S&P Global
Market Intelligence

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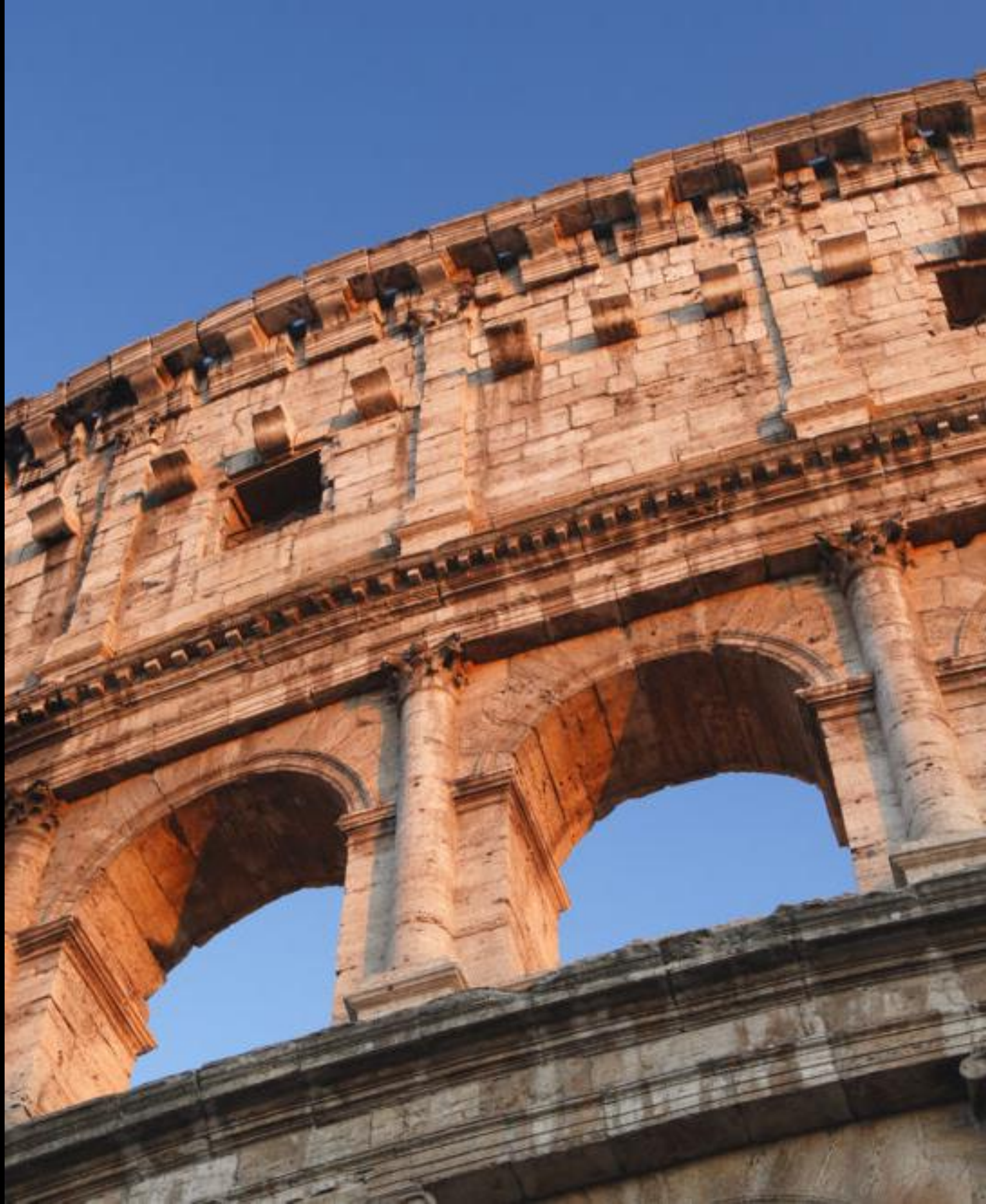
Umweltbezogene Risiken clever managen

June 21st, 2022

Focus on frequent IR questions

- Are ESG issues now unavoidable even for so-called “mainstream” investors?
- What role can IR play on the ESG front as investors face increased regulatory constraints?
- How to deal with the rise of passive investment & index inclusion?
- Would you recommend to do ESG roadshows and conferences, and would you expose the Sustainability/CSR officer(s)?



Our agenda

1. Introduction and Market trends
2. Building your ESG strategy
3. Presentation of the TCFD use case: Defining the strategy by anticipating investors’ requirements

Introduction and Market trends

What are the challenges today?

- While financial performance remains on top of the agenda…
- An extensive ESG programme: regulations/capital market expectations and requirements, large number of new (technical) topics to cover
- Data, reporting, disclosure, messaging: integration of ESG into the organizations' processes, systems and narratives
- Alignment of in-house sustainability strategy and the variety of capital market expectations

Investors expectations are changing

- Tightening regulations (i.e. SFDR)
- ESG integration, Decarbonization strategies
- Risk assessment of the portfolio
- Active vs. passive investment

New risks are emerging

- AGM & Governance risks: Say on Pay, KPIs used for Management's compensation schemes, Board of Directors' Sustainability competencies/skills, new topics when engaging with Proxies and Investors, etc.
- Other risks: e.g. impact from climate change risks

The role of IROs is – materially – evolving

- Difficult to navigate an ever and fast-changing environment (new regulations, new requirements)
- New ESG competencies: a steep learning curve in a technical environment

ESG Regulatory timeline

An overview among many other regulations that are being introduced on the ESG forefront around the world

From Jan. 1 to Dec. 31, 2022

- Non-financial undertakings disclose **taxonomy-eligible and non-taxonomy-eligible** activities under Art 8 **Taxonomy Regulation (TR)** Delegated Acts (DA)

Dec. 30, 2022

- Art 7 **SFDR disclosures** on product-level Principal Adverse Impact (PAI) consideration applies

Jun. 30, 2023

- Financial Market Participant (FMP) first Principal Adverse Impact (PAI) statement under **SFDR** RTS

Jan. 1, 2024

- Financial undertakings start disclosing the full KPIs on **taxonomy-alignment** under Art 8 TR DA

Jun. 30, 2024

- Second FMP PAI statement under **SFDR** RTS

2022 2023 2024

From Jan. 1 to Dec. 31, 2023

- Financial undertakings disclose proportion of assets exposed to **taxonomy non-eligible and eligible economic activities** under Art 8 TR DA

From Jan. 1, 2022

- Product disclosures under Art 5 and 6 **TR** start to apply for the ‘first two environmental objectives’
- Periodic product disclosures in Art 11(1)-(3) **Sustainable Finance Disclosures Regulations (SFDR)** start to apply

Dec. 1, 2022

- Member States to bring into force measures necessary to comply with Art 1 to 3 of **Corporate Sustainability Reporting Directive (CSRD)** *(TBC, under discussion)*

From Jan. 1, 2023

- Non-financial undertakings start disclosing the full KPIs on **taxonomy-alignment** under Art 8 TR DA
- Application of **SFDR** RTS, including Art 5 and 6 TR product disclosures for ‘all environmental objectives’
- Provisions in Art 1-3 **CSRD** and Art 4 of **CSRD** to apply for financial years starting on or after 1 January 2023 *(TBC, under discussion)*
- Start of the **Carbon Border Adjustment Mechanism (CBAM)** transitional phase

- The **CSRD** (reinforcing already in force “NFRD”) is being reviewed by the Parliament and the Council. It should be agreed on in 2022. If adopted, the CSRD will mark an important additional change in corporate reporting. In parallel, EFRAG Task Force is designing the European Sustainability Reporting Standards (ESRS) exposure drafts which will set the overall architecture of the future sustainability reporting under the CSRD. It is probable that CSRD/ESRS will first apply in 2025, based on FY 2024 reporting.

Many other regulations in preparation among which:

- **Corporate Sustainability Due diligence**: in Feb. 2022, the European Commission has adopted a proposal for a directive laying down new obligations for large companies to ensure that their own activities and those of their supply chains comply with human rights and environmental sustainability criteria.
- **EU Green Bond Standard, EU Social Taxonomy**…

Source: ESMA, RTS: regulatory technical standards

Building your ESG strategy

1 Understand the environment

Regulations, Market standards/ frameworks, Investors' (equity/fixed income) expectations...

- What regulations are/will be impacting our organization?
- What are the market practices?
- How do we benchmark against our peers?
- What are our shareholders'/ prospects expectations?
- What are our risks and opportunities?

Shareholder ID & ESG Sensitivity assessment, ESG Benchmarking, Risk & Gap analysis, Market Expectation & Sentiment, Investors profiling, ETF investment profile, Regulatory & Industry analysis...

