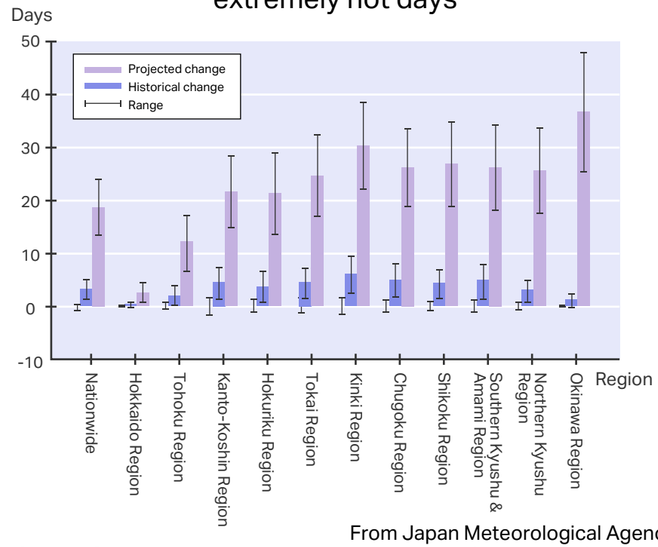
Project timelines are already delayed due to high temperatures, which has increased overall costs. As the number of extreme heat days (35 °C or above) increases, project timelines would lengthen even further.[30]

Daily maximum temperature of 35°C or higher (extremely hot days)



From Japan Meteorological Agency, 'Climate Change in Japan 2025 - Detailed Version' (March 2025) at p.70.[31]

Change in the annual number of extremely hot days



From Japan Meteorological Agency, 'Climate Change in Japan 2025 - Detailed Version' (March 2025) at p.78.[32]

Transition risks: what directors should know

In the words of the TCFD, "transitioning to a lower-carbon economy may entail **extensive policy, legal, technology and market changes** to address mitigation and adaptation requirements related to climate change.

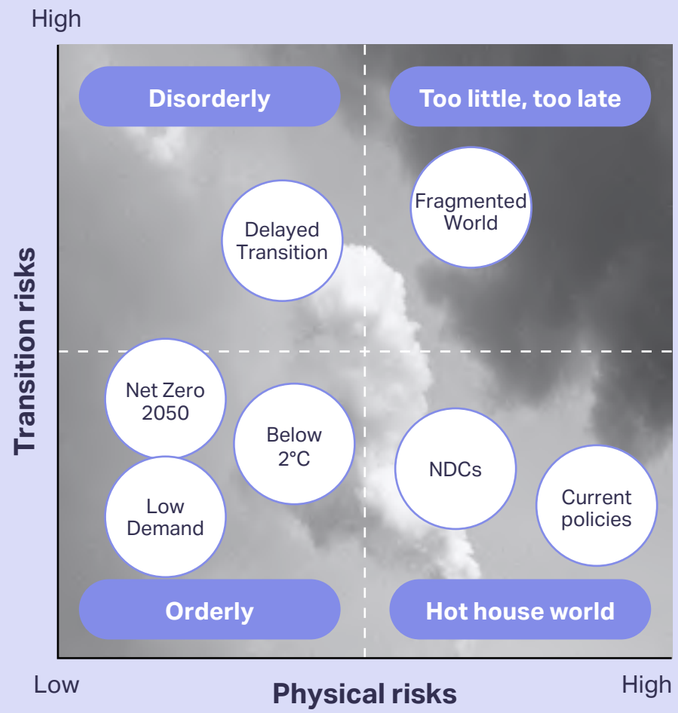
Depending on the nature, speed and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organisations."[33]

Policy changes may generate new opportunities for Japanese companies, but they will also create significant transition risks due to changes in regulations as well as consumer preferences.

Owing to the **rapidly worsening effects** of climate change, companies should prepare for disorderly transition and rapid regulatory changes (see NGFS graph on the right).

Another important risk is the **climate-related litigation risk**. Globally, 20% of climate cases filed in 2024 targeted companies, or their directors and officers.[34]

Boards must cautiously consider the concerns and risks arising from these current and anticipated changes, paying close attention to the risks of carbon lock-in, transition-washing and the possibility of breaching director's fiduciary duties.



The Network for Greening the Finance System, a group of central banks and financial supervisors of which the BoJ is a member, regularly publishes climate scenarios to help its members explore the possible impacts on the economy and the financial system. The graph is from NGFS, Scenario Portal, available https://www.ngfs.net/ngfs-scenarios-portal/[35]

Three examples of transition risks and opportunities

Example 01: Japan's fast changing policy environment

The Japanese Government initiated its Green Transformation ("GX") policy in 2020, committing the nation to achieving carbon neutrality by 2050. GX represents a major shift in Japanese Government industrial and energy priorities and has been solidified by several policies. It aims to provide a national strategy of simultaneously achieving stable energy supply, economic growth and decarbonisation. Domestic civil society and foreign investors have questioned the adequacy of certain aspects of GX and AZEC to reach carbon neutrality.[36]

GX Promotion Act
(amended in May 2025, effective from 1 April 2026)

The GX Promotion Act stipulates the development and implementation of the GX 2040 Vision, the issuance of GX Economy Transition Bonds, the introduction of carbon pricing and the establishment of the GX Acceleration Agency.

- The Government began issuing **GX Economy Transition Bonds** in 2023, with the goal of **JPY 20 trillion over ten years** and contributing to a broader public-private investment framework to support GX, totalling JPY 150 trillion. The first issuance took place on 14 February 2024, totalling JPY 1.6 trillion. The Government's Climate Transition Bond Framework stipulates the criteria for eligible use of proceeds.[37]
- From **April 2026, a mandatory emissions trading scheme (GX-ETS)** has been implemented for large-scale emitters.
- From **2028, a fossil fuel levy** will be introduced, targeting fossil fuel importers.

AZEC

Japan's GX priorities have also extended to the Asia-Pacific region, where Japan launched the Asia Zero-Emission Community ("AZEC") in March 2023 to advance decarbonisation among 11 member countries.

AZEC is promoting projects and technologies that are intended to promote decarbonisation. As of 2025, more than 350 initiatives have been announced, and 68 memoranda of understanding have been signed. Many of the projects mirror those supported by the GX Promotion Act.

Some of the AZEC-supported projects are being questioned for their reliance on fossil fuels.[38]

A note on naming of GX legal instruments

In February 2023, the Government adopted a ten-year roadmap titled the Basic Policy for the Realisation of GX. In May 2023, the Government enacted the GX Promotion Act. The Basic Policy was later revised and renamed as the Strategy for Promoting the Transition to a Decarbonised Growth-Oriented Economic Structure (July 2023) and then the GX 2040 Vision (2025).

Example 01: opportunities and risks from the GX Policy

The GX framework and AZEC create both opportunities and concerns.

Boards must understand such risks in decision making process and consider cautiously such opportunities.

Boards shall ensure that the company undertakes a thorough and rigorous assessment of climate risks and opportunities.

Opportunities

Massive investment mobilisation

- Transitioning to carbon-free production facilities requires substantial capital investment and transition finance to support this shift must be strongly promoted.
- The Japanese government's financial support through the GX Economic Transition Bonds totals JPY150 trillion, which is a massive investment opportunity for decarbonisation.

Regional collaboration and cooperation and Japan's leadership

- Through AZEC opportunities, Japanese decarbonising technology can be shared throughout Asian countries which face problems similar to Japan and can tackle these challenges collectively.

Risks

Carbon lock-in

- Carbon lock-in results if high-emission infrastructure or assets continue to be used, despite the possibility of substituting them with low-emission alternatives, thereby delaying or preventing the transition to near-zero or zero-emission alternatives (OECD).[39]
- GX Economic Transition Bonds target not only "green" uses including mainstreaming renewable energy and investment in battery, but also "non-green" uses such as development of blue hydrogen/ammonia and gas infrastructure and carbon capture, utilisation and storage (CCUS).
- These "non-green" technologies and methodologies may not be necessarily effective for decarbonisation and may not be financially reasonable.

Dependency on fossil fuels and greenwashing — "transition-washing"

- More than 30% of projects under the AZEC scheme include fossil fuel technologies, including natural gas, LNG, ammonia co-firing, blue ammonia and hydrogen, and CCUS.[40]
- Transition-washing occurs when transition finance is directed to entities unwilling or unable to align with net-zero goals at the pace required by the Paris Agreement. Failure to address transition-washing risks undermines investors' confidence and risks misallocating capital to carbon-intensive or inconsistent activities.

Potential risks of breach of directors' fiduciary duties

- If directors' decision is considered as grossly unreasonable in the decision-making process or in the substance of the decision, then directors will be liable for breaching their fiduciary duties (Please see Chapter 3 for further information).

Example 02: expected impacts of the ICJ's advisory opinion on climate change

On 23 July 2025, the Internal Court of Justice (ICJ) issued a unanimous advisory opinion on the obligations of states in respect of climate change.[41] The opinion emphasised that climate risk is not only an environmental challenge but a matter of international law and States' responsibility. Though not legally binding, **the ICJ's advisory opinions carry great legal weight and moral authority**.

Based on the opinion, states have a clear obligation to "protect the climate system" (para. 403) and must regulate the activities of private actors that exacerbate climate change, particularly as it relates to fossil fuels.

It is expected that Japan will tighten the relevant regulations in the near future as a response to the ICJ's advisory opinion. For instance, they could include higher carbon prices as the carbon pricing scheme which has been introduced in Japan from April 2026 progresses.

Boards must consider increasing transition risks as the Japanese government further tightens regulations of the activities of corporate sectors.

Boards need to also be aware that private actors' obligations are intertwined with the State's obligations to reduce GHG emissions in the process of achieving the NDCs.

Given the high emission made by the corporate sector in Japan, Japanese companies' endeavours to reduce GHG emissions will directly contribute to the obligations owed by the Japanese government under the International law.

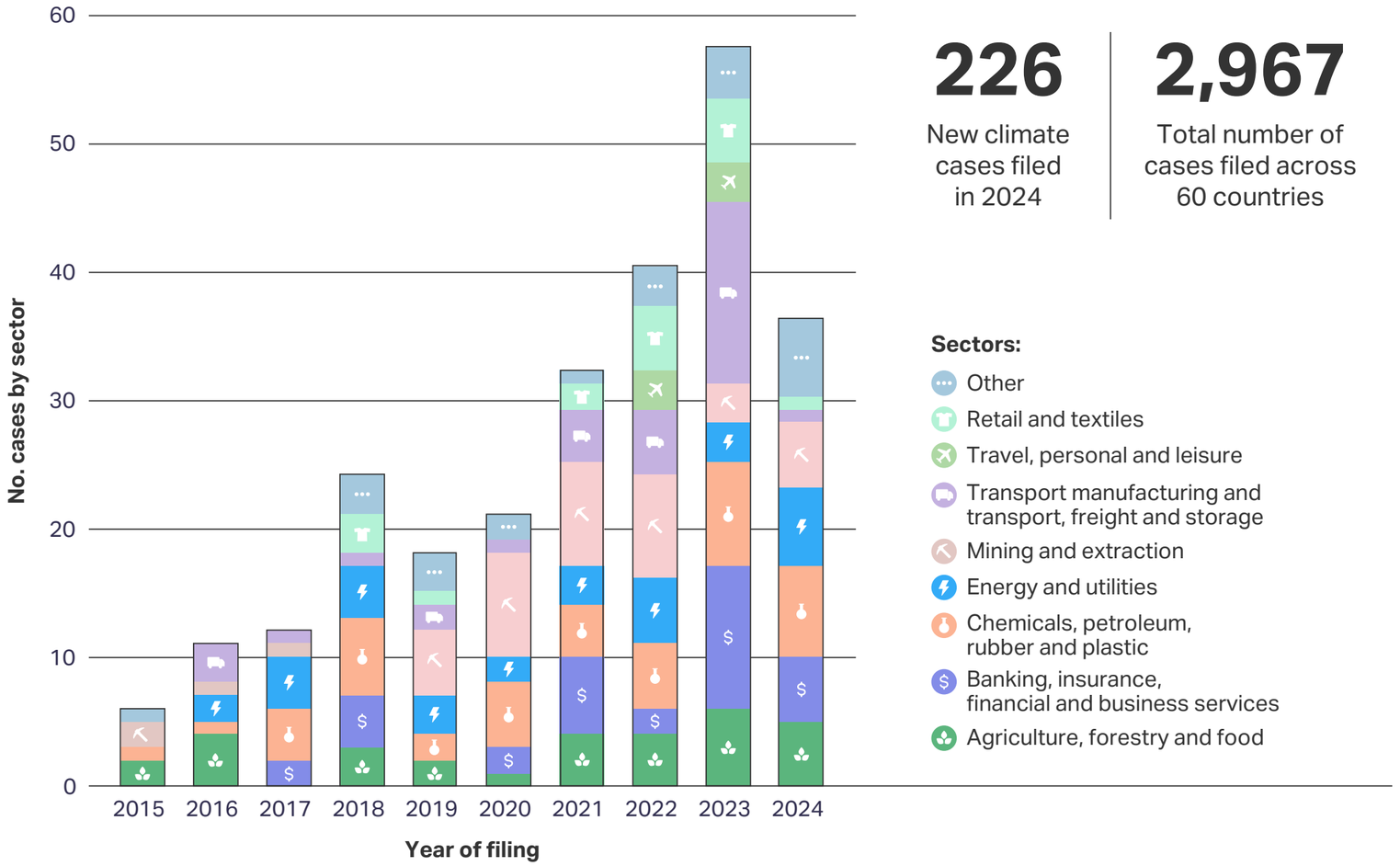
> *"**Failure of a State to take appropriate action to protect the climate system from GHG emissions**—including through **fossil fuel production, fossil fuel consumption, the granting of fossil fuel exploration licences or the provision of fossil fuel subsidies—may constitute an internationally wrongful act** which is attributable to that State." (Para 427 of the ICJ opinion)*
>
> *"Thus, a **State may be responsible** where, for example, it has **failed to exercise due diligence by not taking the necessary regulatory and legislative measures to limit the quantity of emissions caused by private actors** under its jurisdiction." (Para 428)*

