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السادة المحترمين
تحية طيبة وبعد،

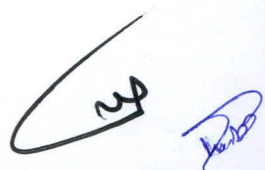
في إطار الجهود التي تبذلها بورصة عمان لتعزيز تنافسية سوق رأس المال الأردني والشركات المدرجة، ومن خلال تطبيق أحدث وأفضل المعايير والممارسات العالمية، بما في ذلك المعايير المتعلقة بالاستدامة والإفصاح والشفافية، وفي ضوء ازدياد أهمية إفصاح الشركات عن المعلومات المتعلقة بمدى تأثرها بالتغير المناخي والفرص والتحديات المرتبطة بذلك، فقد عملت البورصة بالتعاون مع مؤسسة التمويل الدولية IFC، على إعداد النسخة الأولى من دليل الإفصاح عن المعلومات المتعلقة بالمناخ.

وانطلاقاً من مبدأ الشفافية وتعزيزاً لمبدأ المشاركة والتشاور مع كافة الشركاء والجهات ذات العلاقة بالسوق المالي وأهمية آرائهم وملاحظاتهم، فإنني أرفق لاطلاعتكم مسودة دليل الإفصاح عن المعلومات المتعلقة بالمناخ المشار إليه أعلاه. راجياً التكرم بالاطلاع وتزويدنا بأي ملاحظات عبر البريد الإلكتروني info@ase.com.jo وذلك خلال مدة أقصاها أربعة عشر يوماً من تاريخه تمهيداً لإقراره بشكله النهائي، علماً أنه سيتم ترجمة مسودة الدليل إلى اللغة العربية لاحقاً.

وتفضلوا بقبول فائق الاحترام،،،



مازن نجيب الزهيري
المدير التنفيذي



Climate-Related Disclosure Guidance

Draft

Date: May, 2024

Amman, Jordan

Amman Stock Exchange

International Finance Corporation

EY Jordan

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Forward (By ASE CEO, Mr. Mazen Wathaifi)

DRAFT

Executive Summary

In 2015, the world united under the 'Paris Agreement¹,' committed to significantly reducing global greenhouse gas emissions and limiting the global temperature increase to 1.5°C (1). In light of this direction, the Hashemite Kingdom of Jordan has made several national climate commitments toward transitioning to a sustainable, low-carbon economy (refer to general context), necessitating a pressing need for a dramatic improvement in climate-related issues from all organizations in the kingdom.

The Amman Stock Exchange (ASE) has taken a leading role in supporting corporations and companies in Jordan through providing guidance, setting reporting standards, and providing capacity building and training. The launch of this guidance builds on those efforts by encouraging listed companies to elevate climate risk management and enhance their climate-related reporting. This involves incorporating elements related to governance, risk, strategy, and metrics that have a significant impact due to climate-related issues into business models into their business models.

This document provides guidance for all companies publicly listed on the ASE to report their climate-related performance annually. The guidance is designed to help companies effectively disclose their climate change strategies, management of related risks and opportunities, and overall approach for integrating climate issues into their strategies and structures. This will ensure the disclosure of high-quality, consistent data essential to the relevant stakeholders, including investors, clients, partners, suppliers, employees, and the overall community.

How to use this guidance:

To help companies integrate and communicate climate-related information in alignment with global best practices, ISSB, and TCFD, the following three-stage process is proposed²:

1. Define the context for reporting on climate change-related issues

Relevant Document Section: **Chapter 1: Climate Disclosure: Strategic Outlook**

General Context: Explore the broader environmental and regulatory landscape to recognize the significance of detailed climate reporting.

Strategic Importance of Reporting on Climate Change: Use this section to build a strong business case for climate disclosure. Identify industry-specific value drivers and how they align with investor expectations and regulatory requirements.

2. Prepare for reporting on climate change-related issues.

Relevant Document Section: **Chapter 2. Preparation**

¹ Paris Agreement

² SSE Model Guidance on Climate-Related Disclosures

Ensuring Good Governance: Review the company's governance structures to ensure they support climate-related disclosure and management.

Implement a Risk Management Process: Establish or refine processes to identify, assess, and manage climate-related risks.

Assess Materiality and Socio-Economic Impacts: Determine the relevance of different climate issues to your business and stakeholders.

Sector-Specific Considerations: Take into account any industry-specific guidelines and how they affect reporting.

Review Reporting Principles: Ensure your reporting aligns with established principles for clarity, consistency, and comparability.

3. Report on climate change-related issues

Relevant Document Section: **Chapter 3. Reporting**

Governance, Strategy, and Risk Management Disclosures: Report on governance structures and strategic approaches to managing climate risks in accordance with guidance requirements.

Metrics & KPIs: Detail the specific metrics and KPIs used to measure and manage climate impacts and performance.

4. Review, assess, and build capabilities.

Relevant Document Section: **Chapter 4. Tools and Enablers**

Utilize tools such as checklists and tools to evaluate your company's reporting completeness, disclosure maturity, and reporting quality.

Implement the **Quality Assessment Checklist** to ensure high standards are maintained throughout the reporting process.

Use **Illustrative Reporting Templates** and **role descriptions** provided to streamline data collection and disclosure.

Chapter 1: Climate Disclosure: Strategic Outlook

1.1 Background and Context

The Hashemite Kingdom of Jordan is significantly impacted by both physical and transition risks associated with climate change, which are manifesting as rising temperatures, decreasing precipitation, and more frequent and severe droughts. Since the 1960s, Jordan has experienced a notable increase in temperatures and a reduction in rainfall, exacerbating its position as one of the world's most water-scarce countries³. This environmental shift is intensifying challenges across its real economy and financial stability, with climate vulnerability rankings worsening from 63 in 2015 to 73 in 2022⁴, according to the Notre Dame Global Adaptation Initiative (ND-GAIN) index.

Future climate projections for Jordan suggest an increase in temperature by up to 2.9°C by 2050, alongside more severe droughts and more erratic rainfall patterns⁵. These changes pose significant risks to Jordan's development, particularly affecting natural resources, the economy, and society.

Jordan's reliance on imported fossil fuels and inefficiencies in its transport sector⁶, which is rapidly approaching the energy sector as the country's top GHG emitter, highlights the critical need for sustainable practices. In response, Jordan has actively engaged in international climate agreements and has developed national strategies, such as the National Green Growth Plan⁷ and sector-specific action plans, to enhance its climate resilience and economic modernization. Notably, Jordan's commitment to reducing GHG emissions was increased to 31 percent by 2030⁸, emphasizing its proactive stance in integrating climate action into national policy frameworks.

³ [FINAL - Green Finance Strategy - English Version - 10 Nov 2023.pdf \(cbj.gov.jo\)](#)

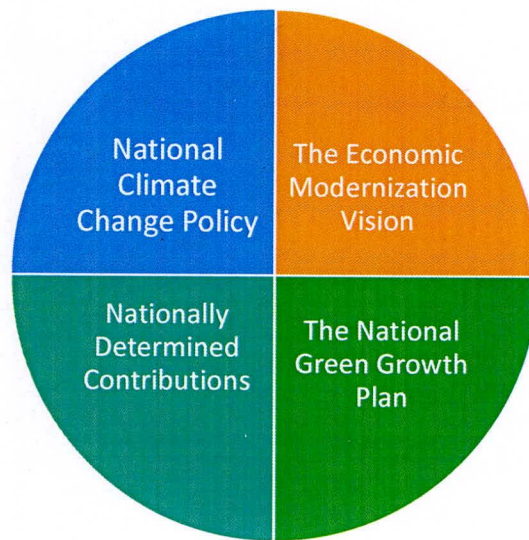
⁴ The ND-GAIN Index

⁵ [FINAL - Green Finance Strategy - English Version - 10 Nov 2023.pdf \(cbj.gov.jo\)](#)

⁶ World Bank Group, Jordan CCDR

⁷ MoE, Jordan National Green Growth Plan

⁸ [FINAL - Green Finance Strategy - English Version - 10 Nov 2023.pdf \(cbj.gov.jo\)](#)



Jordan is proactively aligning its climate strategies with both global initiatives and domestic priorities. This alignment is illustrated through various national policies and frameworks, which guide Jordan's approach to mitigating and adapting to climate change impacts.