2 Define a roadmap

Competencies/skills available, organization set-up, work-flow, what goals/targets

- What are the internally available competencies/skills?
- What is the set-up IR/finance vs. Sustainability team?
- Do we have goals/targets: be compliant / be the benchmark? Index inclusion? Ratings performance/improvement?
- What do we want to achieve short, medium, long-term?

Internal readiness & Materiality assessment, ESG strategic roadmap advisory, Ratings benchmarking & evaluation, Climate & Energy Transition strategy development, Board/C-suite workshops & trainings…

3 Disclose & Engage

Data/reporting/publications, AGM agenda, ESG engagement...

- What is the data that we have?
- Is the ESG reporting system in place?
- What are we reporting and in which report?
- Is the topic impacting our agenda at the AGM?
- Is our governance meeting the ESG topic-related requirements?

Disclosure & Messaging advisory services (i.e. TCFD), Datasets & Models (i.e. GHG emissions), Scenario & Stress Testing, Targeting, ESG & SRI roadshows, Strategic Governance advisory (agenda, proxy voting solutions…)…

4 Measure your impact and adjust

Compliance/Best-practice, Stock ownership, Index inclusion, Ratings performance

- How do we compare against peers/best-practice companies?
- Have we increased the ESG investors exposure to our stock?
- What is the investors' sentiment as regards our ESG strategy, messaging and disclosure?
- What is our index exposure & potential?
- Have we improved our ratings?

Shareholder ID & ESG analysis, Disclosure benchmarking (incl. metrics), ETF investment profile, ESG Investors Targeting & Benchmarking, Perception survey…

Presentation of the TCFD use case: Defining the strategy by anticipating investors' requirements

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*“**TCFD** is about **quality**.*
It’s not about
disclosure or transparency.
It’s the demonstration that you
*are **prepared with a solution,***
having the right messaging and
***communication approach**”*

Our role is to help you avoid receiving these letters

Be prepared for climate-related discussions with your shareholders. If you are not, they will eventually divest.

Investors are regrouping and asking you to be prepared for climate risk related issues

Immediately, next questions are:

- What could be the impact on our share ownership?
- Where do we stand?
- How to be prepared?

[Company name & address]

[Date]

Dear [Audit Committee Chair],

Investor expectations: 1.5C-aligned accounting disclosures

We wrote to you last November as a group of long-term investors and members of the Institutional Investor Group on Climate Change (IIGCC) to draw your attention to investor expectations for Paris-aligned accounts[1]. We are writing again now to understand why the Board was unable to make the requested disclosures, and what steps you will take to address this omission in the forthcoming audited accounts.

In our last letter, we set out the five disclosures we expected to see as part of your 2020 audited financial statements. We specifically asked for an affirmation that the Board was reflecting both [company]'s promised action to reduce greenhouse gas emissions and global decarbonisation aimed at limiting temperature increases to 1.5C in critical accounting assumptions and judgements. Where the Board chose not to adjust its accounting assumptions, we asked for an explanation and sensitivity analysis in the Notes to provide visibility into what a Paris-aligned pathway would mean for [company]'s financial position.

When we wrote, we also drew your attention to guidance published by the International Accounting Standards Board and the International Audit and Assurance Standards Board, as well as the Financial Reporting Council, for including material climate risks into financial statements and associated audits[2]. Where investors representing over $100 trillion in assets under management call for disclosures for how a net zero pathway will impact companies' financial position, they become material under the standards[3] [4].

Having now reviewed your 2020 Financial Statements in some detail, we are keen to understand why the Audit Committee has felt unable to provide the requested disclosures. Overall, we lack the required visibility to give us confidence that the economic impacts from climate change and associated policy action are being properly accounted for. We have little understanding of how [company]'s financial position might be impacted be accelerating decarbonisation associated with a 1.5C pathway.

[1]These expectations were published in this report: Investor Expectations for Paris-aligned Accounts – IIGCC
[2] See: IFRS - Educational material: the effects of climate-related matters on financial statements prepared applying IFRS Standards, IAASB Issues Staff Audit Practice Alert on Climate-Related Risks | IFAC, Summary-FINAL.pdf (frc.org.uk)
[3] A statement calling for Paris-aligned accounts was released by the Principles for Responsible Investment (PRI), the UN Environment Programme Finance Initiative (UNEP FI), the Net-Zero Asset Owner Alliance initiative, IIGCC, Investor Group on Climate Change (IGCC), the Asia Investor Group on Climate Change (AIGCC), and the UK's Pensions and Lifetime Savings Association on 24th September 2020: https://www.unpri.org/accounting-for-climate-change/public-letter-investment-groupings/6432.article
[4] The latest IASB guidance noted above reiterates that materiality depends on investor expectations: *"Information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that primary users of financial statements (hereafter, investors) make on the basis of those financial statements, which provide financial information about a specific company. For example, information about how management has considered climate-related matters in preparing a company's financial statements may be material with respect to the most significant judgements and estimates that management has made."*

1

We attach a more detailed review of your 2020 financial statements and auditor report by Carbon Tracker, setting out gaps against our expectations. [OPTION: add company specific commentary on key areas of concern]

We understand that [company] faces challenges in navigating a transition to a net zero business model. However, the longer the Board delays making the net zero accounting adjustments, the longer it will delay the needed shift in capital towards a low carbon business model. Any misallocation of capital today increases the risk of larger impairments – and associated destruction of shareholder capital – in the future.

[Company] is not alone in omitting reference to climate factors in its financial statements. Carbon Tracker recently published a report "Flying Blind" that details the widespread failure of companies and their auditors to cover material climate risks[5]. In response to this market wide problem, our request for accounting disclosures is being added to the CA100+ benchmark as an 'alignment assessment' indicator, so will also form part of that engagement process.

As we did with our last letter, we are copying in [company's] auditor to emphasise our expectation that they alert shareholders where the accounts are not consistent with a 1.5C outcome[6]. Where they believe there to be material mis-statements according to the accounting standards, or a failure to meet the statutory auditor requirement, this should be highlighted in their Opinion on the accounts. We hope the Audit Committee will reinforce these messages.

Against the above backdrop, from next voting season you should increasingly expect to see investors vote against Audit Committee directors' reappointment, where high-risk companies fail to meet the expectations we have set out in the IIGCC November 2020 paper and underlined again here. We also expect to see these expectations increasingly reflected in investor voting policies on the reappointment of auditors. We would, therefore, be grateful if you could share this letter with the other members of the Audit Committee.

We would, of course, welcome further dialogue with you on the matters raised here. If you would find this helpful, please contact [add name and contact of investor lead].

Yours sincerely,

Cc

Audit committee directors: [add]

[Lead audit partner]

[5]Their report is based on an analysis of the financial statements published by 107 global listed high-carbon companies: Flying blind: The glaring absence of climate risks in financial reporting - Carbon Tracker Initiative
[6] See auditor expectations in Investor Expectations for Paris-aligned Accounts – IIGCC