Example 03: climate litigation (global picture)

At least 226 new climate cases were filed in 2024, bringing the total number of climate cases filed to date to 2,967 across nearly 60 countries globally.[42]

Cases have sought different litigation strategies, with more recent cases focusing on integrating climate considerations into decision-making, including whether downstream or "Scope 3" emission from fossil fuel projects must be considered.[43]

Number of companies targeted globally in strategic climate-aligned cases by sector, 2015–2024



From LSE, 'Global trends in climate change litigation: 2025 snapshot' (25 June 2025) at p.19.[44]

Example 03: climate litigation (global picture)

We present four illustrative and representative cases of climate litigation.

Tort law – corporate responsibility for human rights impacts

In Asmania et al. v. Holcim (2022 Switzerland),[45] inhabitants of the Indonesian island of Pari sued a Swiss-based major buildings materials company for compensation for climate change-related damages on Pari. The case is notable for its transboundary nature, as plaintiffs in foreign countries may seek to hold businesses liable for their climate impacts across borders.

Consumer protection and competition law – greenwashing claims

In FossielVrij NL v. KLM (2022 Netherlands),[47] the Court ruled that KLM, the Dutch national airline, was liable for greenwashing in its sustainability advertising, breaching EU consumer law claims under company law to challenge directors for breach of fiduciary duties.

Corporate due diligence legislation

In Notre Affaire à Tous Les Amis de la Terre and Oxfam France v. BNP Paribas (2022 France),[46] French environmental NGOs brought a suit against a major French multinational universal bank, stating that the bank's plan concerning the climate risks of its activities was inadequate under the French law on the duty of vigilance.

Company law – directors' fiduciary duties

In Enea v. Former Board Members and D&O Insurers (2023 Poland),[48] a Polish state-controlled energy company Enea filed a suit against former board members and its directors and officers, alleging that the former board members breached their fiduciary duties by approving the high-risk coal investment in 2018 despite financial and climate-related warnings.

Example 03: climate litigation risks in Japan

Compared to other jurisdictions, Japanese courts have not heard many climate-related lawsuits. However, a recent ongoing claim, the "Youth Climate Case", has generated a wide attention in the Japanese corporate community.[49]

Additionally in December 2025, another activist group filed a claim against the Government of Japan for climate inaction ("Climate Justice Case").[50] These lawsuits may continue to multiply in Japan in the future.

Youth Climate Case

In August 2024, 16 young people from Japan nationwide filed a case in the Nagoya District Court against 10 utility companies, seeking injunctive relief to limit their CO_2 emissions.

The claim is based on widespread environmental damage rather than localised harm.

In addition to Japanese domestic laws, the claimants primarily refer to international instruments such as the OECD Guidelines for Multinational Enterprises, the Paris Agreement and United Nations Guiding Principles on Business and Human Rights, arguing that private companies have duty to uphold human rights related to climate change.[51]

The filing of this case indicates that activist cases in Japan gradually begin to adopt international standards and norms, which is generally unprecedented in Japan but has been widely used in climate change cases in other jurisdictions such as the UK and EU.

Chapter 2

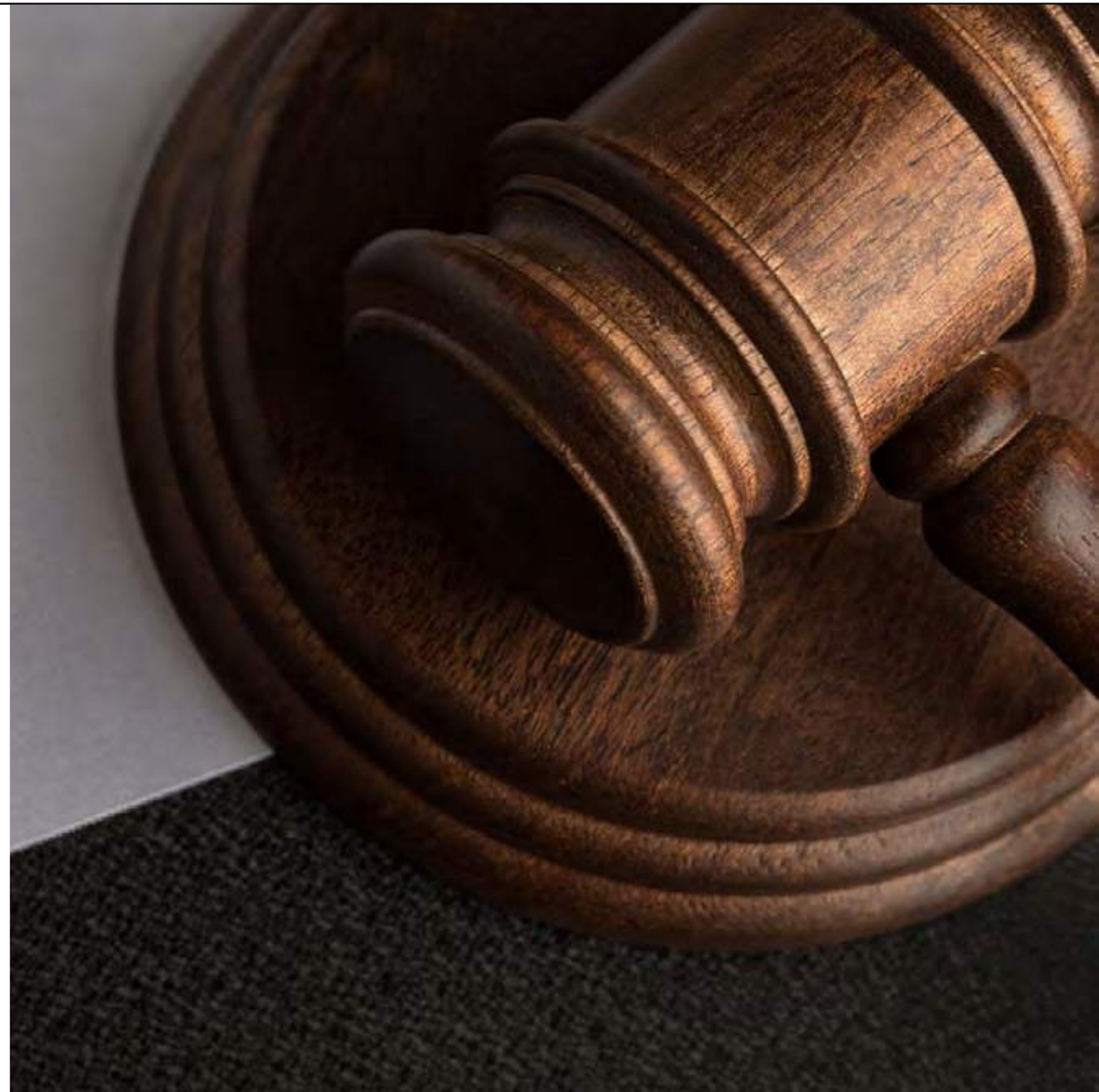
Legal duties of corporate directors

Introduction

Under the Companies Act, directors owe fiduciary duties to their companies, which mandates them to act in the company's best interests for both short and long terms. This implies that **where a director has breached their duty, any other director who does not demonstrate that they properly discharged their duty to the company (in particular, who failed to oversee the directors that breached their duty) would therefore be jointly and severally liable to bear the consequences.**

What one may have considered to be a reasonable exercise of care and diligence 30 years ago looks vastly different today. As evidence of climate-related risks and opportunities faced by businesses continues to grow, it becomes increasingly difficult for directors to reasonably claim they were unaware of these issues.

Although directors have broad discretion when making business decisions under the business judgment rule, recent caselaw demonstrates that the oversight of such discretion has been enhanced especially in the event of severe accidents. This cautions directors against relying on the business judgment rule when making decisions susceptible to climate risks.



Directors' fiduciary duties

Directors' fiduciary duties under Japanese law

Under the Companies Act of Japan, directors primarily owe the following duties:[1]

① **Duty of care of a prudent manager**
② **Duty of loyalty**
③ **Duty to comply with laws and regulations**
④ **Duty to establish internal control systems**

(This Chapter 2 focuses on duties ① and ②. Duties ③ and ④ will be further explained in Chapter 3 and 6.)

These duties require directors to act in the **company's best interests**. The "interests" in this context include not only **short-term gains** but also benefits for the **company's long-term sustainability**. Japan also has a long history of taking into account the **interests of a wide range of stakeholders**, not only shareholders. In light of that history, directors need to consider the **social risks of climate change and risks to consumers**, as well as the impact that their decisions may have on the company's reputation.

Business Judgement Rule ('BJR')

Under the BJR, directors have broad discretion in making business decisions.

A breach of the duty of care is not established unless there are **grossly unreasonable** aspects:[2]

- **in the decision-making process**; and/or
- **in the substance of the decision**.

The BJR is a rule to allow a director's discretion on their business judgements. To apply the BJR in decision-making prosses, a director should undertake sufficient steps to obtain relevant **information and use such information to arrive at a considered decision**.

When decisions related to climate risks are being made, an **uninformed decision will not suffice** when there is mounting evidence that climate change and its financial implications are uncontroversial, well-known and foreseeable.

Directors should be **identifying, evaluating and managing climate-related risks and impacts**. If they fail to do so, they risk breaching their duty of care.