A pivotal example of this commitment is the engagement of the Amman Stock Exchange (ASE) with the UN Sustainable Stock Exchange (SSE) initiative since March 2016. This participation kick-started ASE's sustainability journey. In 2018, ASE bolstered its commitment by launching two sustainability brochures and establishing mandatory Environmental, Social, and Governance (ESG) guidelines for ASE20-listed companies⁹. The momentum continued into 2021 with ASE conducting training sessions and a roundtable discussion on sustainability, followed by updates to the guidelines in 2022¹⁰. These actions reflect ASE's ongoing efforts to promote sustainable business practices among its listed companies¹¹.

⁹ [Guidance on Sustainability Reporting 2018.pdf \(exchange.io\)](#)

¹⁰ [Guidance on Sustainability Reporting.pdf \(ase.com.io\)](#)

¹¹ SSE, Amman Stock Exchange Profile

1.2 The Strategic Nature of Climate Disclosures

Here are five contexts to consider why climate change data and disclosure are strategically important for organizations, indicating a need for accelerated action¹²:

Investor Influence

Investors and asset managers are increasingly directing their investments toward companies that demonstrate robust climate change strategies and transparency in their disclosures. A lack of comprehensive climate-related disclosure can lead investors to perceive a company as unprepared for the climate transition, potentially diverting investments to companies with more transparent and proactive climate policies. Moreover, there is growing coordination among investors to assess companies' climate performance and engage with them on climate action, emphasizing the importance of clear and actionable climate disclosures.

Navigating the Evolving Regulatory Landscape

Regulatory bodies, including stock exchanges and central banks, have intensified their focus on sustainability issues.¹³ For instance, the Principles for Responsible Investment (PRI) identified over 730 policy changes in the world's 50 largest economies, designed to integrate long-term value drivers such as environmental, social, and governance (ESG) factors into investment decisions. This trend is accelerating, as evidenced by the 2020 Task Force on Climate-related Financial Disclosures (TCFD) status report, which highlights a shift towards mandating TCFD disclosures¹⁴ through legislative and regulatory frameworks.

Legal and Reputational Considerations

The legal and reputational risks associated with climate change are increasing. As of May 2023, there were 2,550 climate change-related legal cases filed globally¹⁵, continuing a trend of rising litigation in this area. Beyond litigation, reputational risks can adversely affect sales through consumer boycotts and community protests, impact investor relations, and influence the opinions of potential future employees. Furthermore, shareholder resolutions on climate-related issues are becoming more frequent, exerting additional pressure on companies to adjust their business strategies and operations significantly.

¹² SSE, Model Guidance for Stock Exchanges on Climate Disclosures

¹³ [Taking stock: Sustainable finance policy engagement and policy influence \(d8g8t13e9vf2o.cloudfront.net\)](https://www.pri.org/documents/taking-stock-sustainable-finance-policy-engagement-and-policy-influence-d8g8t13e9vf2o.cloudfront.net)

¹⁴ [IFRS Technical Readiness Working Group, Climate-related Disclosures Prototype, 2021.](#)

¹⁵ [Climate change litigation update | Global law firm | Norton Rose Fulbright](#)

Leveraging Climate Opportunities

Organizations can capitalize on various opportunities by implementing resource efficiencies, adopting low-emission energy sources, innovating new products and services, exploring new markets, and enhancing supply chain resilience. Such initiatives not only mitigate risks but can also deliver substantial financial returns, often outweighing the costs associated with climate change adaptation and mitigation.

Financing in a Green Economy

The financial sector is increasingly providing avenues to support climate-related initiatives, such as the burgeoning green bonds market. In 2023, the issuance of Climate Bonds surpassed the USD 300 billion mark¹⁶, demonstrating the strong growth and investor interest in green finance. This dynamic environment underscores the importance for organizations to engage in clear and relevant climate disclosures that align with the shifting dynamics of global financial markets. Green or sustainability finance offers several benefits to companies, including potentially lower interest rates on loans and bonds, which can reduce the cost of borrowing.

The Jordan Green Finance Strategy details the financial sector's commitment to sustainability, with green financing accounting for 3.1% of bank loans, 1.2% of microfinance loans, and 1% of non-life insurance premiums¹⁷. The strategy aims to increase the total green finance volume by 30% over the next five years, reflecting the expected growth in sustainable financial services and achieving environmental goals.

¹⁶ [Climate Bonds Certification surges past USD300bn milestone in 2023: driving green finance forward | Climate Bonds Initiative](#)

¹⁷ [FINAL - Green Finance Strategy - English Version - 10 Nov 2023.pdf \(cbj.gov.jo\)](#)

Chapter 2: Preparation

2.1 Ensuring Good Governance

Effective governance is crucial for integrating climate-related concerns into an organization's strategic framework. Ensuring these issues receive proper attention involves structuring governance across various organizational levels, from the board of directors to management operations. This section details essential governance components that support effective climate action.

Board Committees

The board should have a specific committee responsible for climate strategy oversight or incorporate these duties into existing committees, such as the Risk or Audit Committees. This ensures regular high-level reviews of climate-related strategies and that strategic decisions take into account climate-related risks.

Management Committees

Management committees play a key role in implementing the strategies approved by the board. These committees should ensure that climate considerations are woven into daily management practices and decision-making processes, aligning operations with the organization's climate objectives.

Charters and Policies

Organizations need to revise existing or create new charters and policies that explicitly include climate-related goals. These documents should define the roles and responsibilities related to climate oversight and action for both the board and management committees, thereby standardizing climate governance across the organization.

Procedures for Wider Adoption

It is vital to establish procedures that embed climate considerations into all organizational layers. This includes guidelines for integrating climate risks and opportunities into project planning, procurement, and business strategies, ensuring comprehensive organizational alignment with climate goals.

Strategic Oversight and Board Engagement in Climate Governance

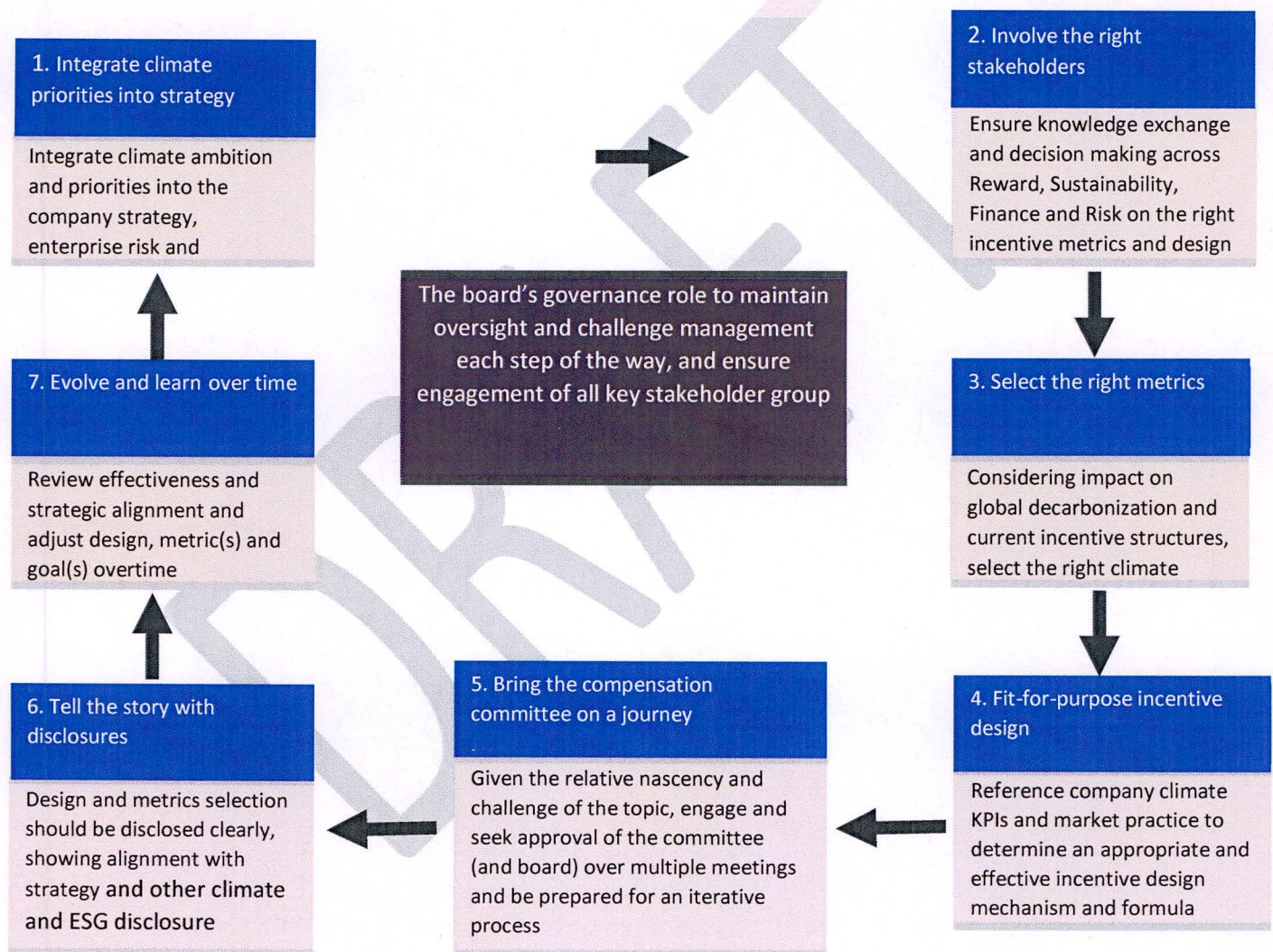
Effective climate governance requires that climate-related issues be consistently included in board agendas to ensure strategic focus. Providing board members with ongoing training on sector-specific climate issues is essential for maintaining effective oversight. Additionally, having at least one board member with experience in managing climate-related risks enhances the board's capacity for informed decision-making. This structured approach supports robust climate governance, facilitating strategic discussions and decisions.