2

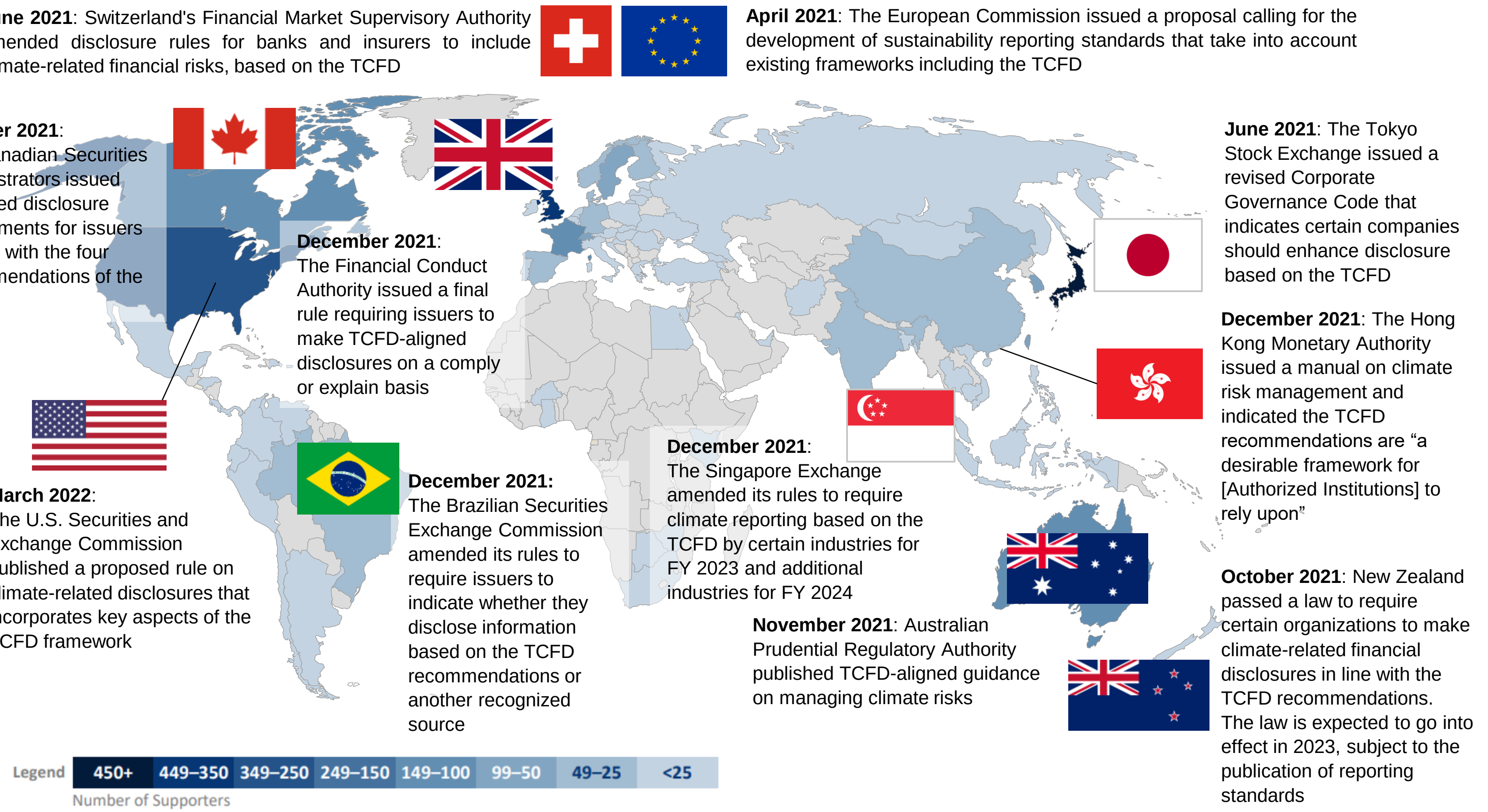
Source: IIGCC, https://www.iigcc.org/news/investors-put-audit-committee-chairs-on-notice-over-continued-omission-of-climate-risks-in-financial-reporting-ahead-of-2022-agm-season/ & https://www.iigcc.org/media/2022/04/NZ-accounts-letter-Nov-2021-template.pdf

Moving towards mandatory TCFD-aligned disclosures

The recommendations of the Task Force for Climate-related Financial Disclosures (TCFD) are voluntary, but are fast gaining traction within sustainability/ESG policy and regulation

June 2021: Switzerland's Financial Market Supervisory Authority amended disclosure rules for banks and insurers to include climate-related financial risks, based on the TCFD

April 2021: The European Commission issued a proposal calling for the development of sustainability reporting standards that take into account existing frameworks including the TCFD



October 2021: The Canadian Securities Administrators issued proposed disclosure requirements for issuers aligned with the four recommendations of the TCFD

December 2021: The Financial Conduct Authority issued a final rule requiring issuers to make TCFD-aligned disclosures on a comply or explain basis

March 2022: The U.S. Securities and Exchange Commission published a proposed rule on climate-related disclosures that incorporates key aspects of the TCFD framework

December 2021: The Brazilian Securities Exchange Commission amended its rules to require issuers to indicate whether they disclose information based on the TCFD recommendations or another recognized source

December 2021: The Singapore Exchange amended its rules to require climate reporting based on the TCFD by certain industries for FY 2023 and additional industries for FY 2024

November 2021: Australian Prudential Regulatory Authority published TCFD-aligned guidance on managing climate risks

June 2021: The Tokyo Stock Exchange issued a revised Corporate Governance Code that indicates certain companies should enhance disclosure based on the TCFD

December 2021: The Hong Kong Monetary Authority issued a manual on climate risk management and indicated the TCFD recommendations are "a desirable framework for [Authorized Institutions] to rely upon"

October 2021: New Zealand passed a law to require certain organizations to make climate-related financial disclosures in line with the TCFD recommendations. The law is expected to go into effect in 2023, subject to the publication of reporting standards

Source: TCFD, Supporters as of February 2022 and Country positions as of May 2022

3,400

Supporters, including the largest asset managers and owners as well as central banks, governments, regulators

95

Jurisdictions

IFRS/ISSB and SEC also moving forward on the forefront of ESG

The proposed frameworks are converging with the TCFD recommendations

ISSB published two exposure drafts setting out proposed IFRS Sustainability Disclosure Standards (March 2022)

The draft standards published so far are:

- IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information: which would require companies to disclose information that enables investors to assess the effect of significant sustainability-related risks and opportunities.
- IFRS S2 Climate-related Disclosures: which sets out reporting standards in relation to the identification, measurement and disclosure of a company's significant climate-related risks and opportunities and incorporates the Taskforce on Climate-related Financial Disclosures recommendations as well as metrics tailored to industry classifications derived from the industry-based SASB Standards

The proposed standards are intended to provide the first global baseline for sustainability reporting and aim to increase the consistency of reporting on ESG-related matters internationally.

The exposure drafts are open for consultation until 29 July 2022.

Link to Comparison: [Draft] IFRS S2 Climate-related Disclosures with the TCFD Recommendations

SEC approved proposed rule on climate-related disclosure (March 2022)

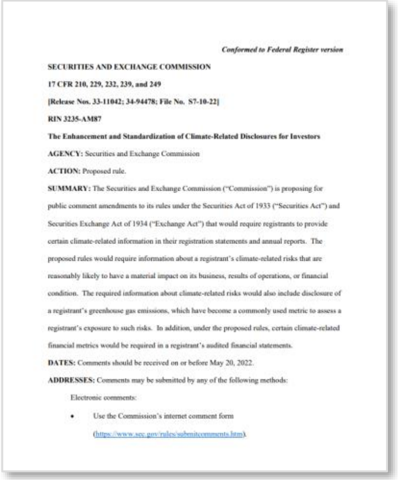
The SEC voted to move forward with the agency's proposed climate rule, which aims to give investors a clearer view of the risks that climate change might pose to a company.

Importantly, the proposed rule would require companies to disclose their Scope 1, 2, and 3 emissions after an initial phase-in period.

The SEC proposes that these first disclosures would be made by larger companies in 2024, based on fiscal year 2023.

The draft climate disclosure requirement borrows heavily from existing, globally recognized reporting frameworks including the Task Force on Climate-Related Financial Disclosures and the Greenhouse Gas Protocol.

The SEC will accept comments on the proposed rule for 60 days.



Conformed to Federal Register version

SECURITIES AND EXCHANGE COMMISSION

17 CFR 210, 229, 232, 239, and 249

[Release Nos. 33-11042; 34-94478; File No. S7-10-22]

RIN 3235-AM87

The Enhancement and Standardization of Climate-Related Disclosures for Investors

AGENCY: Securities and Exchange Commission

ACTION: Proposed rule.

SUMMARY: The Securities and Exchange Commission ("Commission") is proposing for public comment amendments to its rules under the Securities Act of 1933 ("Securities Act") and Securities Exchange Act of 1934 ("Exchange Act") that would require registrants to provide certain climate-related information in their registration statements and annual reports. The proposed rules would require information about a registrant's climate-related risks that are reasonably likely to have a material impact on its business, results of operations, or financial condition. The required information about climate-related risks would also include disclosure of a registrant's greenhouse gas emissions, which have become a commonly used metric to assess a registrant's exposure to such risks. In addition, under the proposed rules, certain climate-related financial metrics would be required in a registrant's audited financial statements.

DATES: Comments should be received on or before May 20, 2022.

ADDRESSES: Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's internet comment form (https://www.sec.gov/rules/submitcomments.htm).