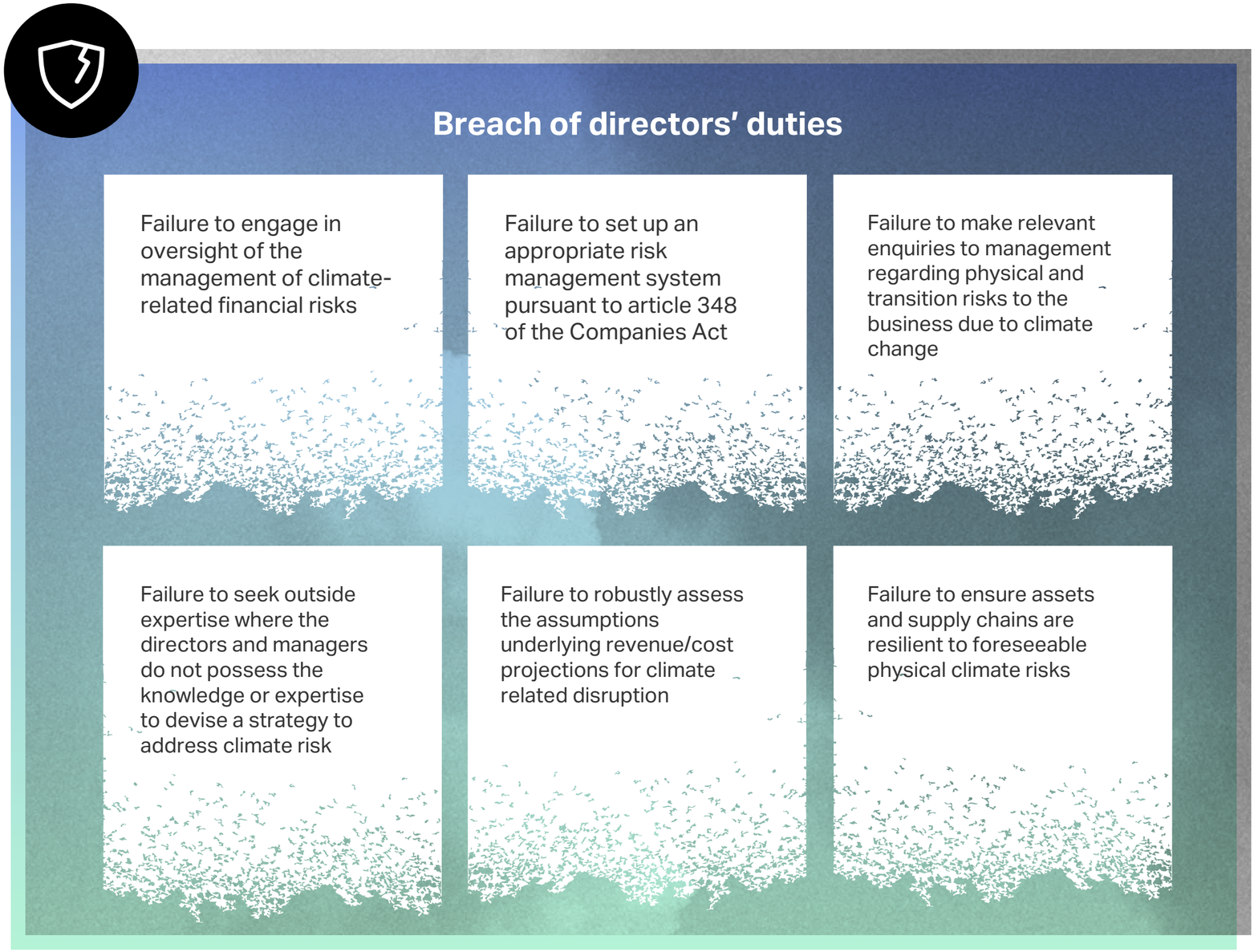
When directors breach their duties and the consequences

When directors breach their duties, they are jointly and severally liable to the company for any resulting damages.

This implies that where a director has breached their duty, any other director who does not demonstrate that they properly discharged their duty to the company (in particular, who failed to oversee the directors that breached their duty) would therefore be jointly and severally liable to bear the consequences.

When directors are grossly negligent or knowingly fail to perform their duties, they are also liable to relevant third parties or shareholders for the resulting damages.

Examples where directors' breaches of fiduciary duties concerning climate change risks include the following on the right.



From CCLI, 'Directors' Duties Regarding Climate Chage in Japan: 2025' (March 2025) pp.30-31.[3]

Case study on the Fukushima nuclear disaster

An overview of the derivative lawsuit

Decisions arising from litigation over the Fukushima Daiichi nuclear accident are highly relevant although not a climate case.

The first-instance judgment at the district court is relevant as it offers guidance on how directors' responsibilities should be assessed with respect to negative externalities arising from corporate operations. It adopts a restrictive interpretation of the business judgment rule and therefore provides useful insights for considering directors' duties concerning climate change.

The district court ordered JPY 13.3 trillion in damages.[4] The liabilities the directors should owe were tremendous. However, the Appellate Court reversed the district court decision.[5] As of the date of publication, an appeal to the Supreme Court is still pending.

Implications for climate-related governance from the Fukushima nuclear disaster derivative lawsuit

Whilst directors are granted discretion in business decisions under the business judgement rule, it can be said that where serious consequences arise, the application of this rule may be subject to strict scrutiny, as seen in the district court's first-instance ruling in the Fukushima Daiichi Nuclear Power Plant litigation. In order to benefit from the protection afforded by the business judgement rule in the context of climate change, directors should follow the following process when making day-to-day decisions.

- **Information gathering** – Gather and consider continuously relevant information by understanding stakeholders' expectations to the company through engagement with investors etc. (please see Chapter 4), obtaining scientifically credible literature and reports on climate risk (such as reports from the Intergovernmental Panel on Climate Change (IPCC)) to deepen understanding of climate risk and seeking advice and guidance from appropriate relevant experts.
- **Risk identification** – Through the operation of internal control systems and other means (please see Chapter 3), identify and assess climate risks relevant to the company.
- **Assessment of the impact of risks on the company** – Assess the impact of identified climate risks on the company, taking into account the identified risks, the nature of the company's business and the severity of potential damage or harm. In particular, companies with high GHG emissions, those that influence decarbonisation through their investment and lending decisions and any other companies deemed highly likely to suffer damages as a result of the materialization of climate risks or to cause such massive damages to third parties that the company would be unable to cover the costs of compensation should assess and take climate risks into account with particular care.
- **Formulation and implementation of appropriate measures** – Reasonably consider and implement necessary mitigation and preventive measures in a timely manner.

Avoiding a finding of breach of the duty of care – implications from the district court ruling

In order for the decisions of directors not to be deemed a breach of the duty of care, they must follow the aforementioned process, recognise the associated risks to the company and then carefully consider and implement specific measures to avoid the consequences of those risks.

Whilst directors are granted discretion regarding the measures to be taken under the business judgement rule, particular attention must be paid to the following points suggested by the District Court ruling in the Fukushima Daiichi Nuclear Power Plant litigation.

- **Where directors obtain information relating to the assessments and judgements of experts or specialist bodies, both within and outside the company, directors should rely on it unless it can be considered grossly unreasonable.**[6]

The District Court ruling states that directors should take measures to prevent damage to the company where it is foreseeable that such damage may result from foreseeable risks, based on the latest scientific and technical expertise.

Conversely, if, despite the existence of such expert assessments and judgements, a director makes a different assessment or judgement without any special circumstances, the process and content of such judgement will be deemed grossly unreasonable and will no longer be covered by the business judgement rule. In fact, the District Court ruling found that a director had breached their duty of care by failing to acknowledge the scientific reliability of an opinion possessing reasonable scientific credibility, without any special circumstances, and by postponing the implementation of safety measures without taking any such measures.

Regarding the degree of reliability that should be expected from scientific and technical expertise, it is held that whilst findings presented solely in the papers of individual researchers are insufficient, it is deemed adequate if there is a reasonable degree of scientific reliability backed by a certain level of authorisation such as when a substantial number of researchers and experts with considerable research experience in the field have conducted a sincere review of those views within a public body or conference, and a summary has been compiled.

- **Where directors obtain risk information, they should conduct a detailed analysis of factors such as the magnitude of the risk, the probability of its occurrence, the accuracy of the forecast of the risk and the extent of the potential damage if the risk materialises and depending on the nature of the risk information, should thoroughly investigate and consider all possible options before carefully implementing measures to prevent damage to the company.**[7]

  If the potential damage to the company is significant, the probability of the risk materialising is low or the accuracy of risk forecasts is limited, this does not mean that no action needs to be taken. In particular, directors of companies engaged in businesses where climate risks could result in substantial financial losses are required to take risk information seriously and respond with due care. They must actively explore potential options that go beyond the company's conventional decision-making frameworks.

Chapter 3

Internal controls system

Introduction

The board of directors of Large Companies (daigaisha), companies with Companies with a Nominating Committee, etc. and Companies with an Audit and Supervisory Committee must establish internal systems to ensure that the company's operations are conducted properly. These internal systems are referred to as **internal controls system**.

Japanese laws, disclosure systems, soft law and administrative guidance all directly impact the structure of corporate climate governance through internal controls. Hence, directors are required to design and operate internal controls as a strategic and integrated governance function, taking these multi-layered demands into account.

In order for directors to fulfil their duty of care and make appropriate decisions, it is necessary to establish an appropriate internal controls system and, through this system, to properly identify climate risks within the company. This means that internal controls system institutionally concretises and supplements the directors' duty of care.

The establishment and operation of internal controls

Internal controls form the fundamental framework for ensuring sound and transparent management while enabling companies to comply with laws, regulations, articles of incorporation and internal rules.

The significance of internal controls

Boards bear the responsibility to establish an internal control system to ensure the proper conduct of business. Through this system, boards are required to oversee all corporate activities, including financial reporting, information disclosure, risk management and compliance. This function institutionally concretises and supplements the directors' duty of care.

The internal control reporting system under the Financial Instruments and Exchange Act (known as "J-SOX" in Japan) requires management itself to evaluate the effectiveness of internal controls over financial reporting and disclose the results.[1]

As the importance of sustainability information grows, the practical need to appropriately extend the internal control framework to non-financial information is becoming increasingly apparent.

An effective internal control system also requires compliance with sustainability disclosure obligations.

Please see Chapter 6 for sustainability disclosure obligations.

Integrating climate-related governance into internal controls

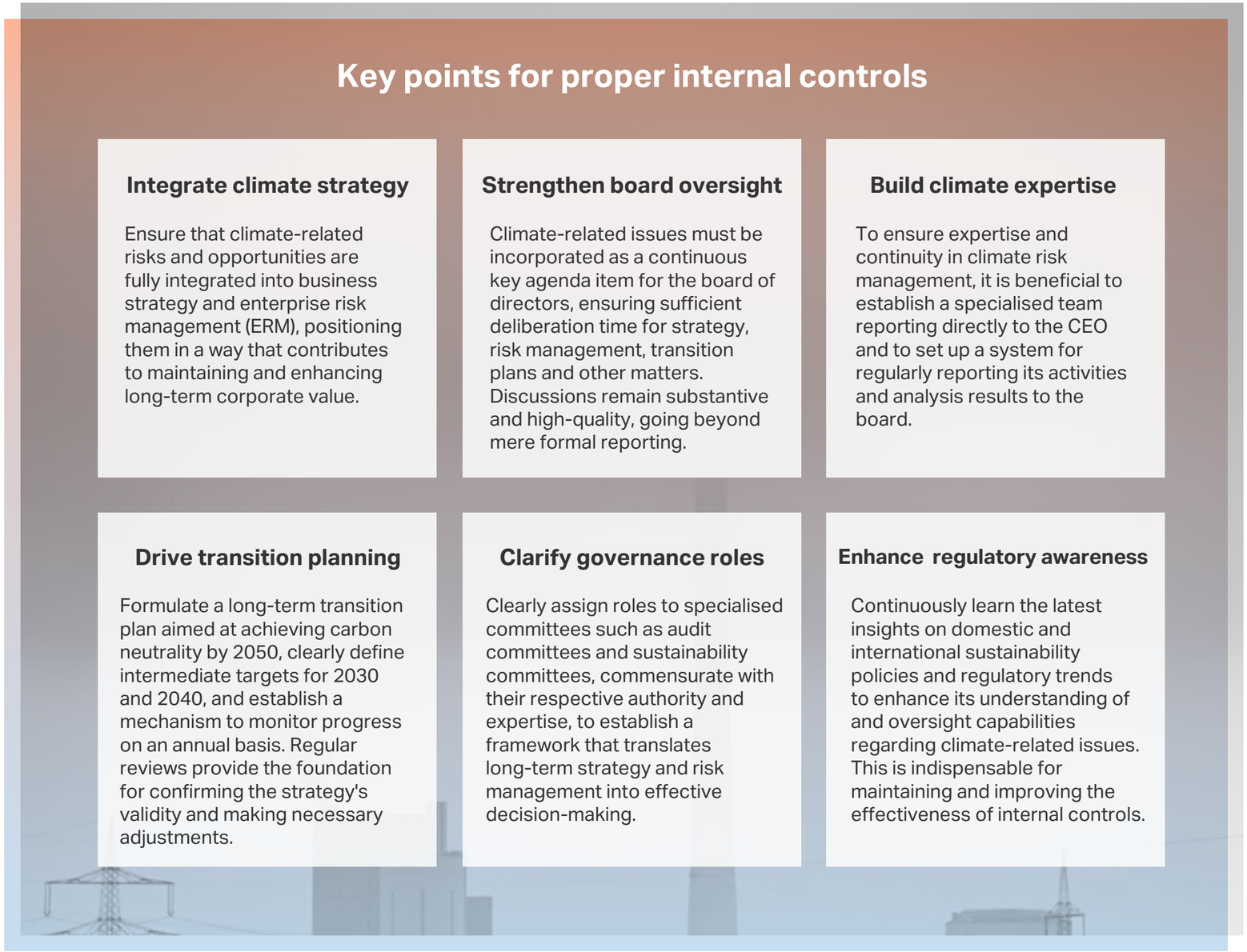
To integrate climate governance into the internal control framework, it is essential to establish specific control processes:

1. Internal procedures must be established to collect and organise information on governance, strategy, risk management, metrics and targets across departments and to prepare and review this information according to defined standards.
2. It is necessary to establish a framework where boards quantitatively and qualitatively assess climate-related risks and opportunities and reflect the results in medium- to long-term strategies and investment decisions.