Link to Compensation and Incentive Plans

Connecting executive compensation and incentives to climate performance is effective in prioritizing climate issues at the highest management levels. These incentives should be clearly articulated, measurable, and directly connected to achieving specific, short term and long-term climate objectives.

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Step-by-step guide to embedding climate in executive compensation



¹⁸ [Executive Compensation Guidebook for Climate Transition - WTW \(wtwco.com\)](https://www.wtwco.com)

Lower impact to organizations,
easier to implement

Design spectrum to incorporate climate metrics into executive compensation:

	Incentive Design Description	Pros
Underpin	Include threshold or basic level of climate performance required for some or all of the payout under other metrics to occur – Short term incentives or long term incentives	Appropriate when a company is first introducing climate metrics
Individual performance rating modifier	Include a climate modifier under the individual elements of the short term incentive or long term incentive to modify the payout up/down by a certain percentage	Can be tailored to an individual's role and improve line-of-sight
Company performance modifier	Include a climate modifier to overall short term incentive or long term incentive formula that modifies the payout up/down by a certain percentage for all participants	A low-risk approach to introducing a standalone, quantitative climate metric
Weighted metric in short term incentives	Include a quantitative climate metric (e.g. carbon emissions) into the short term incentive payout formula	Provides a direct measures that reinforces importance of climate Easily communicated
Weighted metric in Long term incentives	Include a quantitative climate metric (e.g. carbon emissions) into the long term incentive payout formula	Appropriate for metrics that need longer time horizons to produce measurable results like Climate
Incentive funding formula	Incentive pool demand from financial measure adjusted for carbon charge (e.g. carbon cost added to cost of capital in economic profit calculation)	Directly links climate objectives with financial performance for the entire organisation
Standalone incentive plan	Introduce a separate climate incentive plan (e.g., hyper-long term aligned with sustainability strategy, or plain with timeless emissions goals)	Encourages participants to take a longer-time view of performance

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Greater impact to organizations,
more disruptive

¹⁹ [Executive Compensation Guidebook for Climate Transition - WTW \(wtwco.com\)](#)

2.2 Managing Climate Risk

What is Climate Risk?

Climate risk describes the potential for climate change to create adverse outcomes. This might include consequences to lives, public health, ecosystems, buildings, infrastructures, and the economy. For organizations, climate risk can be described as exposure to climate-related impacts that may have fiscal repercussions or decrease revenues. These impacts can vary from short-term disruptions to larger-scale events that can wipe out an asset's entire value or shutdown operations. Larger-scale events can still create financial impacts for communities for years after an event.

There are two types of climate risks²⁰:

Transition Risks are related to the transition to a lower-carbon economy. They involve the organization's ability to manage and adapt to internal and external changes in reducing greenhouse gas emissions and transitioning to renewable energy. This entails addressing policy and legal frameworks, technological advancements, and market shifts to meet climate change mitigation and adaptation requirements.

Examples of transition risks that may affect Jordan:

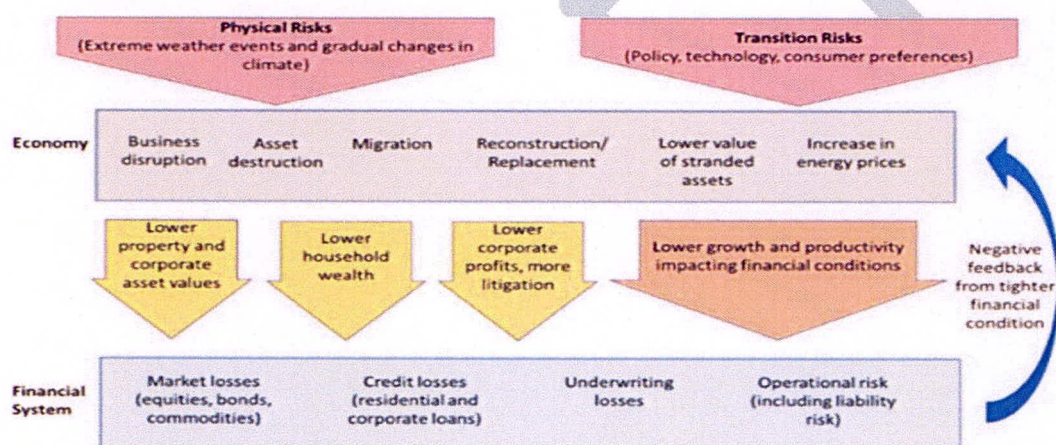
- Price Volatility - Fluctuating fossil fuel prices.
- Environmental Standards - Stricter regulations increasing operational costs.
- Consumer Preferences - Shift towards sustainable alternatives.
- Technological Advances - Emergence of cleaner technologies.
- Credit Risk - Increased risk of loan defaults.
- Liquidity Risk - Challenges in meeting short-term financial obligations.
- Market Risk - Decline in the market value of affected securities.

Physical Risks are related to the physical impacts of climate change. They are categorized in two forms – acute and chronic. Acute physical risks refer to those that are event-driven, including extreme weather events such as hurricanes, or heatwaves. These are often short-lived but can be devastatingly impactful. Chronic physical risks refer to longer-term shifts in climate patterns – for example, changing sea levels or a steady rise in average temperatures. Over the longer term, these can depreciate the value of physical assets, and leave them potentially uninsurable.

²⁰ [Climate Risks and Opportunities Defined | US EPA](#)

Examples of physical risks that may affect Jordan:

- Drought - Persistent dry conditions exacerbating water scarcity and affecting agriculture, industry, and daily life.
- Floods - Sudden and extreme weather events causing damage to infrastructure, homes, and businesses.
- Chronic Water Shortage - A long-term deficit in available water resources, critically impacting all sectors and leading to severe economic and social challenges.
- Extreme Weather Events - Greater frequency and severity of weather events, including severe droughts, affecting the economy and financial stability.
- Rising Temperatures - Elevated temperatures can strain water resources, agricultural productivity, and energy consumption, further stressing economic sectors and financial systems.



Effect of physical and climate risks on the economy and financial systems²¹

Climate Risk Scenarios

Scenario analysis is a well-established method for developing strategic plans that are more flexible or robust to a range of plausible future states.

Companies may use either existing publicly available scenarios such as the Intergovernmental Panel on Climate Change (IPCC), International Energy Agency (IEA)²², Network for Greening the Financial System (NGFS)²³ or other published scenarios or develop their own scenarios. Publicly available scenarios are typically developed by governmental or international research bodies. In addition, entities could consider scenarios that may be more widely used by certain industries as using them may lead to greater comparability.

²¹ Harvard University

²² [Global Energy and Climate Model Documentation 2023 \(iea.blob.core.windows.net\)](https://www.iea.blob.core.windows.net/global-energy-and-climate-model-documentation-2023)

²³ [Generic \(ngfs.net\)](https://www.ngfs.net/)

Examples of Climate Scenarios:

Network for Greening the Financial System (NGFS)

The NGFS scenarios explore the impacts of climate change and climate policy with the aim of providing a common reference framework.