Link to the proposed rule

The Task Force has 11 recommended disclosures across the 4 recommendations

1 Governance

Disclose the company's governance around climate-related risks and opportunities

a) Describe the board's oversight of climate-related risks and opportunities

b) Describe management's role in assessing and managing climate-related risks and opportunities

2 Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the company's businesses, strategy, and financial planning where such information is material

a) Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term

b) Describe the impact of climate-related risks and opportunities on the company's businesses, strategy, and financial planning

c) Describe the resilience of the company's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

3 Risk Management

Disclose how the company identifies, assesses, and manages climate-related risks

a) Describe the company's processes for identifying and assessing climate-related risks

b) Describe the company's processes for managing climate-related risks

c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management

4 Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material

a) Disclose the metrics used by the company to assess climate-related risks and opportunities in line with its strategy and risk management process

b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks

c) Describe the targets used by the company to manage climate-related risks and opportunities and performance against targets

Source: TCFD, 2021

4. TCFD recommends to assess climate-related risks

These are divided into two major categories: Transition risks and Physical risks

Transition risks

(risks related to the transition to a low-carbon economy)

Policy and Legal

- Increased pricing of GHG emissions
- Enhanced emissions-reporting obligations
- Regulatory Risk
- Exposure to litigation

Technology

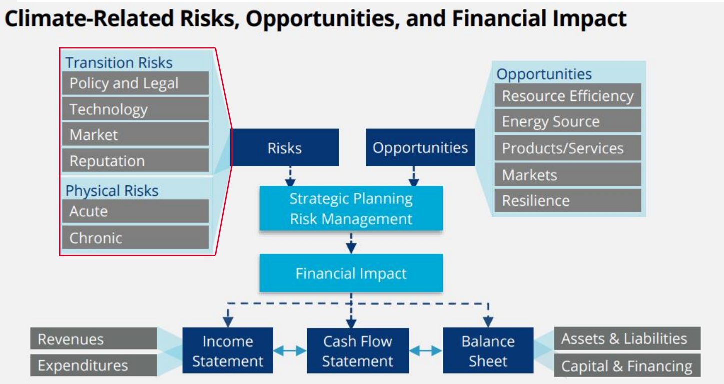
- Substitution of existing products and services with lower emissions options
- Unsuccessful investment in new technologies
- Costs to transition to lower emissions technology

Market

- Changing customer behavior
- Uncertainty in market signals
- Increased cost of raw materials

Reputation

- Shifts in consumer preferences
- Litigation



Physical risks

(risks related to the physical impacts of climate change)

Acute (event-driven)

- Increased severity of extreme weather events such as cyclones and floods

Chronic (longer-term shifts)

- Changes in precipitation patterns and extreme variability in weather patterns
- Rising mean temperatures
- Rising sea levels

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4. Climate Risk Scenario Assessment Overview

TCFD risks categories	Major characteristics	Metrics considered
Policy Risk Exposure	• Risk of policy action to encourage low-carbon transition in direct operations or upstream supply chain (e.g. through carbon taxes)	• Carbon Pricing Risk Exposure (USD millions) • Increase in operating expenditure (%) • Carbon adjusted operating profit margin (%)
Market Risk Exposure	• Increased costs for key suppliers / customers	• EBITDA at risk for key suppliers / customers due to carbon pricing • Median EBITDA at risk for key supplier / customers sectors due to carbon pricing
Reputation Risk Exposure	• Increased scrutiny from investors, lenders and insurers towards business/industry	Benchmark Assessment of: • Carbon Intensity of Industry Group • Carbon intensity of company relative to industry group • Paris Alignment of Scope 1 & 2 GHG Transition Pathway • Climate Strategy Score (S&P Global SAM Scores)
Technology Risk Exposure	• Possible early retirement of existing products or technologies to mitigate climate impacts	Benchmark Assessment of: • Exposure to Revenues from candidate sectors for Low-carbon Transition (EU Taxonomy) • Evidence of Low-carbon Goods/Services • Evidence of Low-carbon CapEx/R&D
Physical Risk Exposure	• Increasing frequency and severity of climate hazards generating financial impacts on company assets	Modelled Average Annual Loss: • Relative risk (%) • Absolute Risk (mUSD)

4. Transition Risks Scenario Analysis (1/3)

Transition risk scenarios considered

Scenarios

- **High Carbon Price Scenario**: This scenario represents the implementation of policies that are considered sufficient to reduce GHG emissions in line with the goal of limiting climate change to 2 degrees Celsius by 2100.
- **Medium Carbon Price Scenario**: This scenario assumes that policies will be implemented to reduce GHG emission and limit climate change to 2 degrees Celsius in the long term, but with action delayed in the short term.
- **Low Carbon Price Scenario**: This scenario represents the full implementation of country Nationally Determined Contributions under the Paris Agreement. Prices in this scenario are considered likely to be insufficient to achieve the goals of the Paris Agreement.

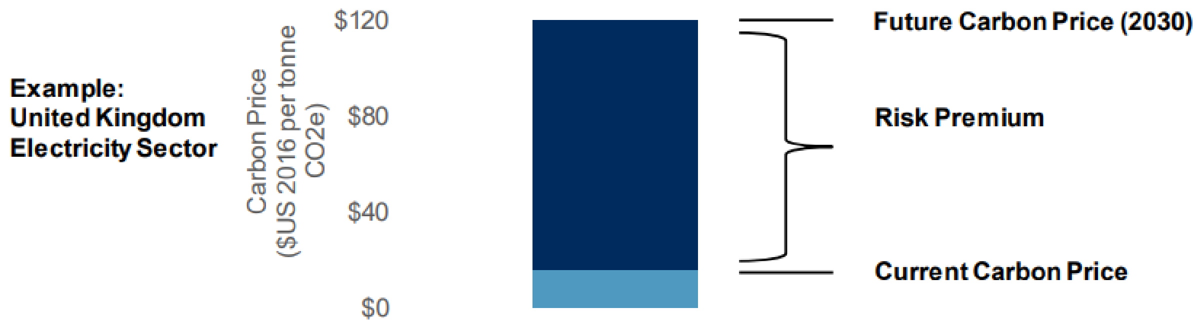
Time Periods

- 2020 (Baseline); 2030; 2040; 2050

Scenario and Time Period Coverage to be further discussed for more details. Scenarios based on research by OECD and IEA (2017).

The Carbon Price Risk Premium

- S&P Global (Trucost) defines the gap between current carbon prices and future carbon price targets as the ‘Carbon Price Risk Premium’. This premium, which varies by sector and geography, reflects the additional financial exposure of a company, sector or facility to carbon pricing regulations in the future and is a useful benchmark for setting internal carbon prices

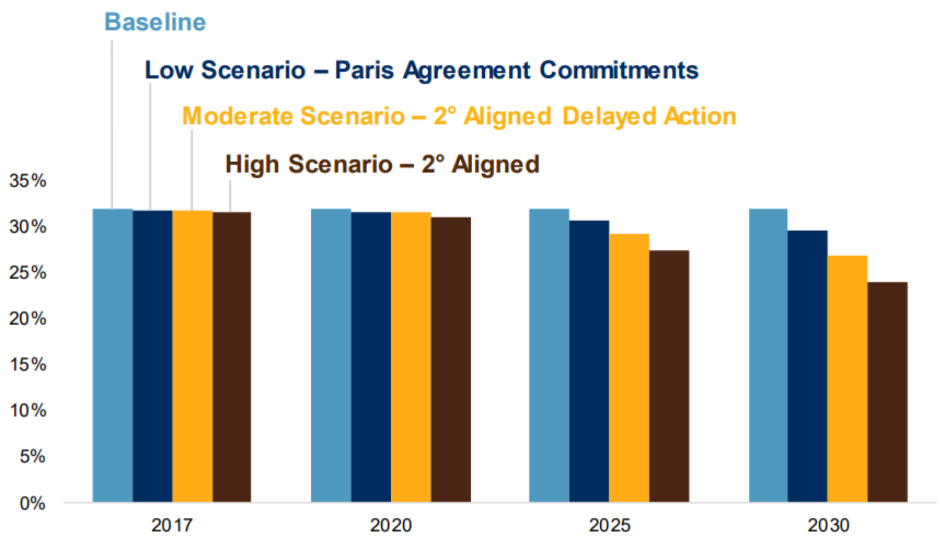


Source: Source: OECD/IEA (2017), OECD (2016), Trucost Analysis (2017)

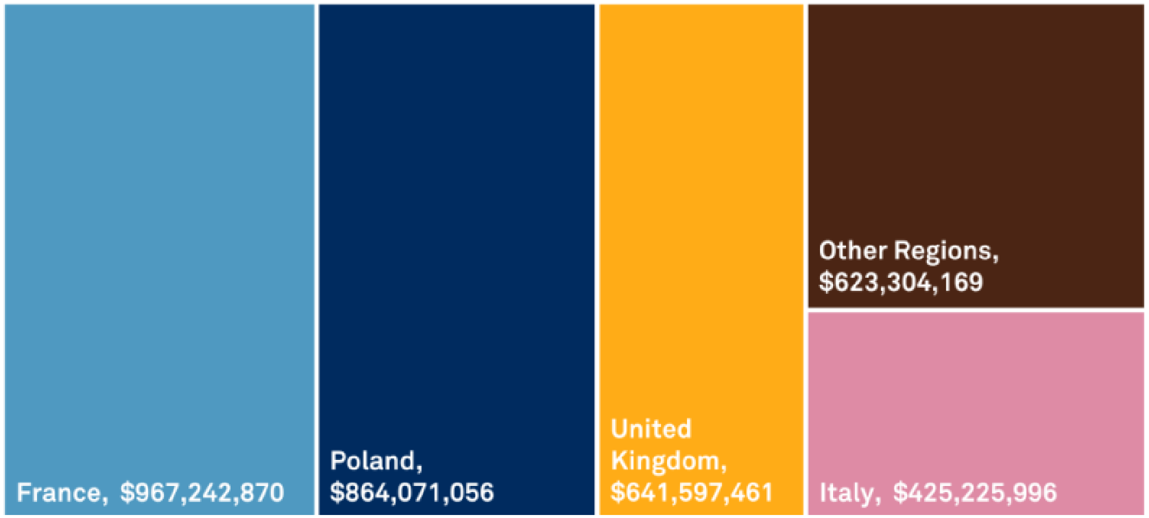
4. Transition Risks Scenario Analysis (2/3)