As part of controls encompassing the supply chain, it is vital to establish systems for acquiring, verifying and managing external data, including Scope 3 emissions, to ensure data transparency and reproducibility.

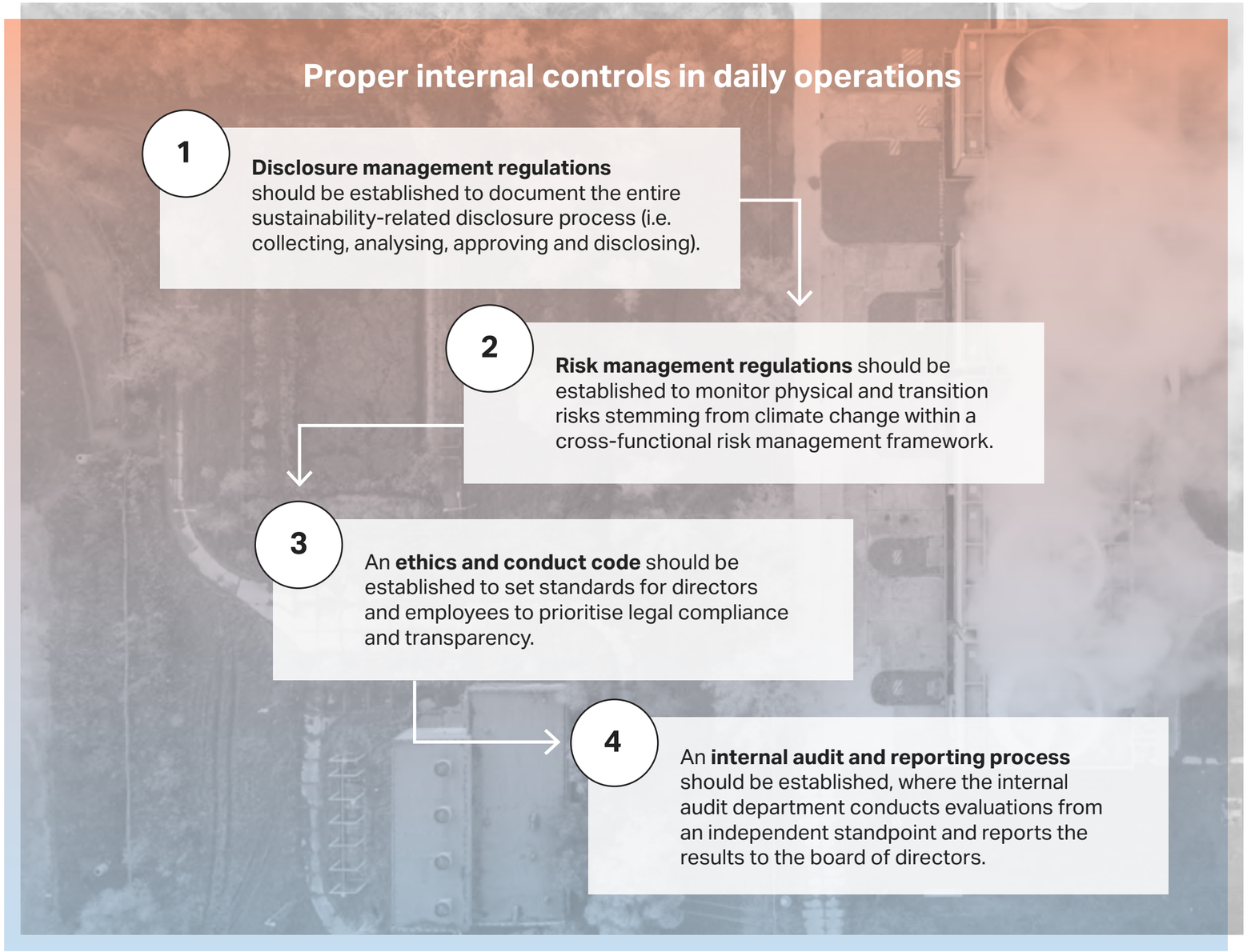
Key points for proper internal controls

Directors should take the following steps to ensure that the control processes function effectively across the company:



Proper internal controls in daily operations

Directors should also take steps to develop operational procedures that translate policies into daily business operations:



Chapter 4

Investor expectations

Introduction

Boards of directors' duty to oversee climate risk has also been reinforced by investor engagements. Investors constantly scrutinise whether companies are placing climate considerations at the heart of their business strategies.

Their engagements emphasise constructive dialogues on business competitiveness to preserve long-term shareholder value in the context of meeting the necessary climate ambitions.

Current focus moves beyond disclosures, towards credible, climate-aligned transition plans. Hence, investee companies' board of directors have a reciprocal responsibility to meaningfully engage with shareholders and actively respond to investor expectations on climate risks.

AIGCC
ASIA INVESTOR GROUP ON CLIMATE CHANGE

Rationale for investor engagement with companies

Overview of investor interactions with companies

Board of directors' meaningful interactions with investors are essential to fulfil their duty to safeguard long-term corporate value, gather relevant information on investor expectations and demonstrate informed decision-making.

In line with fiduciary duties and supported by Japan's Stewardship Code, investors engage with companies on business competitiveness to preserve long-term shareholder value in the context of meeting the necessary climate ambitions for clients and beneficiaries.[1] Investee companies' board of directors have a reciprocal responsibility to meaningfully engage with their shareholders.

Three tools used to express investor expectations

1 Company dialogue

Investors maintain regular and consistent dialogues with their investee companies to ensure companies maintain good climate governance and formulate and implement a credible transition plan.

Investors utilise evaluation tools such as Climate Action 100+ Net Zero Company Benchmark ("Benchmark") as a reference to understand investee companies' progress and set their engagement priorities.[2] Climate Governance is one of the indicators in the assessment, covering key topics such as board's oversight, executive remuneration and board's competency of climate change.

In the latest Benchmark assessment (October 2025), 86% of the 37 Asian companies, including all 11 Japanese-focused companies, have disclosed evidence of board oversight on climate risks. Some companies are also showing steady progress on transparency over climate-linked executive remuneration KPIs and board competence.

2 Proxy voting

Investors leverage proxy voting to ensure climate change considerations in the boardrooms. Based on AIGCC's research, 34% of investors explicitly integrate climate considerations into their proxy voting guidelines, which covers both management and shareholder proposals.[3]

Some investors consider climate change as a "minimum criterion" when they vote for the re-election of directors. In particular, these investors expect companies to disclose historical emissions data and set interim and long-term emissions reduction targets, which reinforces the need for the board of directors to oversee and be able to incorporate climate change into the business strategy.

Investors also use voting rationale as an engagement tool to express their expectations on companies' climate strategy, such as incentivising the board on managing climate change issues, supporting the management to seek better strategic alignment and enhancing transparency on the board's climate change capabilities.

3 Stewardship reporting

Investors publish their stewardship reporting to summarise their engagement activities. These reports often re-emphasise investors' climate change expectations of companies.

AIGCC found that 30% of Asian investors communicate meaningful stewardship actions by publishing climate case studies, which detail engagement objectives, actions and outcomes in their stewardship reporting.[4] In some cases, investors highlight company-specific progress on climate change.

While these case studies can reinforce good company practices on transition, they can also communicate the transition challenges that span across sectors and markets. These enhance transparency and foster constructive discussion on resolving some of the ecosystem barriers for companies to advance in their transition efforts. supporting the management to seek better strategic alignment and enhancing transparency on the board's climate change capabilities.

Areas of investor engagement regarding climate risk management

Investors engagement with companies focuses on **(1) transparency on decarbonisation strategies and capital allocation**, as well as **(2) credible transition plans embedded in overall companies' strategies**, to ensure business competitiveness and preserve long-term shareholder value for clients and beneficiaries.

Details on the boards' disclosures on transition plans and decarbonisation plans are discussed in Chapter 6.

Decarbonisation strategy

Investors expect companies to **clearly identify time-bounded levers and quantify expected contribution of each levers** towards achieving emissions reduction targets. Better disclosures on **revenues and productions already generated from decarbonisation levers** enable investors to evaluate investee companies' current progress on decarbonisation.

For example, electric vehicle strategy has been emphasised as a priority engagement theme in investor engagements with Japanese automakers. Following continuous investor-corporate dialogues, in the latest benchmark assessment, all four Climate Action 100+ Japanese automotive companies disclosed **current revenue attributable to EVs and hybrid vehicles**, an initial step toward transparency on fleet electrification progress to account for revenue from climate solutions.[5] Nissan Motors and Toyota Motor have further provided forward-looking timelines for electrified fleet R&D, including solid-state batteries development advancements.[6]

Investors expect boards to incorporate sector-specific, science-based decarbonisation pathways when formulating their decarbonisation strategies. In this context, AIGCC has published investor expectations for Asian electric utilities,[7] which serve as a foundational reference for engagements conducted through the Asian Utilities Engagement Program.[8] These expectations outline the key actions and disclosures investors anticipate from utilities, including the adoption of credible transition plans, interim emissions-reduction targets aligned with global climate goals and transparent reporting on progress.

Capital allocation

Where companies have demonstrated a baseline level of progress in terms of ambition and overall strategy, investors typically proceed with more detailed questions for companies, e.g. request for greater transparency on capital allocated towards **(1) unabated carbon-intensive assets and products**, such as fossil fuels, and capital allocated **(2) climate solutions**, including that for mature technologies such as renewables and R&D for emerging technologies. This serves as an essential indicator for investors to evaluate a company's strategic alignment and tangible commitment toward achieving its stated emissions reduction targets.

Climate governance and policy engagement

To ensure effective implementation, investors also extend stewardship activities to critical enabling factors such as **climate governance and companies' engagement with climate policies and industry associations (sometimes referred as "climate-related lobbying")**.

Climate governance

To ensure board's accountability over climate-related issues and effective implementation of decarbonisation strategies, investors generally ask for evidence of **board oversight and named position responsible for climate change. Linking executive remuneration to climate performance** is increasingly expected as a key practice. This can incentivise senior management to prioritise and incorporate climate considerations in long-term business strategies.

For example, ENEOS disclosed linking 10% of share-based remuneration to GHG emissions reduction target after intense investor engagements.[9] To adhere to best practice for the boards to regularly assess if they have the necessary skills to integrate climate into business strategies, investors typically ask for details on **the process of which the board's climate competencies are evaluated and outcomes of these assessments**.

Guiding principles on director capabilities needed to oversee the climate transition are outlined in IGCC's Climate Capability Principles for Boards.[10]

Details on board's best practices of climate governance are discussed in Chapter 5.

Climate policy engagement

Investors expect to see disclosures of **companies' policy positions, direct and indirect (i.e., via trade associations) policy engagement, and how these activities are governed**. This information allows investors to assess the coherence of a company's approach to climate change and business model transition, as well as the overall quality of its climate governance. A misalignment between a company's public commitments and its policy engagement is viewed as posing material legal and reputational risks.