The NGFS scenarios explore a set of seven climate scenarios that can be grouped into four categories (quadrants): orderly transition, disorderly transition, hot house world, and too little, too late. Each scenario is characterized by its overall level of physical and transition risk, which are driven by the level of policy ambition, policy timing, coordination, and technology levers.

- **Orderly: Low Demand** explores the global efforts needed to be able to limit global warming to below 1.5°C by 2050 in an orderly fashion, aligned with the Paris Agreement, driven by lower energy demands. Given the policy delays, this orderly scenario shows that achieving these targets will require even greater ambition in future compared with the previously published 'orderly transition' scenarios.
Net Zero 2050 limits global warming to 1.5°C through stringent climate policies and innovation, reaching global net zero CO2 emissions around 2050. Some jurisdictions such as the US, EU, UK, Canada, Australia, and Japan reach net zero for all GHGs.
Below 2°C Below 2°C gradually increases the stringency of climate policies, giving a 67% chance of limiting global warming to below 2°C. Additionally, countries with net zero targets reach them partially (80% of the target).
- **Disorderly: Delayed Transition** assumes annual emissions do not decrease until 2030. Strong policies are needed to limit warming to below 2°C. Negative emissions are limited.
- **Hot House World: Nationally Determined Contributions (NDCs)** includes all pledged targets even if not yet backed up by implemented effective policies.
Current Policies assumes that only currently implemented policies are preserved, leading to high physical risks.
- **Too Little, too late:** Fragmented World assumes a delayed and divergent climate policy response among countries globally, leading to high physical and transition risks. Countries without zero targets follow current policies, while other countries achieve them only partially (80% of the target).

Examples of Climate Scenarios:

The International Energy Agency (IEA) Global Energy & Climate Model (GEC)

The GEC model developed by the International Energy Agency (IEA) is a comprehensive tool used to analyze long-term energy and climate scenarios. This model integrates various aspects of the energy system, including energy demand, supply, and emissions, along with economic factors and technological developments.

The IEA's World Energy Outlook, Energy Technology Perspectives and their related reports explore different aspects of three scenarios, all of which are fully updated to include the latest energy market and cost data.

Table 1.1 ► Definitions and objectives of the GEC Model 2023 scenarios

	Net Zero Emissions by 2050 Scenario (NZE Scenario)	Announced Pledges Scenario (APS)	Stated Policies Scenario (STEPS)
Definitions	A scenario which sets out a pathway for the global energy sector to achieve net zero CO ₂ emissions by 2050. It does not rely on emissions reductions from outside the energy sector to achieve its goals. Universal access to electricity and clean cooking are achieved by 2030. The scenario was fully updated in 2023.	A scenario which assumes that all climate commitments made by governments and industries around the world by the end of August 2023, including Nationally Determined Contributions (NDCs) and longer-term net zero targets, as well as targets for access to electricity and clean cooking, will be met in full and on time.	A scenario which reflects current policy settings based on a sector-by-sector and country-by-country assessment of the energy-related policies that were in place by the end of August 2023, as well as those that are under development. The scenario also takes into account currently planned manufacturing capacities for clean energy technologies.
Objectives	To show what is needed across the main sectors by various actors, and by when, for the world to achieve net zero energy-related and industrial process CO ₂ emissions by 2050 while meeting other energy-related sustainable development goals such as universal energy access.	To show how close current pledges get the world to the target of limiting global warming to 1.5 °C. The differences between the APS and the NZE Scenario highlight the "ambition gap" that needs to be closed to achieve the goals of the Paris Agreement adopted in 2015. It also shows the gap between current targets and achieving universal energy access.	To provide a benchmark to assess the potential achievements (and limitations) of recent developments in energy and climate policy. The differences between the STEPS and the APS highlight the "implementation gap" that needs to be closed for countries to achieve their announced decarbonisation targets.

Implementing a Climate Risk Management Process²⁴

Step 1: Define goals of risk management in the organization (Objectives and scope)

- a) Establish objectives of exercise: Assess financial firm's risks due to physical and transition factors.
- b) Identify material physical and transition risk drivers: Define the appropriate time horizon for analysis. While many organizations conduct operational and financial planning over a 1-2-year timeframe and strategic and capital planning over a 2-5-year timeframe, climate-related risks may have implications over a longer period. Typical time horizons are categorized as 'Short-term' (0-3 years), 'Medium-term' (3-10 years), and 'Long-term' (10+ years).

The absence of comprehensive strategies to manage climate-related risks exposes organizations to potential adverse impacts on operational efficiency, financial stability, and long-term viability. Moreover, the lack of transparent risk management information hinders investors' ability to accurately assess an organization's exposure to climate risks.

- c) Identify target audience/key stakeholders including banks, insurers, investors, suppliers, standard setters, customers, the public, government, asset managers, and other relevant parties.

Step 2: Understand the possible future scenario of climate change

Develop an understanding of how climate change could potentially alter operational and strategic frameworks within the organization.

1. Determine the scope of climate risks covered (transition risks, physical risks, or both) and assess their materiality based on financial impact, regulatory compliance, reputational effects, operational disruptions, strategic alignment, and stakeholder concerns.
2. Select number of scenarios, Identify level of granularity and time intervals of the assessment
3. Establish assumptions with regards to stress testing, for example static balance sheet assumption vs dynamic balance sheet.

Static Balance Sheet: Assumes the balance sheet composition remains unchanged over the testing horizon. This approach is simpler to implement but less realistic.

Dynamic Balance Sheet: Assumes changes in the balance sheet composition and an evolving business model over time. This method is more realistic but more complex to model.

4. Identify discount rates particularly when using long-time horizons and dynamic balance sheet assumptions

²⁴ [Climate risks: scenario analysis – Executive Summary \(bis.org\)](#)

Step 3: Understand the severity of potential impacts of climate change

1. Assess the financial impact on company revenues, profitability, product margin, etc.
2. Assess economic impacts on key variables (e.g. unemployment, inflation, productivity)
3. Assess financial impacts arising from corporate and household exposures
4. Select exposure and potential loss or damage metrics depending on relevance, objectives, data availability and materiality

Step 4: Using and communicating results

- a) Identify target audience for the climate risk management disclosures, such as internal management, regulators, investors, or the public, and decide how the results will be communicated to each group to meet their specific informational needs.
- b) Describe methodologies, main scenarios, main assumptions, key sensitivities, and limitations of results
- c) Use results to improve risk awareness, and risk management practices or foster further research
- d) Consider results in supervisory practices (eg improve the firm's strategy, enhancing risk management) and identify the impact on the central bank's investments

2.3 Setting Net Zero Targets

The "net zero transition" aims to balance greenhouse gas emissions by minimizing emissions and offsetting the rest. There are various initiatives that entities could take to reduce their GHG emissions and achieve Net Zero targets including:

- Develop a comprehensive transition plan encompassing energy efficiency upgrades, renewable energy adoption, and sustainable supply chains. Set clear targets like reducing emissions by a specific percentage by 2025 and reaching net zero by 2050. Facilitate these goals with technology improvements, financial incentives, and strategic partnerships, and include sustainability training for employees.
- Implement incentive plans to engage stakeholders
- Integrate decarbonization into the core value proposition, aligning it with financial value
- Adopt energy efficiency technologies and energy transition sources from fossil fuels to renewable energy, carbon offsetting, capture and storage, and planting trees
- Adopt emissions reduction and target-setting frameworks such as Science Based Targets Initiative (SBTi)

Setting Science-Based Targets

The Science Based Targets initiative (SBTi)²⁵ developed the first global science-based standard for companies to set net-zero targets. Methods endorsed by the SBTi are instructive frameworks that may be used by companies to set emissions reduction targets consistent with the best available climate science. These methods are constructed from three main elements: a greenhouse gas budget, a set of emission scenarios, and an allocation approach.

There are currently two open-source, target-setting methods used by the SBTi designed to assess corporate emission reduction targets:

- The Absolute Contraction Approach (ACA) is a one-size-fits-all method that ensures that companies setting targets deliver absolute emissions reductions in line with global decarbonization pathways.
- The Sectoral Decarbonization Approach (SDA) is an alternative method that allows carbon-intensity metrics and targets to be derived from global mitigation pathways for some of the most carbon-intensive activities. Sector-specific guidance and methods are currently available for many sectors.

To reach a state of net-zero at the corporate level, companies must deeply reduce emissions and counterbalance the impact of any emissions that remain.