Examples of outputs

Change in operating margin from carbon pricing risk



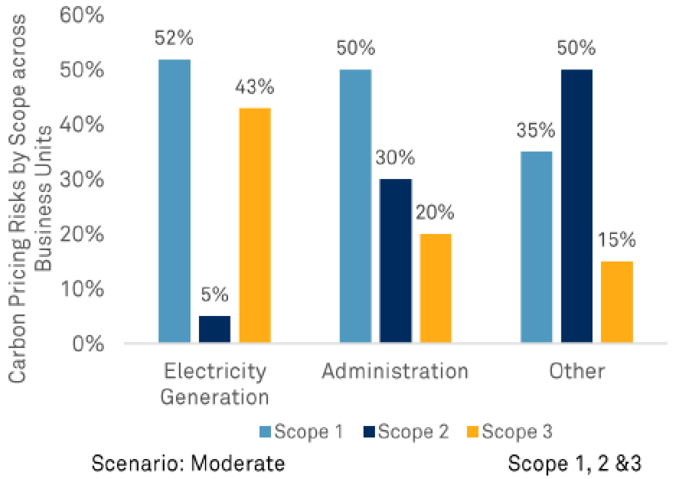
Carbon pricing risk of Top Five Geographies in 2030 (2°C)
(Scenario Moderate, Scope 1 and 2)



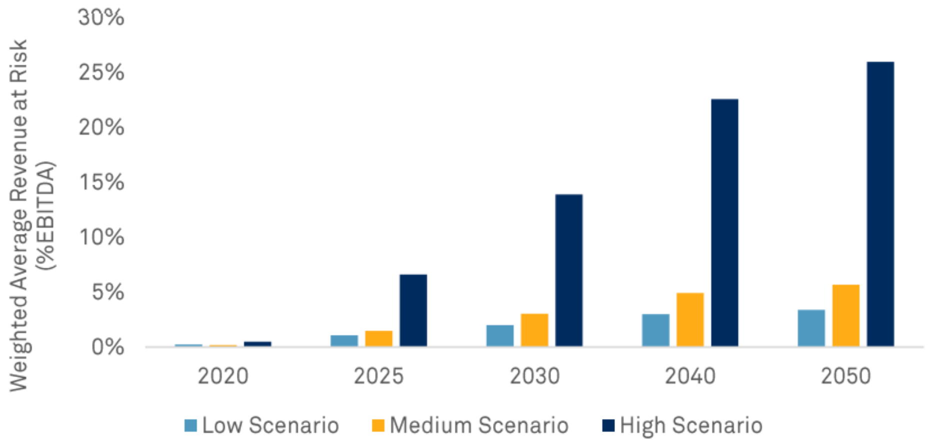
4. Transition Risks Scenario Analysis (3/3)

Examples of outputs

Carbon pricing risk by Scopes at Business unit level



Customers' Earnings at risk under various scenarios

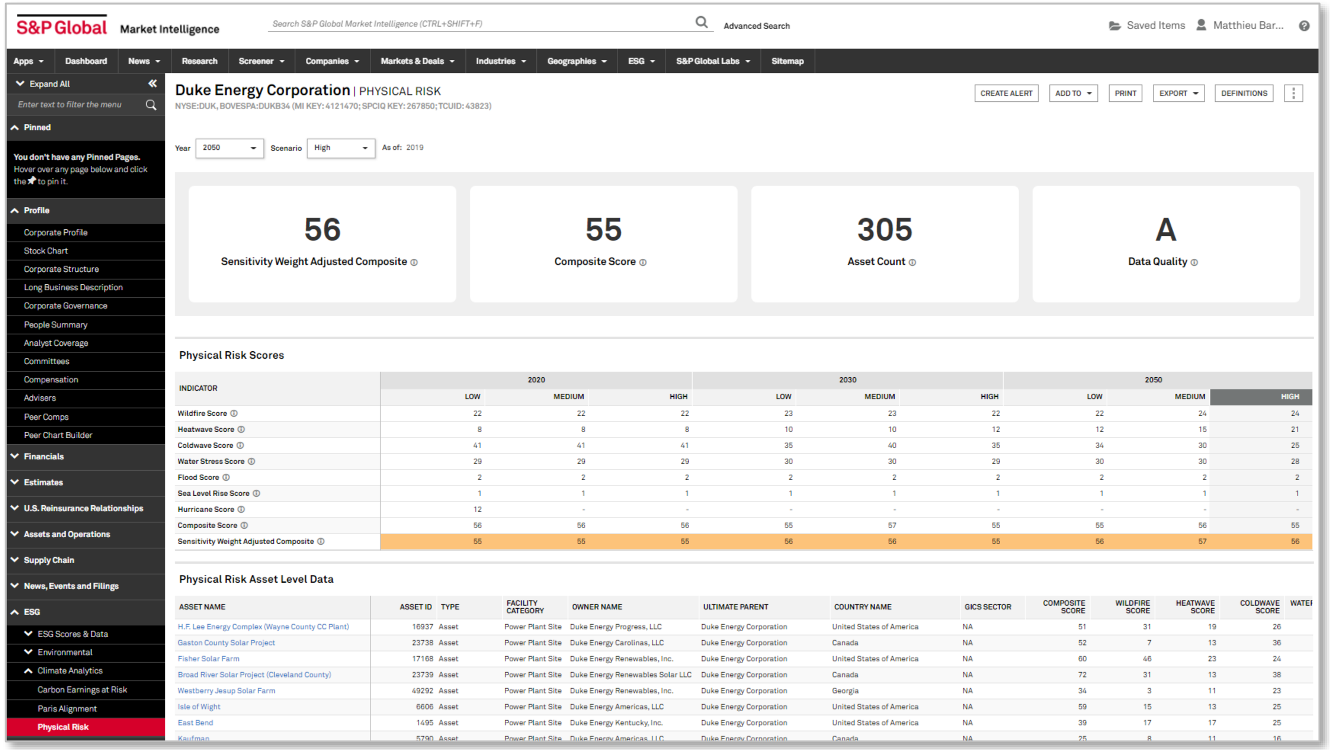


Summary of Technology risk exposure

Company	Carbon Mitigation Candidate Sector(s)	Candidate Sector Revenue Share	Green Share Revenue	Evidence of Green R&D or Green Capex	Overall Technology Risk Exposure
<The Client>	Manufacture of Aluminium	High	Low	Yes	Moderate
Peer 1	Manufacture of Aluminium	High	Low	Yes	Moderate
Peer 2	Manufacture of Aluminium	High	Low	Yes	Moderate
Peer 3	Manufacture of Aluminium Manufacture of Iron and Steel	High	Low	Yes	Moderate

4. Physical Risk Assessment

Trucost's Physical Risk dataset assesses company exposure to physical risk at the asset-level



Source: Market Intelligence platform, for illustrative purposes only.