Directors can refer to the Global Standard on Responsible Climate Lobbying for a framework to assess if their lobbying activities are Paris-aligned.[11]

For example, Climate Action 100+ investors have prioritised dialogue with Nippon Steel on its climate transition strategy and transparency around climate policy engagement, with the aim of mitigating associated financial risks. Investors' asks are communicated through letter, periodic meetings and in-depth discussions in an investor-company roundtable.

At the company's June 2024 annual general meeting, a shareholder proposal—jointly filed by a European investor and an Australia-based civil society oraganisation calling for greater transparency on climate policy engagement—received around 27% support. Continuous engagement resulted in Nippon Steel publishing its first review of trade associations and announced an investment of JPY 868.7 billion to expand EAF steelmaking in 2025.[12]

Chapter 5

Board structure and composition for effective climate governance

Introduction

Globally, expectations on corporate boards to steer their companies' climate transition are growing but many appear to be struggling to do so. Instead of leading with assurance, these boards appear "to be led"—by management and external advisers—and are frequently reactive rather than proactive.

In a recent discussion, a non-executive director of a large Japanese company admitted that the board's agenda on climate change had been largely set by management, including the decision to establish a board-level sustainability committee, and noted that the board was still grappling with its precise role on climate oversight.

This chapter illustrates how companies outside Japan are building strong governance in three core areas to enable their boards to effectively discharge climate-related responsibilities.

It is drawn from desk-research as well as "off-the-record" discussions with board directors and business executives in different geographies.

Securing a formal mandate on climate action oversight

Board oversight of climate action is a global trend

To ensure climate action is prioritised and to signal its importance internally and externally, the board should be explicitly charged with its oversight.

According to the World Economic Forum's guiding principles on Effective Climate Governance on Corporate Boards, an explicit mandate is a critical component of effective board leadership on climate action.[1]

Globally, it is increasingly common for the boards of large companies to be formally charged to oversee climate action. According to a recent OECD survey, "**6,215 companies representing 70% of global market capitalisation indicated their boards of directors oversee climate-related issues.**"[2]

Degrees of specificity in board climate mandates

In practice, **companies formulate board mandates on climate action with different degrees of specificity**, as illustrated below:

Broad sustainability focus

At Canadian insurer Sun Life, the board charter specifies that the board is to "provide challenge, advice and guidance to senior management on… the enterprise approach to climate change" and to approve and oversee, inter alia, "the strategic plan and business, capital, investment and sustainability plans on an annual basis."[3]

Explicit climate change focus

Concurrent with its pledge to achieve net zero by 2050, Philippine conglomerate Ayala Corporation amended the board charter to explicitly task the board of directors with responsibility "for overseeing the proper monitoring and management of climate-related risks and opportunities and other sustainability-related concerns."[4]

Specific references to climate-related activities

At consumer goods giant Unilever, the Board Rules state that the board of directors is exclusively charged with the "endorsement or amendment of Unilever's Climate Transition Action Plan."[5]

Core categories of board climate oversight

While the specific activities that the board undertakes will vary by company and its industry, Willis Towers Watson, a consultancy firm, notes that **climate action oversight falls into three broad categories**:

Regulatory conformance

The board plays a critical role in ensuring that the company satisfies regulatory requirements in the geographies in which they operate. This includes holding management accountable for compliance and ensuring that climate disclosures are truthful and accurate (See detailed information of directors' fiduciary duties and regulatory requirements in Chapters 2 and 6).

Organisational performance

The board is also responsible for driving sustainable performance that balances short- and long-term value creation. In the climate context, this requires the board to advise and challenge management to articulate climate-related risks and opportunities, and to formulate a clear business case for climate action that is congruent with its fiduciary duty and the firm's purpose.

Sustainability and "future proofing"

Beyond the preceding areas, the board has a responsibility to drive management to develop a comprehensive plan to adapt and thrive in a low-carbon economy, and the board must thereafter exercise oversight over major investments, business model analyses, risk management, and cultural alignment to ensure successful transition plans (see also Chapter 6 for transition plans).

Establishing supporting structures at board & management levels

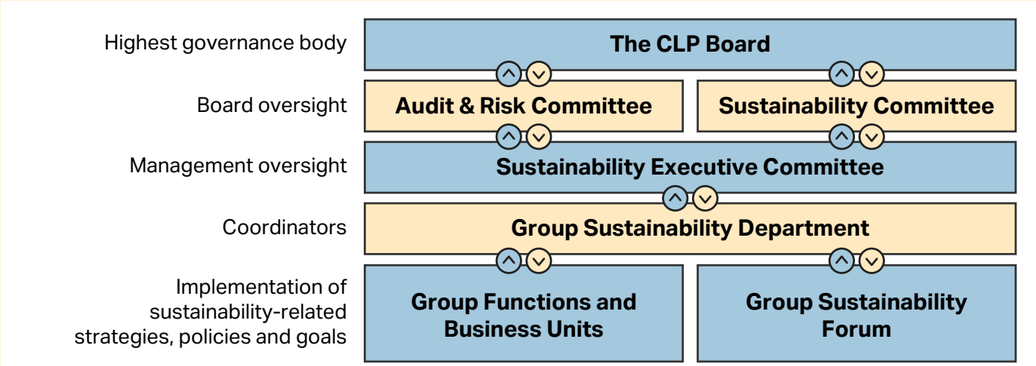
Customisation of board oversight configuration

Boards will not be able to fulfil all their climate-related duties on their own and will therefore need well-developed supporting structures at board and management levels to assist them.

Corporate boards across the globe adopt different structures to oversee sustainability matters and, notably, the most appropriate configuration for each company is likely to evolve over time to meet changing demands and requirements.

As there are different ways to distribute climate responsibilities among board committees, we provide two examples on how two international companies have established such structures:

#1: CLP's overall climate governance structure[6]



#2: Consumer goods company, Unilever, allocate to climate oversight three principal committees[7]

Corporate Responsibility Committee

Reviews and provides input on the management of current and emerging sustainability matters and is responsible for reviewing the Climate Transition Action Plan (CTAP), ensuring that Unilever remains current and reviewing progress towards meeting targets.

Audit Committee

Oversees non-financial disclosures, including progress reports against the CTAP. It also reviews the scope and results of any internal and external assurance activities obtained over climate-related disclosures.

Compensation Committee

Sets performance measures to deliver on sustainability commitments, including climate-focused targets.

Dedicated board-level sustainability committees

Meanwhile, other boards might create a new sustainability committee to bolster its climate action oversight.

For instance, following the publication of its 2050 carbon neutrality pledge, a major European steelmaker established a standalone board-level sustainability committee.

A senior executive shared that the company's net zero pledge contributed to the board's decision to restructure its oversight of climate action and noted that the new structure has brought "**a greater focus and longer discussions on climate change, net zero and other environmental matters.**"

Similarly, the chief sustainability officer of a Southeast Asian bank observed that the creation of a board-level sustainability committee allowed for "**a lot more focused discussions, a lot more time debating the really important issues.**"

In most countries, a small percentage of companies maintain a dedicated board-level sustainability committee.[8] In the US, 17% of S&P 500 companies have one while in Southeast Asia, a 2023 Malaysia-Singapore survey found a standalone board-level sustainability committee in 11% of large companies.[9] At the other end of the spectrum, 51% of FTSE 100 companies feature a sustainability or ESG committee.[10]

On the other hand, in Japan, ClientEarth has counted 23 JPX Prime 150 Index companies voluntarily establishing a sustainability committee at the board level.[11] Given that Japanese listed companies can choose a company type with statutory committees subject to the Companies Act, it is uncertain under the current law what the power dynamics of a voluntary sustainability committee at the board level are in relation to other statutory committees and whether decisions made by a voluntary sustainability committee have binding effects to the company. For this reason, we recommend that a board level sustainability committee should have an advisory role (rather than playing a decision-making role equivalent to the board). According to ClientEarth's review, 14 of the 23 JSX Prime 150 Index companies with a sustainability committee explicitly made it advisory.

Advantages of a standalone sustainability committee

Although different structures can be effective, our discussions with board members and executives reveal that a standalone sustainability committee offers three advantages:

Time for fuller and deeper discussions of sustainability matters, without the risk of these topics being squeezed out if oversight instead sits at the board of directors' level or in a different board committee.

Opportunity for board members to build expertise, which is essential because some sustainability matters —such as Scope 3 emissions measurement and transition pathways to net zero—are complicated and technical.

Sustained oversight provided by a standalone sustainability committee can be particularly helpful for monitoring climate transition plans, which require periodic updating to reflect technological advances, public policy changes, evolving industry conditions and other relevant factors.

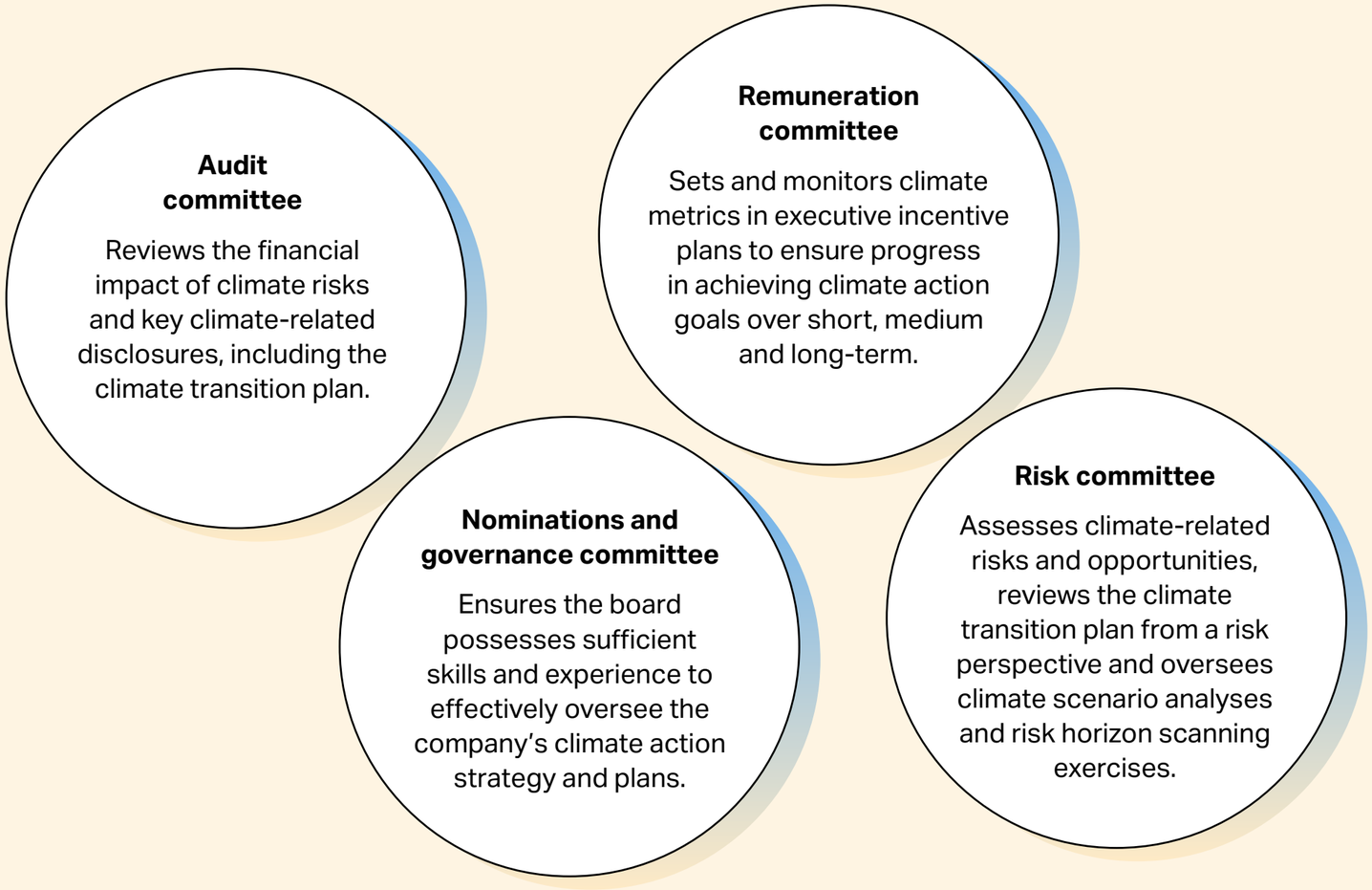
Avoiding siloed climate oversight

Where a board-level sustainability committee exists, National University of Singapore professor Mak Yuen Teen advises that **the board should "ensure that sustainability is not something that is simply tasked to a single board committee through a 'silo' approach**, rather than fully integrated into the work of the board and other board committees."[12]

Concerningly, in a recent survey, the Australian Institute of Company Directors found that "climate oversight often sits in a single sustainability committee with insufficient integration across audit, risk, remuneration and nomination committees."[13]

Climate oversight by board committees

As shown below, different board committees assume important climate oversight roles.