The role of carbon credits in achieving net-zero targets

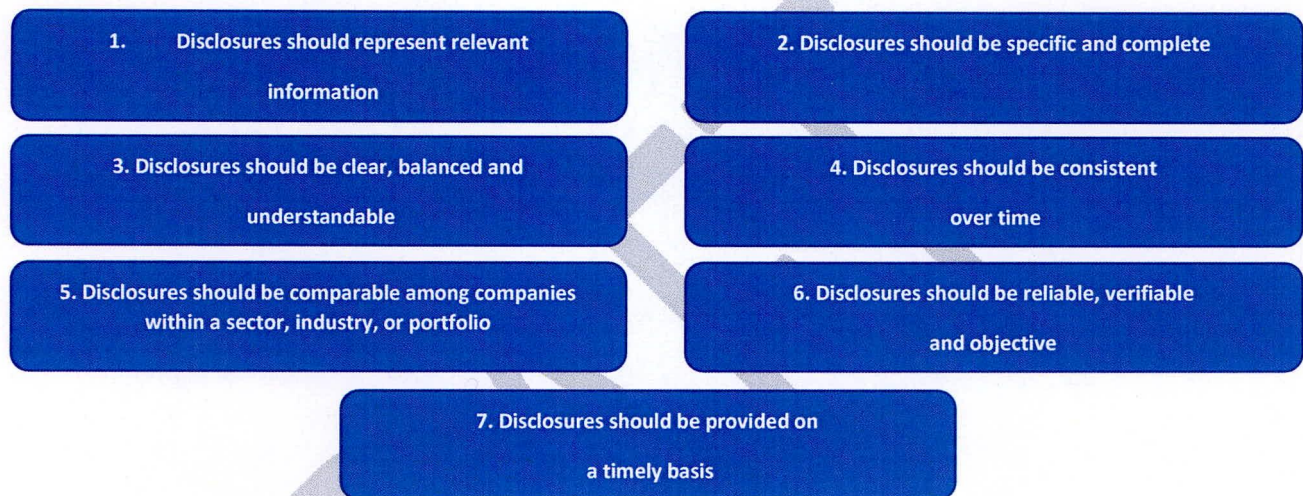
Carbon credits are certificates permitting the emission of one metric ton of carbon dioxide or its equivalent. They are a vital element of emissions trading schemes aimed at combating climate change. Typically issued by governmental or international bodies, they're earned through projects reducing greenhouse gas emissions like renewable energy or reforestation. These projects are verified by independent auditors, and credits are awarded accordingly. Credits can then be traded on carbon markets, enabling entities to offset excess emissions or generate revenue. This market-based approach incentivizes emissions reductions, fostering sustainability and flexibility in achieving environmental goals.

Offsetting excess emission refers to the method by which entities compensate for their greenhouse gas emissions by purchasing carbon credits. Each credit represents a reduction of one metric ton of carbon dioxide or its equivalent through sustainable projects like renewable energy developments or reforestation. By buying these credits, organizations can effectively neutralize their emissions, aligning their activities with broader environmental objectives without reducing their emissions directly at the source.

²⁵ [Ambitious corporate climate action - Science Based Targets](#)

2.4 Reporting Principles

In order to ensure consistency of reporting that maintains global standards and achieve the dissemination of climate-related information in a comparable, unequivocal, and measurable way, organizations should incorporate the following 7 principles developed by the TCFD.

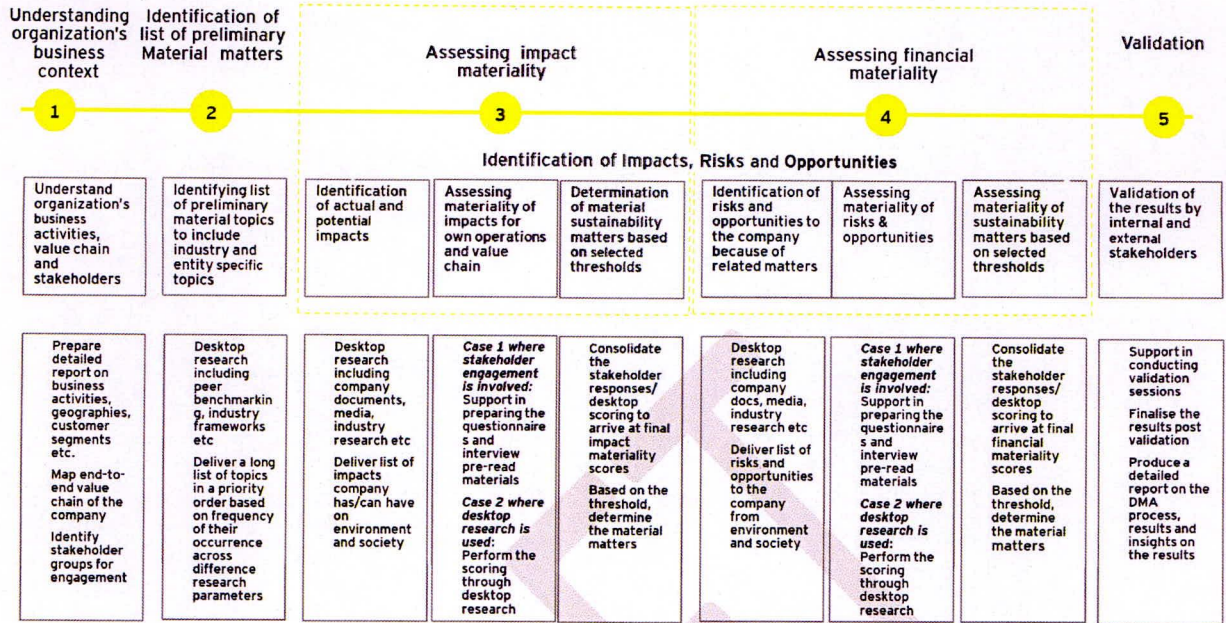


2.5 Identifying Material Topics

Conducting a materiality assessment ensures alignment with organizational goals by pinpointing climate-related risks and opportunities impacting enterprise value, as well as broader environmental and societal consequences. It's essential for establishing objectives, targets, and programs within an ESG management framework. Organizations should conduct a materiality assessment to enhance reporting and evaluate which factors are material.

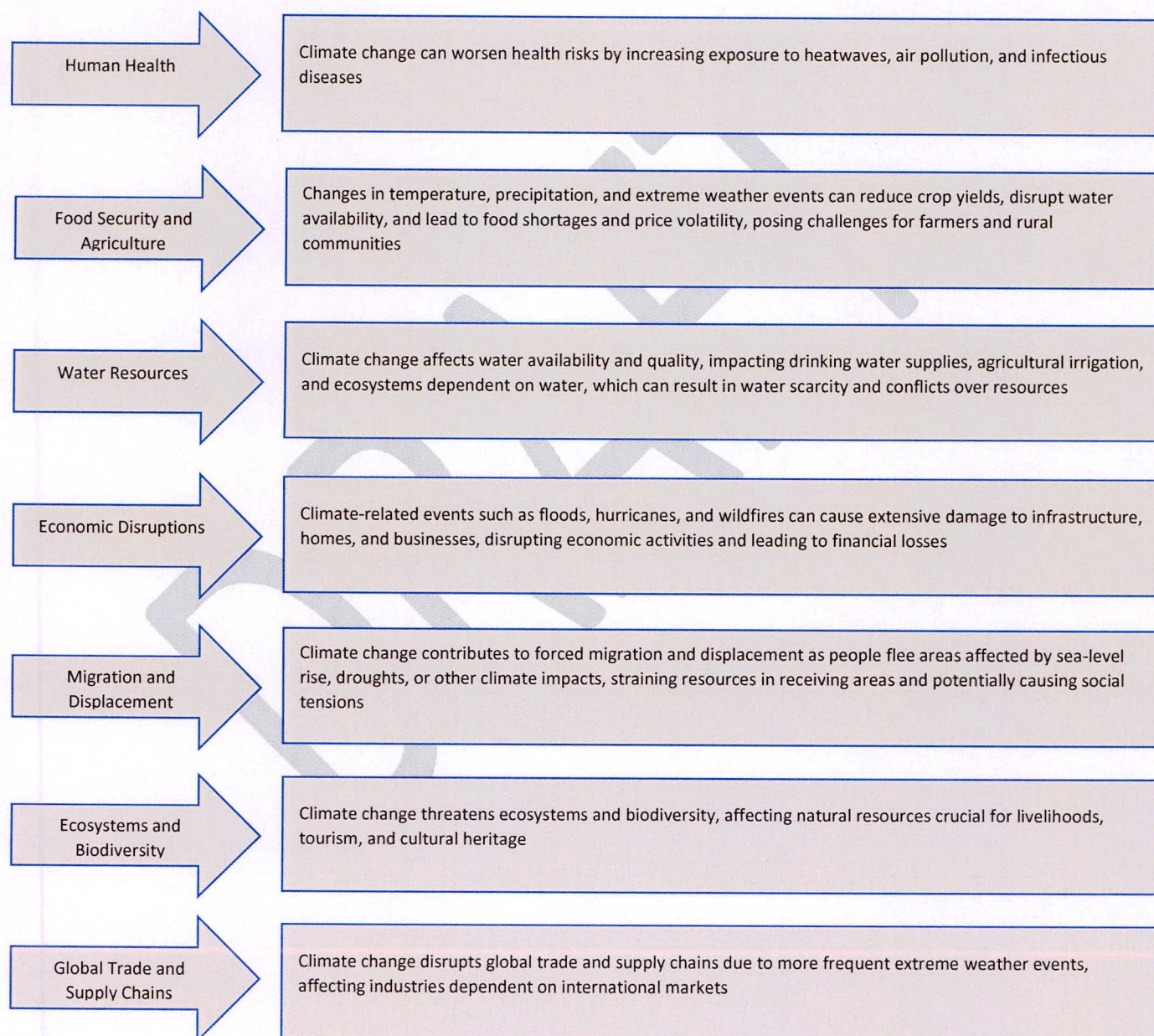
5-stage process to deliver the Double Materiality Assessment²⁶