Illustrative only – Actual ESG analysis would be based on real-time data input, we will not use the data point showed on CIQ

Overview

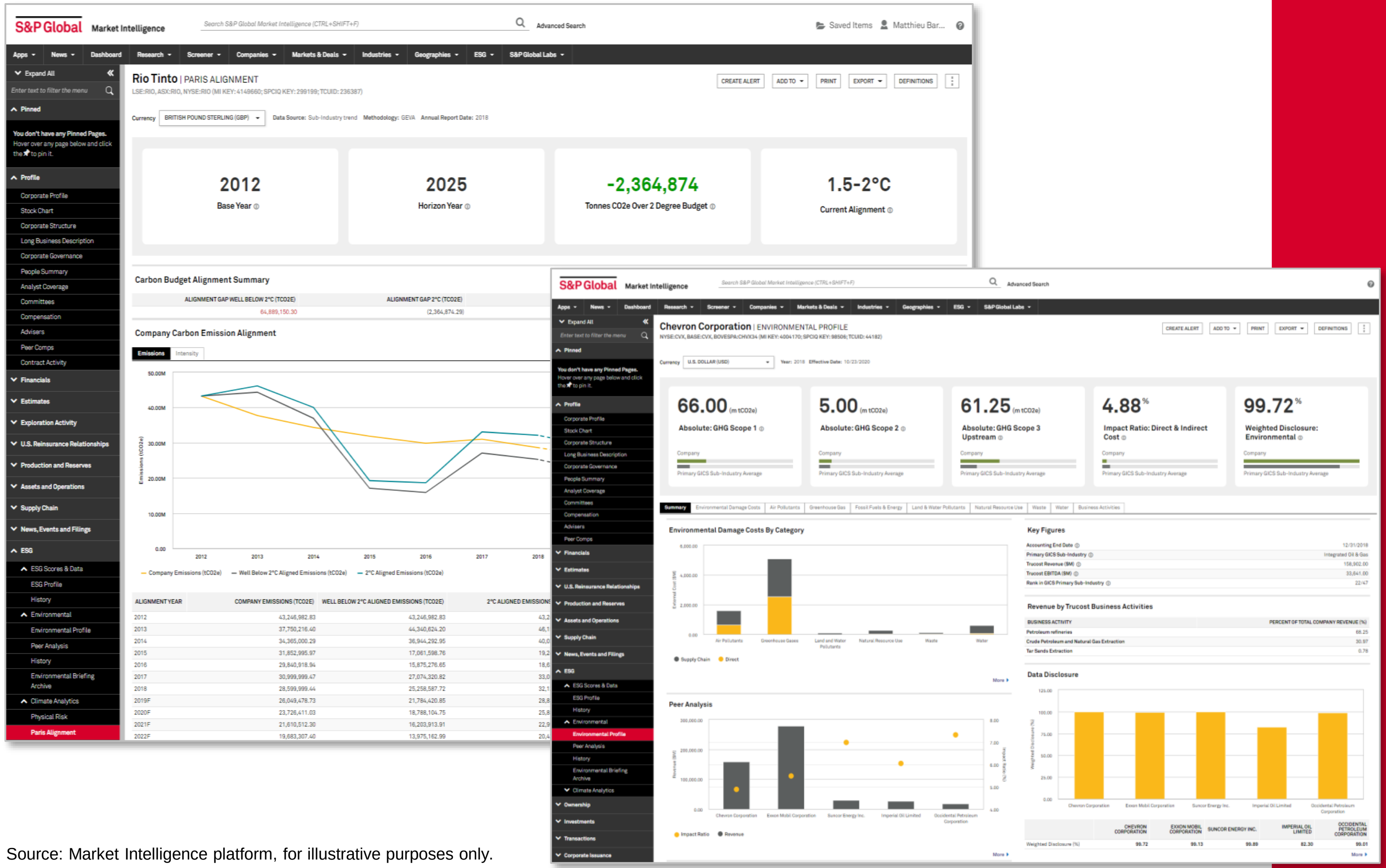
- **Physical risk scores for 7 hazards (heatwaves, coldwaves, drought, wildfire, hurricanes, riverine flooding, seal-level rise) and three IPCC scenarios (RCP 2.6, 4.5 and 8.5)**

Coverage

- **2.9 million+ asset locations, 125,000+ asset owners including 15,000+ public companies**
- **Risk metrics for 2020, 2030 and 2050**

4. Environmental datasets and Paris-Alignment tool

Trucost's Paris Alignment data assesses company-level alignment with the Paris Agreement goal to limit global warming to well below 2°C from pre-industrial levels



Source: Market Intelligence platform, for illustrative purposes only.

Unique data sets

- S&P Global ESG datasets and analytics include Environmental Analytics with 15,000+ companies' scope 1, 2, and 3 emissions, direct and first tier indirect emissions, and future emission and transition pathways, which can be fed into SBTi's SDA models
- Trucost's Paris Alignment data assesses company-level alignment with the Paris Agreement

Paris-Alignment coverage

- 12 years historical and future emissions, over/under carbon budget metrics, °C alignment with the Paris Agreement using the SDA-GEVA approach recommended by SBTi.
- 4,500+ public companies

4. TCFD Climate-related targets disclosure guidance

TCFD 2021 guidance provides recommendations for formulating and disclosing climate-related targets

- A climate-related target refers to a **specific level, threshold, quantity, or qualitative goal** that the organization wishes to meet **over a defined time horizon** in order to address its climate-related risks and opportunities.
- A company's climate-related targets should inform, and be informed by, its strategy and risk management and be linked to its climate-related metrics.
- Effective disclosure of climate-related targets includes grounding disclosures in narrative or qualitative information to help users understand their context.
- Companies should describe the **qualitative information** that encompasses climate-related targets and reflects longer-term changes to an organization's business or expected strategic direction.
- Companies should also consider disclosing in formats that would lead to better **standardization and comparability**

Characteristics of effective climate-related targets

- Aligned with Strategy and Risk Management goals
- Linked to relevant metrics
- Quantified and measurable
- Clearly specified over time
  - Baseline
  - Time horizon
  - Interim targets
- Understandable and contextualized
- Periodically reviewed and updated
- Reported annually

Source: TCFD, Guidance on Metrics, Targets, and Transition Plans, 2021

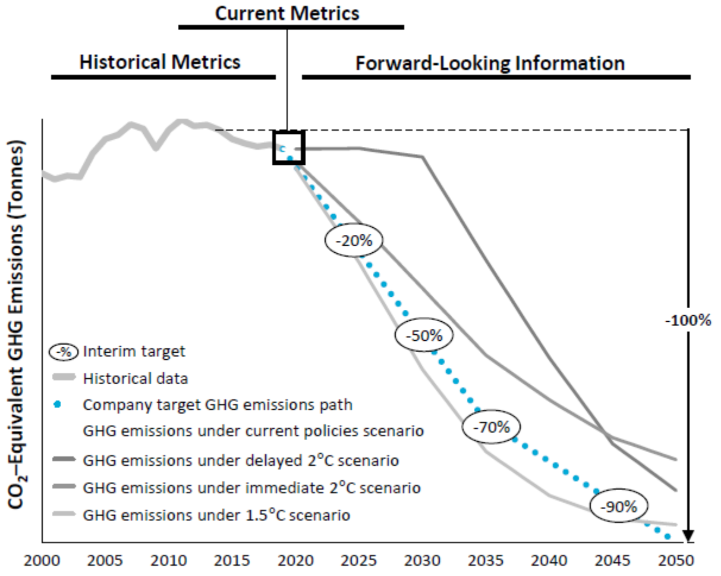
4. TCFD recommends the use of quantified climate-related targets

The guidance provides examples of quantified targets that align with cross-industry climate-related metric categories

Cross-Industry Metric Category	Climate-Related Target Examples
GHG Emissions	• Reduce net Scope 1, Scope 2, and Scope 3 GHG emissions to zero by 2050, with an interim target to cut emissions by 70% relative to a 2015 baseline by 2035
Transition Risks	• Reduce percentage of asset value exposed to transition risks by 30% by 2030, relative to a 2019 baseline
Physical Risks	• Reduce percentage of asset value exposed to acute and chronic physical climate-related risks by 50% by 2050 • Ensure at least 60% of flood-exposed assets have risk mitigation in place in line with the 2060 projected 100-year floodplain
Climate-Related Opportunities	• Increase net installed renewable capacity so that it comprises 85% of total capacity by 2035
Capital Deployment	• Invest at least 25% of annual capital expenditure into electric vehicle manufacturing • Lend at least 10% of portfolio to projects focused primarily on physical climate-related risk mitigation
Internal Carbon Pricing	• Increase internal carbon price to $150 by 2030 to reflect potential changes in policy
Remuneration	• Increase amount of executive management remuneration impacted by climate considerations to 10% by 2025

Disclosure example: GHG emissions reduction targets

Our firm commits to reducing net Scope 1 and 2 GHG emissions—as defined by the GHG Protocol—to zero by 2050, with an interim target to cut Scope 1 and 2 GHG emissions by 2030 by 50%, relative to a 2015 baseline.