Management-level support structures for climate risks oversight

In addition to board-level committees, the board of directors will also need **management-level support structures, such as a management-led sustainability committee** and possibly other specialised bodies.

For example, the board-level sustainability committee of the European steel maker referenced above is supported by a management-level climate change committee, which provides advice on "the progress needed to maintain the company's chosen leadership position on climate change." At an Asian insurer, a management-level climate and net zero steering committee is charged with overseeing the fulfilment of the firm's net-zero pledge.

In Japan, management-level sustainability committees are widespread, with 85% of Nikkei 225 and TOPIX 100 companies having them.[14] 97% of these committees are chaired by the company's CEO or another executive, with 3% chaired by an external director of the board.

While management accountability for climate action ultimately rests with the CEO, **many companies have created the chief sustainability officer (CSO) position to oversee day-to-day sustainability-related activities**. The 2025 global Forbes survey of 1,100 executives found that 79% of companies have a CSO,[15] while in Japan, around 30 Nikkei 225 and TOPIX 100 companies have appointed a CSO or equivalent.[16]

In addition, the CFO has an increasingly critical role in realising a firm's climate goals. CFOs, for instance, can leverage "their expertise in financial strategy, risk, and capital management [to] help ensure that transition plans are financially grounded, operationally executable, and aligned with long-term organisational value."[17]

Lastly, at many companies, sustainability governance is built from management level upwards. For example, a large Southeast Asian bank created a group sustainability department in 2019, hired a group chief sustainability officer in 2020, and established a dedicated board-level sustainability committee in 2021. However, **given the urgency of climate change, board and management-level structures should be built in parallel**.

> "By leveraging their expertise in financial strategy, risk, and capital management, CFOs help ensure that transition plans are financially grounded, operationally executable, and aligned with long-term organisational value. Their engagement often enhances credibility with investors and stakeholders and supports successful plan execution."
>
> —AICD-ACSI, Governing for net zero, July 2025

Strengthening board competence to carry out climate mandate

Corporate initiatives to strengthen board competence

The board's ability to effectively discharge its climate action responsibilities depends critically on the competence of its members. As a French board chair puts it, "**[d]irectors and their boards become effective on climate change issues when they are comfortable with the topic. With knowledge built, you can debate and challenge the proposals in the room with much more strength.**"

While board members are not required to be climate experts, they must possess sufficient knowledge to comprehend fundamental and organisation-specific climate and related sustainability issues and their impact on the company's business and must engage meaningfully with management and others to steer the enterprise forward. This is also important from the directors' fiduciary duties point of view as discussed in Chapter 2.

In addition, while the board can draw upon expert advice, it needs to be able to evaluate the quality of advice rendered.

For most boards, there is a clear and urgent need for upskilling. A 2023 BCG global survey of nearly 900 directors found that **only 29%** of respondents felt knowledgeable enough to "**effectively challenge management on sustainability plans and ambitions and exercise oversight on their execution.**"[18]

Given this, the Investor Group on Climate Change calls on boards to organise regular training —rather than one-off briefings —on "topics including scenario development, regulatory changes, investor expectations, innovations and sector-relevant transition capabilities."[19]

To close existing competency gaps, many companies organise external and internal training sessions for board members. To enrich board discussions on tackling climate change, some companies arrange experiential activities to allow their leaders to "see things first-hand." Seeking to better inform discussions on whether and how to roll out EV fleets, the board and management of a Southeast Asian public transportation company went on a trip to China to visit EV manufacturers and see EV transportation networks in operation.

How one mining board strengthened its climate competence

Following a board evaluation exercise, a global mining company's board elevated climate change as an area of focus. Over the next two years, the board—at main board, sustainability committee, and dedicated two-day board strategy sessions—explored the long-term impact of climate change on the firm's overall strategy, reviewed decarbonisation pathways, explored new technologies to reduce the company's environmental impact, and met with subject-matter experts, who sought to expand individual directors' views and "challenge their thinking" on climate change.

Recruit sustainability experts as new board members

Not withstanding the provision of extensive training, **some boards may ultimately decide that enhancing its competence requires recruiting new members possessing deep or specialised sustainability knowledge and experience**.

At the European steel company mentioned above, an executive observed that the addition of a sustainability specialist to the board has "raised the intensity of discussion on sustainability matters up a level."

Beyond expanding directors' knowledge, enhancing their competence is equally about getting the board comfortable with experimentation, with making trade-off decisions, and with moving forward despite the unusually high degree of uncertainty involved in a climate transition.

As one European chair puts it, "it was a big cultural shift for the board and management team to accept that some parts of the climate action plan are unknown" but the chair exhorted boards to get used to it because "things will not necessarily be easier going forward."

By building robust governance mechanisms along the lines discussed in this chapter, Japanese boards can position themselves to lead their companies' climate transition with confidence and competence.

Chapter 6

Board of director's practical response to climate-related issues

Introduction

This chapter addresses how Japanese companies should integrate climate governance into daily operation. Specifically, it considers climate-related disclosures aligned with Japanese and international standards, strategies and transition plans for long-term value creation.

Given the rise of climate-related disclosure requirements globally and nationally, directors of Japanese companies are expected to diligently incorporate these requirements and provide specific explanations accordingly. By engaging the entire supply chain through transition plans, directors of companies contribute to enhancing corporate resilience from investors' demands and regulations.

Climate-related disclosures

Disclosure frameworks in Japan

1. Statutory disclosure framework

In January 2023, the Cabinet Office Ordinance on Disclosure of Corporate Information was amended, mandating the disclosure of sustainability-related information in securities reports and similar documents.[1] Specifically, it required disclosure to align with four principles: governance, strategy (including scenario analysis), risk management and metrics and targets.

Disclosure is largely materiality-based. Disclosure of governance and risk management have generally been required for all listed companies, while strategy and metrics/targets must be included if deemed material to investors' decisions.

The 2023 FIEA regime established a high-level, principles-based obligation, using the TCFD pillars as an organising structure rather than as a binding technical standard.

2. Technical disclosure standards

In March 2025, the SSBJ issued its first comprehensive **Sustainability Disclosure Standards** (the "SSBJ Standards"), designed to align with international frameworks (**ISSB's IFRS S1 & S2**). These include a "Climate-related Disclosures" standard focusing specifically on **climate-related financial information**.

In February 2026, the FSA decided that **SSBJ Standards will apply to sustainability disclosures in Annual Reports (Yu-Ho) under the FIEA** (details and application dates are explained in the following pages).[2]

3. Soft-law disclosure: Corporate Governance Code (CGC)

The CGC operates as a soft-law complement to the FIEA disclosure rules, particularly for Tokyo Stock Exchange Prime Market Companies. As of the date of writing, proposed revisions to the CGC are under consultation.[3]

Key features of the proposed revisions include:

- The governance of sustainability is strengthened, as boards are expected to integrate sustainability into strategy and risk management and oversee climate risks and opportunities. Sustainability is framed as core to corporate value.
- The revisions explicitly reference ISSB, which means the CGC has moved beyond TCFD-style encouragement and pointed toward a global baseline for disclosure.
- The revisions reinforce a division of roles between the CGC and SSBJ Standards, with CGC illustrating the governance and strategic oversight of sustainability and SSBJ Standards providing technical disclosure standards.

Structure of the SSBJ Standards

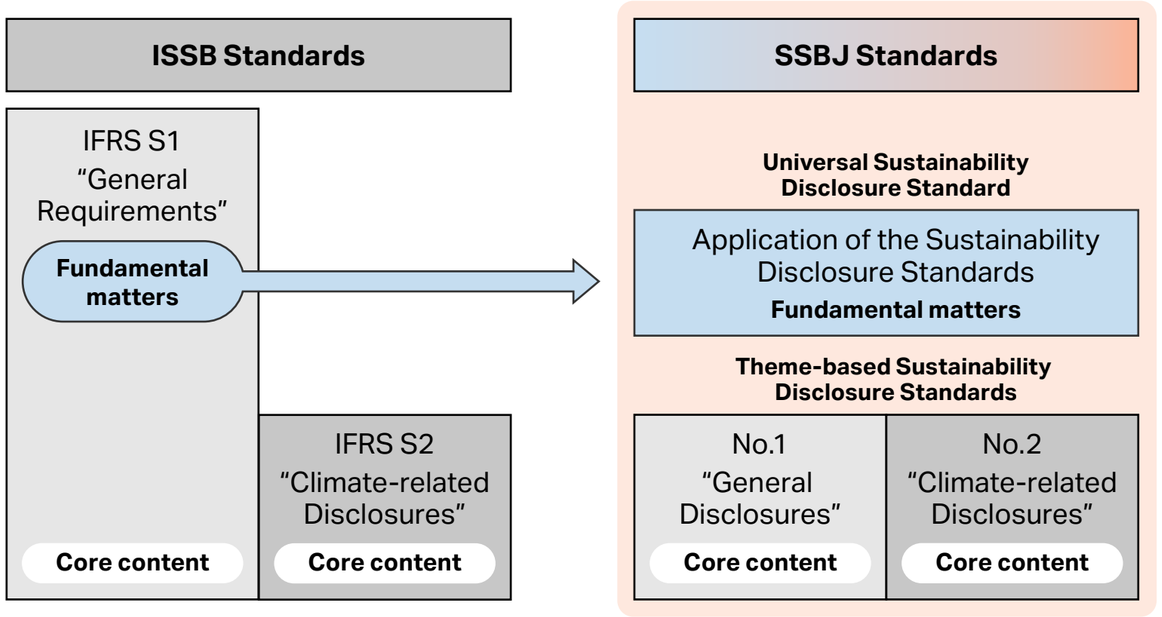
The SSBJ Standards and the ISSB Standards have a slightly different structure, but follow the same principles.

Rather than transposing the ISSB's IFRS S1& S2 verbatim, the SSBJ has re-classified and incorporated the sustainability disclosure requirements into the following framework (see more in the graph).[4]

SSBJ's **Universal Sustainability Disclosure Standard** explain the overall structure of Sustainability Disclosure Standards and basic rules underlying the Sustainability Disclosure Standards (similar to the IFRS S1 "General Requirements").

The SSBJ's **Theme-based Sustainability Disclosure Standards** are similar to the IFRS S2 "Climate-related Disclosure" and are divided in:

- No. 1 "General Disclosures"
- No. 2 "Climate-related Disclosures"



SSBJ, 'SSBJ issues Inaugural Sustainability Disclosure Standards to be applied in Japan' (March 5, 2025)[6]
(Note - these Sustainability Disclosure Standards are revised on 13 March 2026.)

Note: In March 2026, the SSBJ amended three sustainability disclosure standards related to GHG emissions disclosures. These March amendments aim to correspond to the ISSB's issuance of amendments to IFRS S2 related to GHG emissions disclosures in December 2025. **This showcases the SSBJ's functional alignment with the ISSB Standards.**[5]

Key features of the SSBJ Standards

Key features of the SSBJ standard include (1) international alignment with the ISSB Standards and (2) detailed reporting requirements.

1. International alignment

Japan's climate disclosure evolution is being driven partly by global frameworks.

Globally, disclosure regulations have been institutionally strengthened in many capital markets as a result of customers' and relevant stakeholders' increasing demand.

The key examples are the IFRS S1 and IFRS S2 published by the ISSB in June 2023. The S1 and S2 integrate the recommendations of TCFD and establish a global baseline for sustainability disclosure in capital markets.