²⁶ EY's 5 Stage Double Materiality Assessment



2.6 Socio-Economic Impact of Climate Change

A vital aspect uncovered through a materiality assessment, requiring attention and consideration is the socio-economic impact. The socio-economic impact of climate change encompasses its effects on human societies, economies, and communities. These impacts are diverse and far-reaching, influencing various aspects of people's lives and livelihoods. Key socio-economic impacts of climate change include:



Chapter 3: Reporting

3.1 Governance Disclosures

The objective of climate-related financial disclosures on governance is to enable users of general-purpose financial reports to understand the governance processes, controls, and procedures an entity uses to monitor, manage, and oversee climate-related risks and opportunities.

To attain this objective, companies are recommended to provide information on the following 13 disclosures²⁷:

1. Identification of the governance body or individual responsible for climate-related risks and opportunities oversight.
2. Disclosure of how responsibilities for climate-related risks and opportunities are reflected in the governance body's or individual's terms of reference, mandates, role descriptions, and other related policies.
3. Description of the processes to determine if the governance body or individual has the necessary skills and competencies to oversee climate-related strategies.
4. Frequency and method of how the governance body or individual is informed about climate-related risks and opportunities.
5. Explanation of how climate-related risks and opportunities are considered by the governance body or individual in strategic oversight, major transactions, and risk management policies.
6. Processes for the governance body or individual overseeing the setting of climate-related targets.
7. Monitoring of progress towards climate-related targets by the governance body or individual.
8. Integration of performance metrics related to climate targets into remuneration policies.
9. Role of management in governance processes, controls, and procedures to monitor and manage climate-related risks and opportunities.
10. Delegation of climate-related governance roles to specific management-level positions or committees.
11. Oversight mechanisms for management-level positions or committees delegated with climate-related responsibilities.
12. Use of controls and procedures by management to support the oversight of climate-related risks and opportunities.
13. Integration of management's climate-related controls and procedures with other internal functions.

²⁷ [2021-TCFD-Implementing_Guidance.pdf \(bbhuh.io\)](https://www.bbhuh.io/2021-TCFD-Implementing-Guidance.pdf) & ISSB, IFRS S2, Climate Related Disclosures

3.2 Strategy Disclosures

Climate-related issues may affect an organization's businesses, strategy, and financial planning over the short, medium, and long term. Such information is used to inform expectations about the future performance of an organization.

To attain this objective, companies are recommended to provide information on the following 10 disclosures²⁸:

1. Disclosure of how the entity has responded to and plans to respond to climate-related risks and opportunities in its strategy and decision-making.
2. Disclosure of plans to achieve any climate-related targets set by the entity.
3. Disclosure of plans to achieve any targets required by law or regulation.
4. Disclosure of current and anticipated changes to the business model, including resource allocation, to address climate-related risks and opportunities.
5. Disclosure of current and anticipated direct mitigation and adaptation efforts.
6. Disclosure of current and anticipated indirect mitigation and adaptation efforts.
7. Disclosure of any climate-related transition plan, including key assumptions and dependencies.
8. Disclosure of plans to achieve any climate-related targets, including greenhouse gas emissions targets.
9. Disclosure of how the entity is resourcing and plans to resource, the activities related to climate strategies.
10. Disclosure of quantitative and qualitative information about the progress of plans disclosed in previous reporting periods.

3.3 Risk Management Disclosures

The objective of climate-related financial disclosures on risk management is to enable users of general-purpose financial reports to understand an entity's processes to identify, assess, prioritize, and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the entity's overall risk management process.

To attain this objective, companies are recommended to provide information on the following 10 disclosures²⁹:

1. Disclosure of processes and related policies for identifying, assessing, prioritizing, and monitoring climate-related risks.

²⁸ [2021-TCFD-Implementing_Guidance.pdf \(bbhub.io\)](#) & ISSB, IFRS S2, Climate Related Disclosures

²⁹ [2021-TCFD-Implementing_Guidance.pdf \(bbhub.io\)](#) & ISSB, IFRS S2, Climate Related Disclosures

2. Details about the inputs and parameters used in risk management processes, including data sources and scope of operations.
3. Information on the use of climate-related scenario analysis for risk identification.
4. Description of how the nature, likelihood, and magnitude of climate-related risks are assessed.
5. Disclosure on how climate-related risks are prioritized relative to other risks.
6. Information on the monitoring practices for climate-related risks.
7. Details on any changes to the risk management processes compared to the previous reporting period.
8. Disclosure of processes used to identify, assess, prioritize, and monitor climate-related opportunities.
9. Information on the use of scenario analysis to inform the identification of climate-related opportunities.
10. Description of how the management of climate-related risks and opportunities is integrated into the overall risk management strategy.

DRAFT

3.4 Metrics & Targets

The goal of providing metrics and targets in climate-related financial reporting is to give users of general financial statements a clear picture of a company's standing concerning climate-related risks and opportunities. This includes insight into how well the company is doing in meeting its own climate-related goals and any legally or regulatorily mandated benchmarks³⁰.

Disclosure	Process Guidance
Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	<ul style="list-style-type: none"> Organizations should disclose key metrics used to assess and manage climate-related risks and opportunities. Organizations are encouraged to include metrics related to climate risks associated with water, energy, land use, and waste management where applicable³¹. When climate-related issues are material, organizations should explain whether and how performance metrics are integrated into remuneration policies. Organizations should disclose internal carbon prices (if available) and metrics highlighting climate-related opportunities, such as revenue from low-carbon products and services, where relevant. Metrics should include historical data to facilitate trend analysis. Organizations may also consider offering forward-looking metrics aligned with the cross-industry climate-related categories reflecting their business or strategic planning timeframes. Additionally, organizations should explain the methodologies employed to calculate or estimate climate-related metrics if not explicitly stated.
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	<ul style="list-style-type: none"> Organizations should outline their key climate-related targets, such as GHG emissions, water usage, and energy usage, aligning with cross-industry climate-related categories, where applicable, and reflecting anticipated regulatory requirements, market constraints, or other objectives. These goals may also include efficiency or financial targets, tolerance for financial losses, reductions in GHG emissions across product life cycles, or revenue targets for low-carbon products and services. When describing targets, organizations should address: <ul style="list-style-type: none"> whether the target is absolute or intensity-based Time frames over which the target applies Base year from which progress is measured Key performance indicators used to assess progress against targets <p>Organizations disclosing medium-term or long-term targets should also share interim targets either in aggregate or by business line, if available.</p> <p>Organizations should explain the methodologies used to calculate these targets and measures if not explicitly stated.</p>
Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	<ul style="list-style-type: none"> Organizations should outline their key climate-related targets, such as GHG emissions, water usage, and energy usage, aligning with cross-industry climate-related categories, where applicable, and reflecting anticipated regulatory requirements, market constraints, or other objectives. These goals may also include efficiency or financial targets, tolerance for financial losses, reductions in GHG emissions across product life cycles, or revenue targets for low-carbon products and services. When describing targets, organizations should address: <ul style="list-style-type: none"> whether the target is absolute or intensity based Time frames over which the target applies Base year from which progress is measured Key performance indicators used to assess progress against targets <p>Organizations disclosing medium-term or long-term targets should also share interim targets either in aggregate or by business line, if available.</p> <p>Organizations should explain the methodologies used to calculate these targets and measures if not explicitly stated.</p>

³⁰ISSB, IFRS S2, Climate Related Disclosures

³¹ [2021-Metrics Targets Guidance-1.pdf \(bbhub.io\)](#)

Basic Metrics for reporting on climate-related issues³².