Source: TCFD, Annex: Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures, 2021 and Guidance on Metrics, Targets, and Transition Plans, 2021

4. TCFD outlines metric categories with data methodology

The Metrics & Targets approach applied to climate and environmental issues applies to social and governance topics

Metric Category	Description	Examples to be adjusted to match relevant metrics for your respective industry
GHG Emissions	Absolute Scope 1, Scope 2, and Scope 3; emissions intensity	• Absolute Scope 1, Scope 2, and Scope 3 GHG emissions • Weighted average carbon intensity • Gross global Scope 1 GHG emissions covered under emissions-limiting regulations
Transition Risks	Amount and extent of assets or business activities vulnerable to transition risks	• Volume of real estate collaterals highly exposed to transition risk • Concentration of credit exposure to carbon-related assets • Percent of revenue from coal mining
Physical Risks	Amount and extent of assets or business activities vulnerable to physical risks	• Number and value of mortgage loans in 100-year flood zones • Proportion of property, infrastructure, or other alternative asset portfolios in an area subject to flooding, heat stress, or water stress • Proportion of real assets exposed to 1:100 or 1:200 climate-related hazards
Climate-Related Opportunities	Proportion of revenue, assets, or other business activities aligned with climate-related opportunities	• Revenues from products or services that support the transition to a low-carbon economy • Proportion of homes delivered certified to a third-party, multiattribute green building standard
Capital Deployment	Amount of capital expenditure, financing, or investment deployed toward climate-related risks and opportunities	• Percentage of annual revenue invested in R&D of low-carbon products/services • Investment in climate adaptation measures (e.g., soil health, irrigation, technology)
Internal Carbon Prices	Price on each ton of GHG emissions used internally by a company	• Internal carbon price • Shadow carbon price, by geography
Remuneration	Proportion of executive management remuneration linked to climate considerations	• Portion of employee’s annual discretionary bonus linked to investments in climate-related products • Weighting of climate goals on long-term incentive • Scorecards for Executive Directors • Weighting of performance against operational emissions’ targets for remuneration scorecard

Source: TCFD, Guidance on Metrics, Targets, and Transition Plans, 2021

S&P Global
Market Intelligence

A word to conclude and how does this now affect an IRO?

Many thanks for your attention.

IR Impact – what to do next?

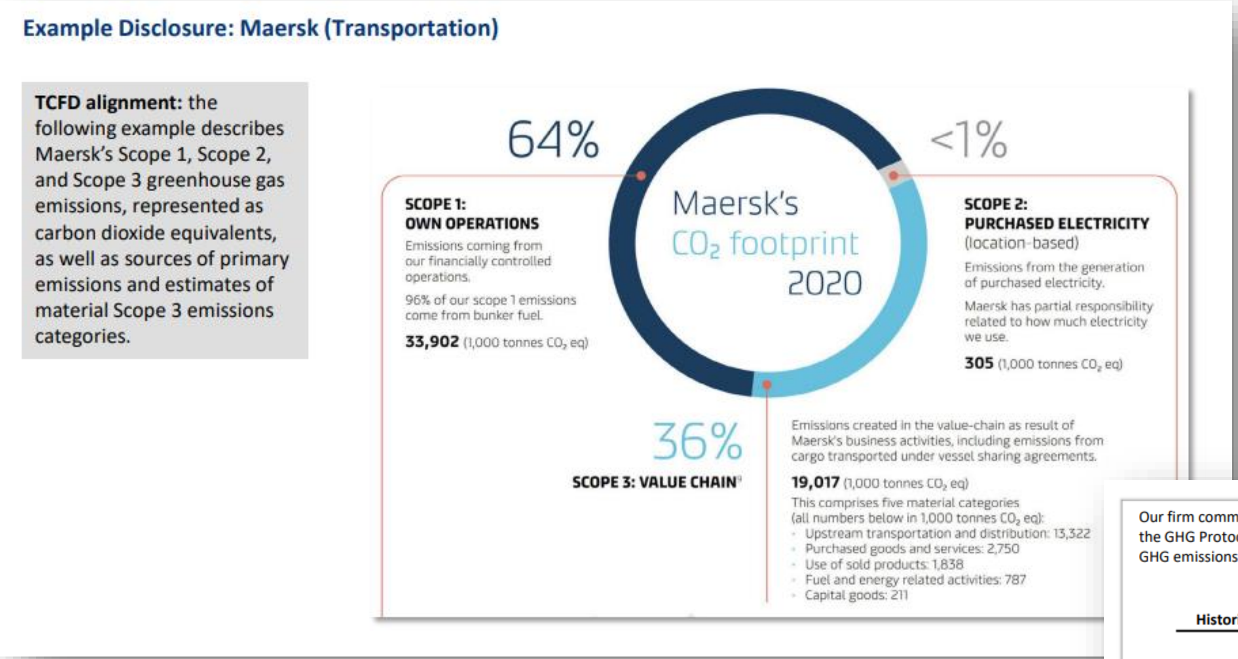
Start defining a strategy, incorporated in the equity story.

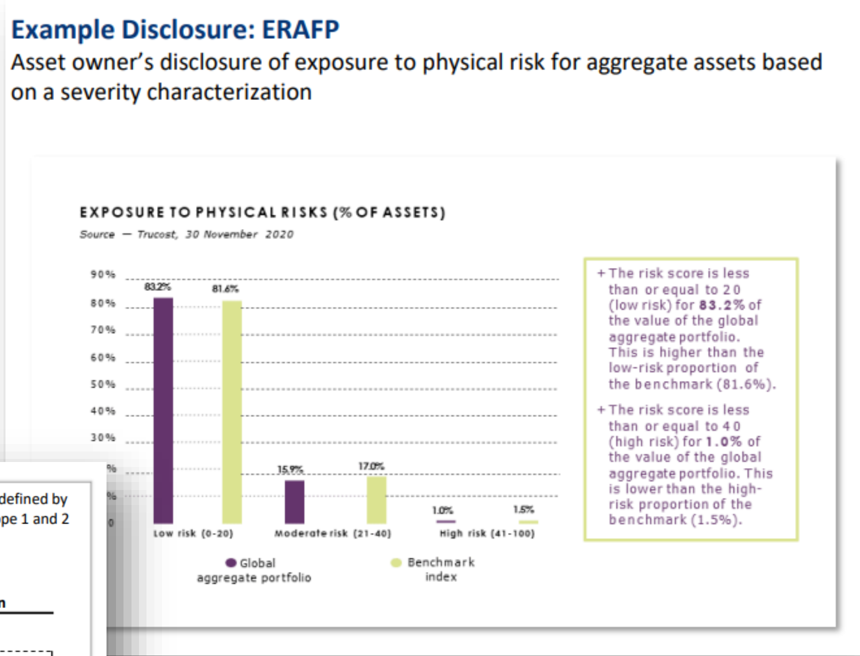
Knowing about the own strengths and weaknesses.