2. Detailed reporting requirements

Under the SSBJ Disclosure Standards, companies are required to disclose procedures of "sustainability governance" and "risk management" (as already required in existing mandatory sustainability disclosure rules) and, **more importantly, they are required to disclose and explain the "strategy" and "metrics" applicable to their "sustainability governance" and "risk management".**[7]

Examples of specific reporting elements include:

- **"financial impact of climate-related risks and opportunities"** (see Article 14 Item 3 and Articles 21 through 27 of the Climate-related Disclosure Standard No. 2)
- **GHG emissions data (Scope 1, 2 and 3)** (Articles 47 through 76, see in particular Article 70 of the Climate-related Disclosure Standard No. 2)
- **"incorporation of climate-related assessment criteria into executive renumeration"** (Article 84 of the Climate-related Disclosure Standard No. 2)

In other words, the SSBJ Standards are both a disclosure framework as well as soft law that board shall refer to, to ensure that climate risks and opportunities are appropriately connected to companies' financial statements.

The following slides explain this critical principle in detail.

Connecting climate risks and opportunities to the financial statements

The "strategy" disclosure section of the SSBJ Standards contain **the most important provisions of the SSBJ Standards, as they directly connect climate risks and opportunities to companies' financial statements** (see Article 14 (specifically, Item 3) and Articles 21 through 27).

- Companies need to disclose the "financial impact of the climate-related risks and opportunities that reasonably likely affect a company's outlook" (Article 14 Item 3).
- Companies must disclose the **quantitative and qualitative** information of current and expected financial impacts, including how climate-related risks and opportunities would impact a company's financial position, financial performance and cash flows (See Articles 21 through 27).[8]
- Although Articles 25 through 27 provide some exemptions for providing quantitative information for some companies, Article 27 Item 3 specifically states that the exempted companies must still disclose "**quantitative** information on the **combined** financial impact of climate-related risks or opportunities which are exempted and the other climate-related risks or opportunities."[9]

Therefore, these provisions have in effect **quantified climate-related risks**, which is unprecedented among other existing disclosure frameworks adopted in Japan. This also corresponds to the spirit of the IFRS/ISSB as an accounting disclosure framework.

Prioritising direct, primary, most timely and verified emissions data collected by the company over data sourced from third parties

Companies must disclose quantitative metrics such as GHG emissions (Scope 1, 2 and 3) (Articles 47 through 76).

Notably, these provisions could in practice change managerial and industrial behaviours.

Particularly, companies must use direct, primary, most timely and verified data for their Scope 3 emissions disclosures over estimated, secondary, not timely and unverified data (Article 70).[10]

This means that companies must prioritise data collected directly by themselves regarding their own operations, value chain and GHG emissions; they cannot simply rely on data sourced from third parties.

The requirements can generate a ripple effect on the disclosing companies' value chain.

For instance, when an upstream oil & gas company needs to solicit direct, primary, most timely and verified Scope 3 emissions data from its midstream and downstream partners, the process forces the midstream and downstream companies to follow the same practice.

This effectively creates internal performance management obligations on all companies involved in the value chain when handling Scope 3 emissions data.

Expectation to link executive remuneration to climate-related performance of the company

Companies must disclose the method of incorporating the climate-related performance metrics and the proportion of executive remuneration recognised during the reporting period when **climate-related performance metrics** are incorporated into executive remuneration (Article 87).[11]

Climate activism has called for "climate-linked remuneration" in shareholder proposals over the last five years. Although Article 84 does not apply to companies where climate-related performance metrics are not incorporated into executive remuneration, the fact that "climate-linked remuneration" requirement is spelled out under the SSBJ Standards indicates that such a disclosure is **expected**.

This further deepens the SSBJ Standards as soft law, where boards should ensure the best practice in compliance with the Standards.

Roll out of the SSBJ standard

Who must comply?

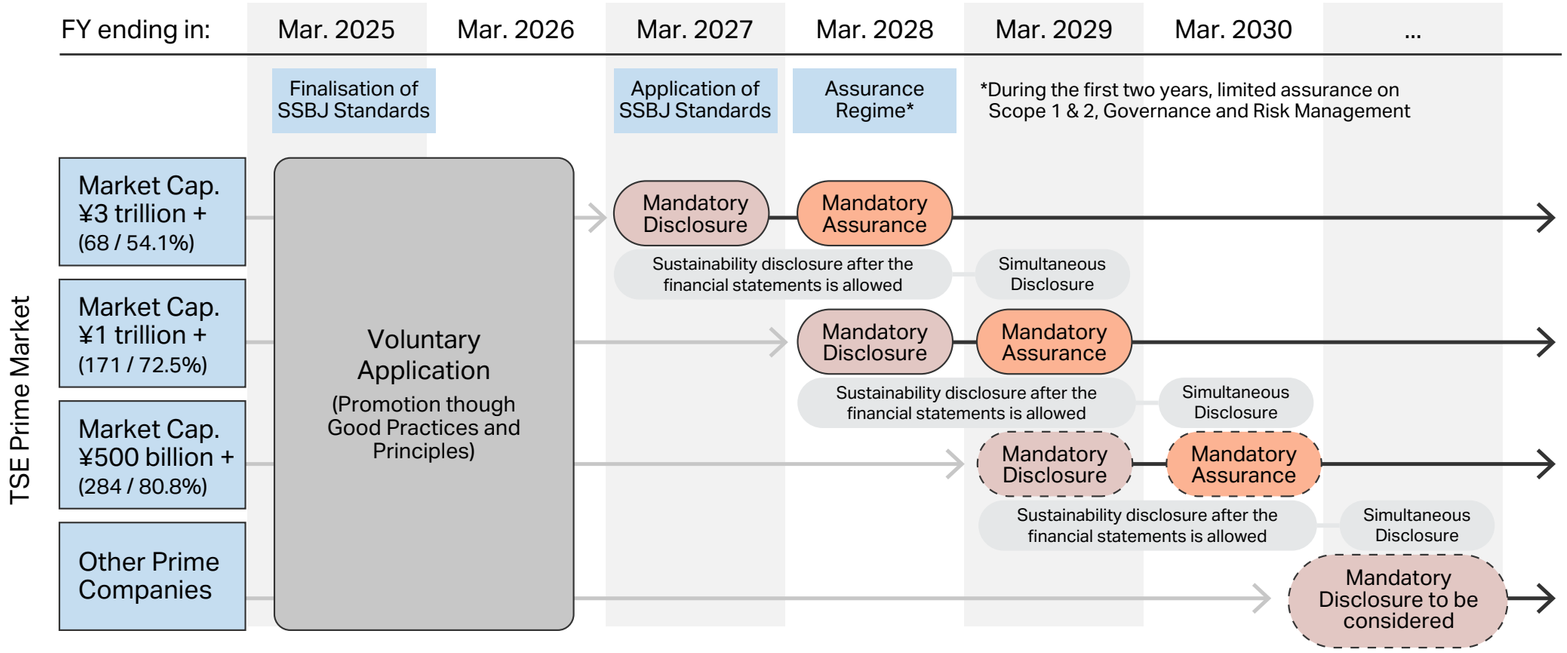
The SSBJ standards were designed primarily with Tokyo Stock Exchange Prime Market companies in mind.

Although the anticipated full thresholds in law have not been finalised, a recent amendment in February 2026 has promulgated the application of the SSBJ Standards for companies with two different thresholds.[12]

First, the SSBJ Standards will apply for companies with an average market capitalisation of **3 trillion yen or more**, to annual reports of and after 31 March 2027.

Second, for companies of **1 trillion yen or more and below 3 trillion yen**, the SSBJ Standards will apply to annual reports of and after 31 March 2028.

Even though it is not enforced as law yet, it is expected that the SSBJ Standards will apply, for companies with an average market capitalisation of 500 billion yen or more and less than 1 trillion yen, to annual reports of and after 31 March 2029 (see details in the phased timeline below).



The phased implementation timeline (FSA, 'Roadmap on Sustainability Disclosure and Assurance' (July 17, 2025)[13]

Formulation and implementation of transition plans for long-term value creation

What are transition plans?

Transition plans serve as a roadmap showing how a company intends to achieve both value creation and decarbonisation, providing useful information for investors and financial institutions in their decision-making.

The TCFD Consortium's Transition Planning Guidebook describes a transition plan as "information useful for decision-making that explicitly shows how a company will balance the transition to a low-carbon/decarbonised society with value creation."[14]

Transition plans encompass the management of climate-related risks (i.e. physical risks and transition risks) (see more details on climate-related risks in Chapter 1).

The importance of transition plans

Transition plans are not only tools for responding to regulations or investor demands, but they also contribute to enhancing corporate value:

- such plans can incorporate anticipated business risks from carbon pricing implementation or stricter regulations in advance; and
- in some cases, they enable the identification of investment opportunities in decarbonisation technologies or new markets.

Transition plans supported by scientific evidence facilitate access to financing, such as transition finance and Green Transition Bonds. They also help withstand scrutiny from financial institutions and investors.

As climate-related demands from business partners and consumers intensify, engaging the entire supply chain through transition plans contributes to enhancing corporate resilience.

Integrating the transition plan in the business strategy: a four step process

1 Establishing internal processes and board involvement

Transition plans must be aligned with mid-term management plans and business strategies. It is crucial that companies establish an internal framework centred on top management, involving collaboration between finance, business operations and sustainability departments.

According to the "Basic Guidelines on Climate Transition Finance" (2025 Edition) issued by FSA/METI/MoE, transition strategies should ideally be linked to mid-term management plans and similar documents.[15]

2 Understanding roles and conducting oversight of boards of directors

Boards are responsible for overseeing the identification of climate-related risks and opportunities, the status of stakeholder engagement and the consistency and feasibility of transition plans.

As discussed in Chapter 3, directors of Large Companies etc. have an obligation to establish internal control systems and may be liable for breach of duty of care if they fail to obtain expert opinions or conduct due diligence.

3 Utilising external guidance

Guidance from bodies such as the TCFD Consortium, ISSB, METI and UK Transition Plan Taskforce (TPT) provides useful reference materials that organise the components of transition plans and disclosure methods.

However, merely following these external guidelines is not sufficient. Companies must conduct independent analyses based on their business characteristics, risk profiles and business models.