Metric	Definition	Unit of Measure
GHG Emissions	Absolute Scope 1, Scope 2, and relevant material categories of Scope 3 emissions, as well as carbon intensity	MT of CO ₂ e
Internal Carbon Prices	Price on each ton of GHG emissions used internally by an organization	Price in local currency (JOD), per MT of CO ₂ e
Transition Risks	Amount and extent of assets or business activities vulnerable to transition risks	Percentage
Physical Risks	Amount and extent of assets or business activities vulnerable to physical risks	Percentage
Climate-Related Opportunities	Proportion of revenue, assets, or other business activities aligned with climate-related opportunities	Percentage
Capital Deployment	Amount of capital expenditure, financing, or investment deployed toward climate-related risks and opportunities	Local currency (JOD)
Remuneration	Proportion of executive management remuneration linked to climate considerations	Percentage/amount in local currency (JOD) or weighting

³² [2021-Metrics Targets Guidance-1.pdf \(bbhub.io\)](#)

Chapter 4: Tools and Enablers

4.1 Self-assessment Checklists

Included in this guidance are three self-assessment checklists that serve to help companies identify gaps and opportunities for enhancing their capabilities in line with the disclosure requirements outlined herein. These tools are structured to assist organizations in evaluating their current practices across three key dimensions:

1. **ASE Guidance Scope Checklist:** Aligned with the TCFD requirements, this checklist aids organizations in assessing the completeness and breadth of their climate-related disclosures. It is designed to provide a clear understanding of the extent to which their disclosures cover the necessary aspects of climate change.
2. **ASE Guidance Maturity Checklist:** Based on the SSEI TCFD checklist, and the Transition Pathway Initiative (TPI) and its "4 Level Staircase" model, this checklist helps organizations gauge the maturity of their disclosures. It evaluates how well their reporting aligns with advancing towards a net-zero future in alignment with TCFD standards.
3. **ASE Guidance Quality Checklist:** This checklist focuses on the quality aspects of climate disclosures, helping organizations identify and address gaps, and implement leading practices for assurance and accuracy. It is aimed at enhancing the consistency and reliability of the disclosed information.

ASE Guidance Scope Checklist

Companies should use the checklist to confirm if their reports adequately address each question and indicate where the relevant information can be found. If disclosures are lacking with publicly available information, companies are encouraged to enhance their reporting with additional details.

Those aiming for comprehensive disclosure may adopt the Transition Pathway Initiative (TPI)'s staged "4 Level Staircase", compiled along with the TCFD checklist by the UN SSE³³ and outlined on page XXX. The TCFD Checklist aligns with the TPI model, helping companies identify what needs to be addressed to progress to the next level of reporting maturity.

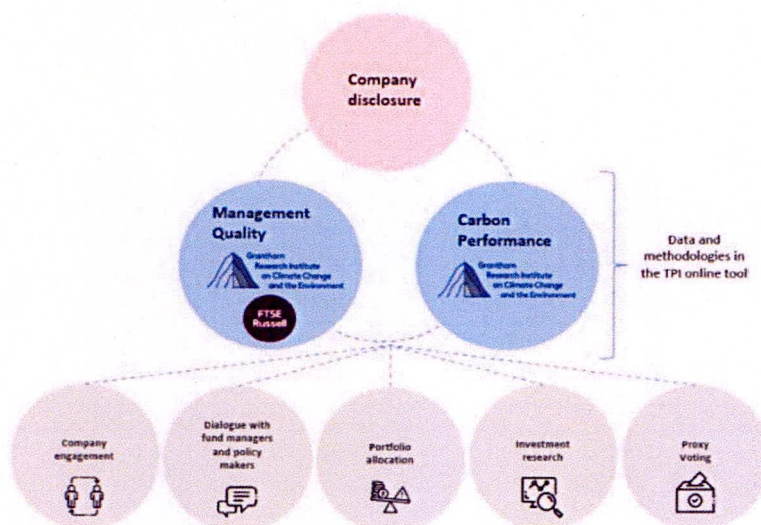
³³ UN SSE TCFD Checklist, Model Guidance on Climate Disclosures

Governance	YES	NO	NA
1. Does the board have a designated member or committee responsible for climate-related issues?			
2. Are climate-related risks and opportunities regularly reviewed by the board within major plans, risk management policies, and strategy?			
3. Is the board's performance in managing climate-related issues regularly monitored against set goals and targets?			
4. Are specific management positions or committees tasked with climate-related responsibilities?			
5. Do these management roles report directly to the board on climate-related matters?			
Strategy	YES	NO	NA
6. Are climate-related risks and opportunities identified for specific time horizons (short, medium, long-term)?			
7. Is a materiality analysis performed to determine the financial impact of climate-related risks and opportunities?			
8. Are climate-related risks and opportunities assessed across different sectors and geographies?			
9. Are climate-related factors incorporated into the company's strategic and financial planning processes?			
10. Is there a strategic plan for transitioning to a lower-carbon economy, including investment in research and development?			
11. Does the company conduct scenario analyses including a 2°C or lower scenario?			
Risk Management	YES	NO	NA
12. Are climate-related risks identified and considered significant within the organization's overall risk framework?			
13. Is there a comprehensive process for identifying, assessing, and managing climate-related risks?			
14. Are climate-related risk management processes fully integrated into the organization's overall risk management?			
Metrics and Targets	YES	NO	NA
15. Are specific metrics employed to assess climate-related risks and opportunities?			
16. Are GHG emissions and other relevant data verified externally?			
17. Are climate-related metrics incorporated into performance evaluations and remuneration policies?			
18. Are there established targets for GHG emissions, energy usage, and other climate-related objectives?			
19. Are these targets reviewed and adjusted periodically?			

ASE Guidance Maturity Checklist

Companies can use this checklist to evaluate and track the effectiveness of companies' governance and management pertaining to their greenhouse gas emissions, as well as the associated risks and opportunities emerging from the transition towards a low-carbon economy.

ASE has adapted this tool from the Transition Pathway Initiative (TPI) framework, which is an asset-owner-led initiative supported by asset managers, which assesses companies' readiness for the transition to a low-carbon economy. TPI aims to gauge the pathway of transitioning to a low carbon economy and evaluate how it looks like for companies with a high impact on climate change. It also aims to assess the progress these companies are making in their shift to a low-carbon economy.

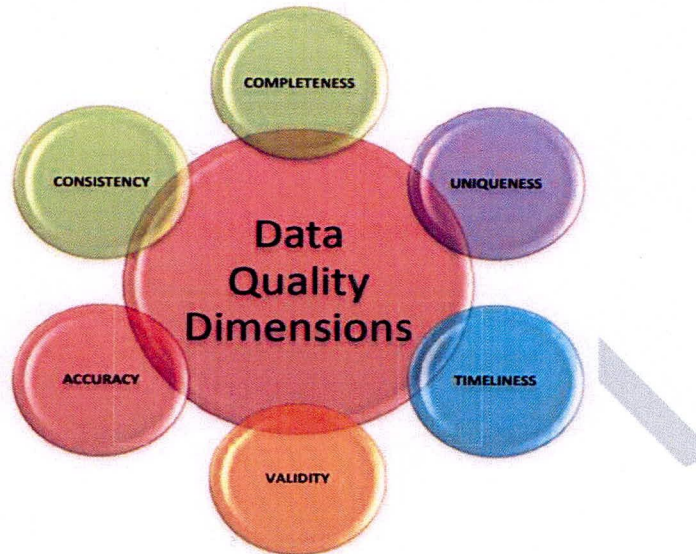


LEVEL 0: UNAWARE OF (OR NOT ACKNOWLEDGING) CLIMATE CHANGE AS A BUSINESS ISSUE		
Question	Criteria	Response
1	Does the company acknowledge climate change as a significant issue for the business?	Yes/No
LEVEL 1: ACKNOWLEDGING CLIMATE CHANGE AS A BUSINESS ISSUE		
2	Does the company recognize climate change as a relevant risk and/or opportunity for the business?	Yes/No
3	Does the company have a policy (or equivalent) commitment to action on climate change?	Yes/No
LEVEL 2: BUILDING CAPACITY		
4	Has the company set greenhouse gas emission reduction targets?	Yes/No
5	Has the company published information on its operational (Scope 1 and 2) greenhouse gas emissions?	Yes/No
LEVEL 3: INTEGRATING INTO OPERATIONAL DECISION-MAKING		
6	Has the company nominated a board member or board committee with explicit responsibility for oversight of the climate change policy?	Yes/No
7	Has the company set quantitative targets for reducing its greenhouse gas emissions?	Yes/No
8	Does the company report on Scope 3 emissions?	Yes/No
9	Has the company had its operational (Scope 1 and/or 2) greenhouse gas emissions data verified?	Yes/No
10	Does the company support domestic and international efforts to mitigate climate change?	Yes/No
11	Does the company have a process to manage climate-related risks?	Yes/No
12	Does the company disclose materially important Scope 3 emissions?	Yes/No
LEVEL 4: STRATEGIC ASSESSMENT		
13	Does the company disclose its membership and involvement in organizations or coalitions dedicated specifically to climate issues?	Yes/No
14	Has the company set long-term quantitative targets for reducing its greenhouse gas emissions?	Yes/No
15	Does the company's remuneration for senior executives incorporate climate change performance?	Yes/No
16	Does the company incorporate climate change risks and opportunities in their strategy?	Yes/No
17	Does the company undertake climate scenario planning?	Yes/No
18	Does the company disclose an internal price of carbon?	Yes/No
19	Does the company ensure consistency between its climate change policy and the positions taken by trade associations of which it is a member?	Yes/No

ASE Guidance Quality Checklist

For reporting to be meaningful and credible, the underlying data must meet essential standards of acceptability. Ensuring data quality guarantees that communication of outcomes and goal setting is underpinned by reliable and pertinent information.

The reported information must follow the data quality dimensions outlined below



Completeness The extent to which a dataset encompasses all anticipated records. At a data element level, completeness is the degree to which all records have data populated when expected	Uniqueness The measure of uniqueness within a dataset, is reflected by the absence of duplicate records	Timeliness The degree to which data represent reality from the required point in time, coupled with its readiness for access at the anticipated moment
Validity Data is considered valid when it aligns with the syntactic criteria (format, type, range) established by its definition.	Accuracy The extent to which data accurately reflects the actual occurrence it is intended to represent	Consistency The absence of difference, when comparing two or more representations of a thing against a definition. can be measured by setting a threshold for how much difference there can be between two datasets

Companies are advised to adhere to the provided checklist in order to assess their conformity with the specified data quality dimensions and related indicators of data quality.

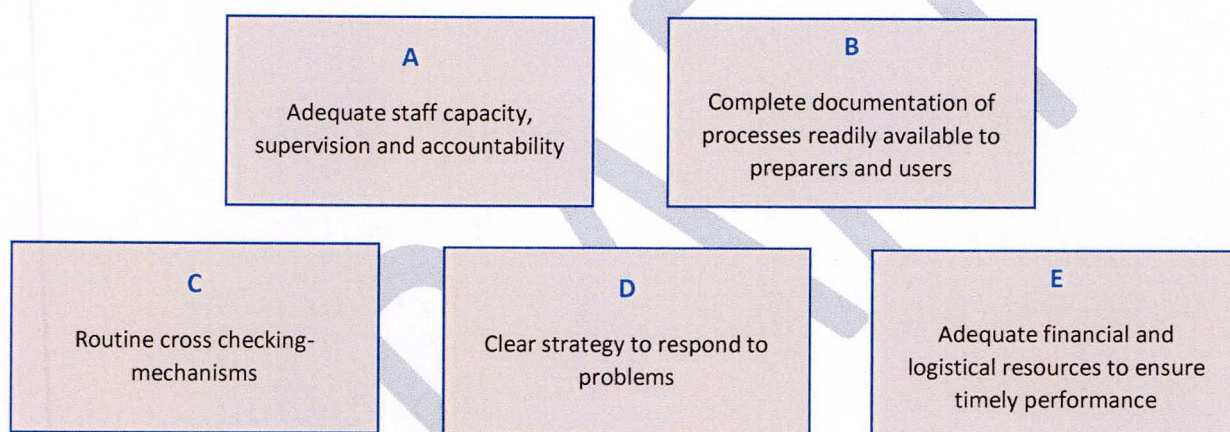
Data Quality Dimensions & Assurance Checklist	Data Dimension/ Additional Indicators
Are all data sets and data items recorded?	Completeness
Can we match the data set across data stores?	Consistency
Is there a single view of the data set?	Uniqueness
Does the data match the rules?	Validity
Does the data reflect the data set?	Accuracy
Is the data being assessed against the actual thing it represents	Accuracy
Assessing the data against an authoritative reference data set	Accuracy
Is the data collection method/tool being used to collect the data fine-tuned or exact enough	Accuracy
Is there a senior management oversight on data collection & quality	Governance
Develop standardized metrics	Metrics
Tracking of data quality indicators	Metrics
The existence of an ESMS or any data-flow tracking system	Governance
Data Quality assurance process in place	Governance
Are data collection and analysis methods documented in writing and being used to ensure the same procedures are being followed each time?	Reliability
Is there independence in key data collection, management, and assessment procedures?	Integrity
Are mechanisms in place to prevent unauthorized changes to the data?	Integrity
Are data available frequently enough to inform program management decisions?	Timeliness
Are the data reported the most current practically available?	Timeliness
Are the data reported as soon as possible after being collected?	Timeliness

4.2 Data Verification & Assurance

Information disclosed in external reports should undergo internal assurance procedures to ensure accuracy, appropriateness, and reliability. Companies may consider engaging external consultants for assurance to enhance data credibility with third-party audit if the capacity does not exist internally. As climate-related disclosures become standard in financial filings, governance processes should mirror those used for public financial disclosures, including review by the CFO and audit committee or equivalents.

An internal data assurance process can ensure data accuracy, leading to a better decision-making and performance for the issuer. Existing internal audit, risk management, and data control systems developed for mainstream financial reporting can be leveraged for this purpose. If internal systems are inadequate, investing in building capacity in this area may be beneficial for long-term interests of the company.

Approach for a Successful Data Quality Assurance Plan



Furthermore, companies may refer to the data quality dimensions and assurance checklist on page 34 to improve their data quality management and assurance practices.

4.3 Climate Change Reporting Roles & Responsibilities

Organizations are recommended to prioritize the integration of sustainability & climate change specialists into their teams to drive meaningful change and achieve sustainable outcomes. By appointing dedicated sustainability professionals, companies can better assess their environmental impact, improve their reporting, identify opportunities for efficiency and innovation, and navigate complex regulatory landscapes.

Organizations are advised to adopt the Climate Governance Progression matrix by the IFC³⁴ as a guideline for establishing the duties and obligations of sustainability/climate change officers to ensure adherence to best practices and promote ongoing advancement.

Below is an outline detailing the potential roles and responsibilities of Sustainability Specialists:

Title	Potential Roles & Responsibilities
Chief Sustainability Officer	Spearheads an organization's sustainability efforts by developing strategies, engaging stakeholders, monitoring performance, managing risks, fostering innovation and ensuring transparency. They play a pivotal role in integrating sustainability into the organization's core business strategy and operations, driving long-term value creation, resilience, and positive societal impact.
Sustainability Specialist	Analyzes sustainability performance data and metrics, responsible for developing and implementing sustainability strategies, initiatives, and policies within an organization to minimize environmental impact and enhance climate related processes.
Climate Change Specialist	Assesses and analyzes climate-related risks and impacts on businesses or communities. Develops strategies and recommendations for climate adaptation and mitigation.
Corporate Social Responsibility (CSR) Officer	Oversees the development and implementation of corporate sustainability and social responsibility programs, including community engagement and stakeholder relations.
Environmental Compliance Specialist	Ensures that organizations comply with environmental regulations and standards by conducting audits, inspections, and environmental impact assessments.
Environmental Policy Specialist	Researches and analyzes environmental policies and regulations. Provides recommendations for policy development and advocacy to address environmental challenges.
Carbon Market Specialist	Studies carbon emissions trading and carbon offset markets. Analyzes carbon pricing mechanisms and assists organizations in managing their carbon footprint

Glossary (Will be added)

³⁴ [IFC Climate Governance Progression Matrix](#)