4 Understanding stakeholder engagement and disclosure

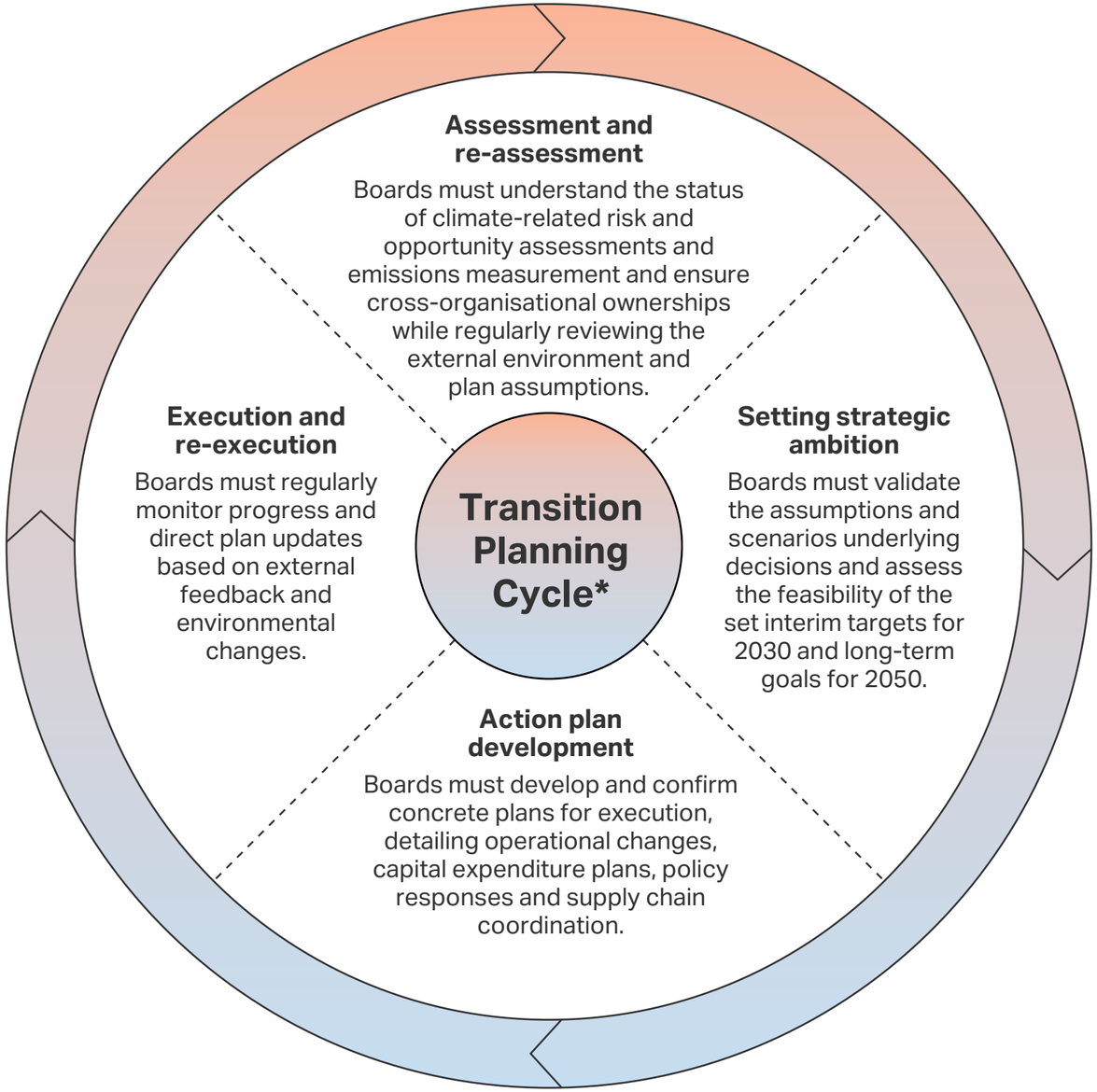
When formulating transition plans, companies should understand the expectations of key stakeholders—such as investors, business partners, employees and local communities—and reflect them in the plans.

Companies should develop transition plans transparently, with progress and review details being published in a timely manner. This enhances corporate credibility and can reduce transaction costs.

A suggested transition planning cycle[16]

Transition plans are not completed upon formulation. Continuous improvements through execution and monitoring are essential.

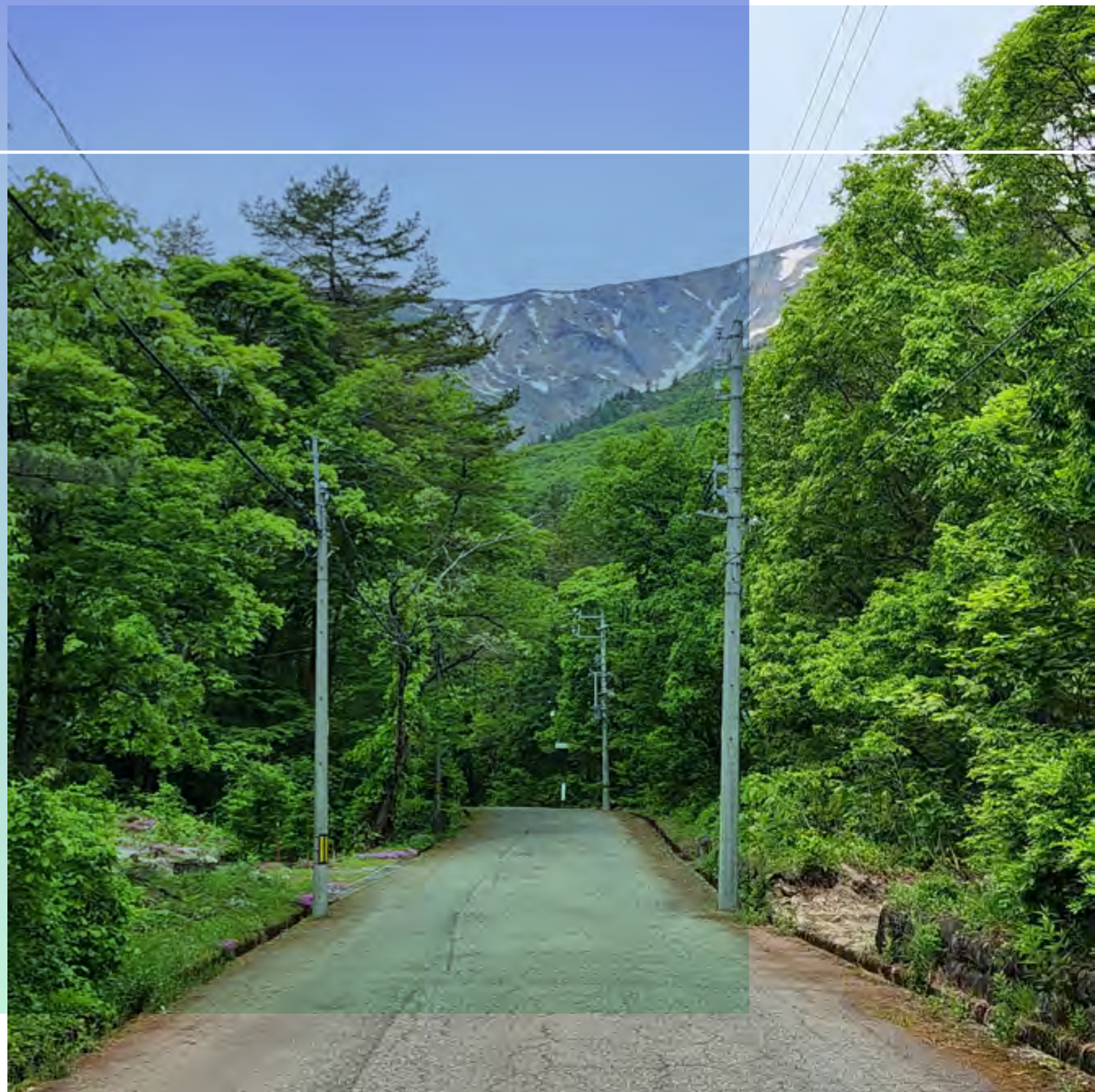
Throughout this cycle, **boards should confirm that the transition plan is integrated into the company's overall strategies, risk managements and financial plannings, making adjustments to the management strategies** as necessary.



*The cycle is presented by the UK Transition Plan Taskforce, serving as a reference for companies to dynamically update their plans.

Chapter 7

Summary and suggested questions for directors



Key takeaways for directors' best practices to mitigate climate change risks

Extract from Commonwealth Climate and Law Initiative (CCLI)'s "Directors' Duties Regarding Climate Change in Japan"[1]

To prevent directors from breaching their directors' fiduciary duties in the context of climate change (see details in Chapter 2), they must accomplish their day-to-day management with extensive care. Examples of best practices are suggested in the diagram, which will help directors meet their obligations.

1. Integrate climate risk into strategy and risk management

Ensure climate-related issues are fully integrated into strategic planning and oversight of risk management, including financial and operational risk management, and that the board understands the relevant risks and opportunities for the company in the short, medium and long term.

2. Embed climate considerations in board governance and oversight

Ensure climate-related risks and opportunities are integrated into board governance, strategy and oversight responsibilities and are receiving timely consideration and focus, as well as giving climate-related issues sufficient time on the board agenda.

3. Assign clear management accountability for climate risk

Ensure that responsibility for climate risk identification, management and evaluation is assigned to a clearly-identified management team that reports directly to the CEO and the board, and ensure that the board has effective oversight of that management.

4. Develop, implement and monitor a long-term climate transition plan

Ensure that a process is on the board agenda to develop and continuously enhance a climate transition roadmap, plan or strategy to 2050, with transparent net-zero or reduction targets and clear interim targets for 2030 and 2040, and that progress is reported annually to the board.

5. Ensure regulatory-compliant climate disclosure

Ensure that material climate-related issues are disclosed in accordance with legislative and regulatory requirements, and consult expert advisors where necessary.

6. Translate long-term strategy into committee-level decisions

Delegate to the appropriate committee(s) of the board the task of translating the company's long-term strategy into a structured decision-making process for each aspect that is relevant to each committee's terms of reference.

7. Maintain ongoing board education on climate and emerging risks

Ensure that the board receives regular information and training to remain up to date on regulatory, policy and market developments relating to climate, sustainability, biodiversity and emerging risks and opportunities.

Questions that every director should ask

To ensure that the board is able to fulfill its leadership responsibilities in the context of climate change, we suggest that it (regularly) asks itself the following questions.

1.1. Does the board fully understand climate risks and impacts?

Does the board possess a strong understanding of climate physical and transition risks and opportunities that the company faces – in Japan and other geographies where it maintains a significant presence – and the potential impact of these risks and opportunities on the company's overall strategy, financial condition, product offerings, operations, reputation, liability exposure and other significant aspects of the business?

1.2. Does the board ensure rigorous evaluation of climate opportunities?

With respect to pursuing climate-related business opportunities, does the board ensure that management undertakes a thorough and rigorous assessment that includes consideration of the risks of carbon lock-in, transition-washing and other adverse impacts?

1.3. Is the board systematically monitoring regulatory developments?

Has the board established a process to be regularly informed of climate-related policy, legal and regulatory developments, particularly those that would increase or expand required actions by the corporate sector?

→ Chapter 1: Understanding climate risks and opportunities

2.1. Does the board fully understand directors' legal duties in the climate context?

Does the board have a comprehensive understanding of directors' fiduciary duties and the business judgement rule as formulated in law and interpreted by courts in Japan, including their application in the context of climate change?

2.2. Is the board applying best practices to manage legal and fiduciary risk?

Does the board follow best practices to mitigate the risk of breaching directors' fiduciary duties in the context of climate change?

→ Chapter 2: Legal duties of corporate directors

Questions that every director should ask

3.1. Is the internal control system sufficiently robust?

Has the board established an internal control system to ensure the proper conduct of business in all corporate activities, including financial reporting, information disclosure, risk management and compliance? Does the internal control system integrate climate governance, particularly the establishment of a framework to enable the board to quantitatively and qualitatively assesses climate-related risks and opportunities?

→ Chapter 3: Internal controls system

4.1. Does the board stay informed of evolving investors' expectations?

Does the board keep abreast of evolving climate-related expectations of significant shareholders and shareholder groups, the tools and frameworks they use to assess the climate-related performance of investee companies, and the means through which they communicate their views of the company's climate-related performance?

4.2. Does the board ensure that it has appropriate processes to engage with its shareholders?

Does the board ensure that the company maintains a well-structured program for conducting meaningful engagements with significant shareholders and shareholder groups, including making available suitable individuals at board and management levels for meetings with shareholders and allocating adequate resources to respond to shareholders in a timely manner?

→ Chapter 4: Investor expectations

Questions that every director should ask

5.1. Does the board have a formal, clear mandate?

Does the board have a formal mandate on climate action that signals its importance internally and externally? Does the mandate clearly inform the board on its key areas of focus?

5.2. Does the board have adequate supporting bodies?

Does the board have adequate supporting structures at board and management levels to enable it to efficiently and effectively fulfil its climate action responsibilities? Is the allocation of responsibilities among these bodies clear and coherent?

5.3. What are the training opportunities for board members?

Has the board established a comprehensive training program to equip board members with the competency to effectively discharge the board's climate action responsibilities? Does the program include "experiential" activities in addition to "classroom" learning? Has the board assessed whether a sustainability specialist should be appointed to the board and/or a board committee to close any remaining competency gaps?

→ Chapter 5: Best practices of climate governance

6.1 Is the board overseeing a credible transition plan?

Does the board actively oversee the development and implementation of an ambitious and comprehensive climate transition plan that is based on the latest science, meets regulatory requirements, aligned with established guidelines and linked to the company' mid-term management plans and similar documents?

6.2. Does the board have a sufficiently granular oversight of the sustainability disclosures?

Does the board ensure that the company's climate-related disclosures are aligned with Japanese and international standards? In particular, has the board put in place mechanisms to ensure the quality of governance disclosure, appropriateness of material assessments, validity of scenario analysis, quality of sustainability data and appropriateness of internal controls?

→ Chapter 6: Practical response to climate-related issues

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