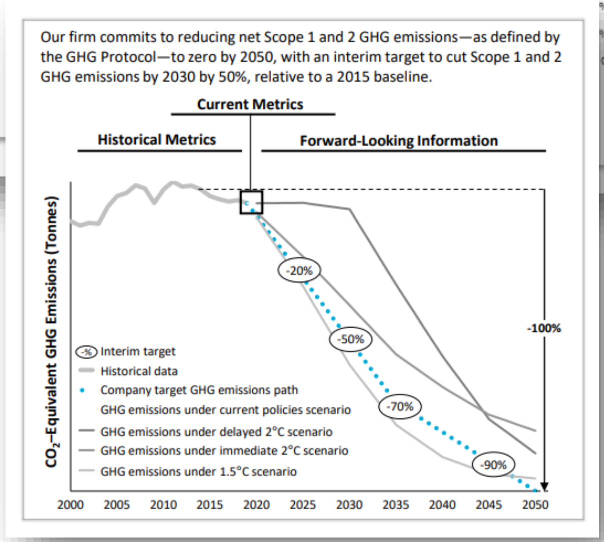
Focusing on ESG – sensitive KPIs

Disclose and communicate

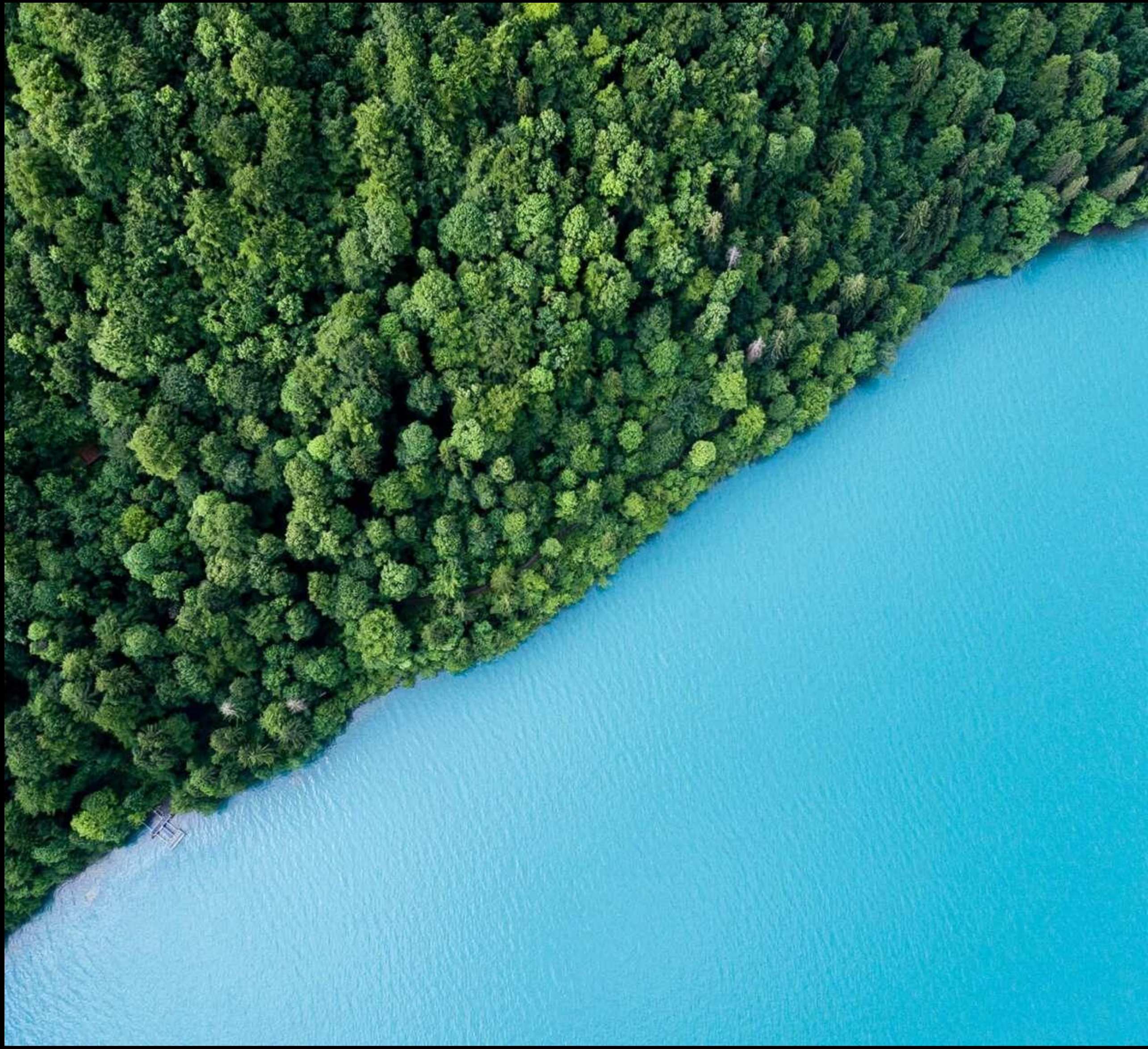
Examples of Disclosures







Appendix



A step-by-step modular approach to enhance company status quo and grow ESG profile

S&P Global has deep history and expertise in monitoring ESG, sustainability and climate trends, and helps global capital markets understand these shifts, including the risks and opportunities that come with ESG for all market participants.

Our holistic data, tools, workflow and advisory solutions bring light into the darkness of the "ESG black box " to equip you with actionable intelligence for strategic resilient positioning.

We wish to accompany your journey to benefit from the growing ESG-linked capital pool and proactively prepare for the regulatory, reporting and industry trends that is relevant to your business.

We tailor our approach to your needs. Whether you have a comprehensive ESG program or wish to create one from the ground up, S&P Global is a trusted partner every step of the way.

We want you to be prepared for the future. The future is now.

1 Diagnose

Analyze and understand your profile and the environment

2 Design

Define a roadmap and implement your ESG strategy

3 Engage

Disclose, engage and measure the effectiveness of your ESG journey

ESG roadmap

Our vision is to accompany you step by step to implement a meaningful and impactful ESG journey

Diagnose

- **ESG Gap Analysis & Benchmarking**
- **Double Materiality Assessment**
- **ETF & Index ESG Investment Pulse**
- **ESG Spotlight (ESG Ecosystem)**
- **Board Risk Assessment**

Design

- **ESG Data Collection & Reporting Repository**
- **Strategic ESG Advisory**
- **ESG Messaging & Communications**
- **Compensation schemes**
- **Climate & Environmental Reporting (i.e. TCFD)**

Including focus on:

- Governance
- Strategy
- Risk Management including Physical & Transition Risks Assessment
- Metrics, Scenarios & Targets (e.g. SBTi)

Engage

- **ESG Perception Analysis**
- **ESG Investor DNA & Intelligence**
- **Investor Targeting**
- **Investor ESG Engagement Strategy & AGM Advisory**
- **Management & Board Workshops (Education and Training)**

Targeted audience:

- Investor Relations
- Corporate Sustainability / Sustainable Finance
- Management & Board

S&P Global – who we are

- S&P and IHS Markit have merged under S&P Global brand
- We provide IR and ESG advisory as services.
- S&P Global is a leading provider of ESG data and solutions.
- We are a trusted partner for world-leading ESG and financial information solutions.
- S&P Global brings in an experienced team understanding you as a client as well as the demand from regulators and the market.
- This is complemented with the unparalleled availability and usage of ESG data and capital markets information provide by S&P.

Well-tested approach

- S&P Global's methodologies have been tested and applied on numerous projects across different industry sectors

Credible data

- S&P Global provides robust and credible data essential for business decision making and external reporting

Market penetration

- S&P Global own the world's largest and most comprehensive database of corporate environmental performance on over 15,000 companies

Data technology leader

- S&P Global is the first to develop a comprehensive carbon pricing risk data set for use by capital markets

*“We deliver **Data-Driven ESG Advisory** to offer our clients a one-stop-shop solution which is **unique** on the market”*

Climate & TCFD credentials

Because our track-record is the best proof of our expertise

TCFD Report

Description

- In 2018, S&P Global assessed climate-related risks and opportunities in accordance with the recommendations from the Task Force on Climate-Related Financial Disclosures (TCFD). The second TCFD report was just released in August 2020. The analysis for the Company's 2020 and 2019 report was informed by Trucost ESG Analysis, part of S&P Global. Trucost ESG Analysis took a robust, data driven approach to the TCFD assessment

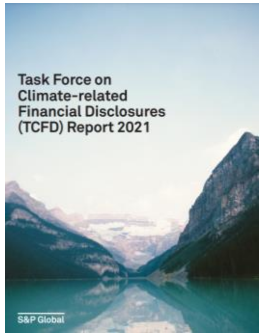
Client profile

- **Industry**: Financial information and analytics
- **Region**: Global

Project insights & benefits

- The in-depth TCFD assessment completed by Trucost ESG Analysis was an important step on S&P Global's journey to gaining a holistic view of the risks and opportunities material to the Company

Link to report



Climate Change Scenario Report

Description

- Ford engaged S&P Global to analyze the exposure of its facilities to the physical impacts of climate change for over 70 manufacturing and non-manufacturing sites across 17 countries

Client profile

- **Industry**: Automotive
- **Region**: Global

Project insights & benefits

- Based on S&P Global's (Trucost) analysis, the most significant climate-related risk for Ford is water stress, with Ford plants in India, China, South Africa and Mexico among those identified most affected. Flooding and cyclones/typhoons are also high risks for some sites in Asia

Link to report

Climate Change Impacts on Portfolio Analysis and Information Disclosure

Description

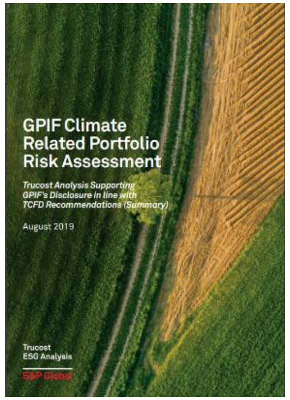
- Government Pension Investment Fund (GPIF) of Japan entrusted Analysis of Climate Change Impacts on Portfolios and Information Disclosure Support Services to Trucost and disclosed climate-related information for the first time in "ESG report 2018" in accordance with the recommendations published by the TCFD

Client profile

- **Industry**: Financial Services, Pension fund
- **Region**: Global

Project insights & benefits

- This report by S&P Global (Trucost) provides both forward looking and historical metrics that may be used by asset owners and/or asset managers to support their climate-related disclosures in line with TCFD recommendations, and inform internal processes for risk management and strategy development within an organization Link to report



S&P Global

We Accelerate Progress

Today, the right decisions lead to progress, for organizations and for the world.
Our essential intelligence is a catalyst to accelerate progress.

S&P Global Market Intelligence

S&P Global Ratings

S&P Global Commodity Insights

S&P Global Mobility

S&P Dow Jones Indices
A Division of S&P Global

S&P Global Engineering Solutions

S&P Global + IHS Markit

The S&P Global Advantage

Unparalleled data assets
Delivering product innovation across multiple industry sectors

Multi-asset class benchmarks
Supporting trading, thematic and factor-based investing

Comprehensive ESG and climate solutions
Informing sustainability, energy transition, and climate agendas

Leading global supply chain intelligence
Managing complex financial and operational risk

Public and private markets solutions
Connecting credit risk, data analytics and workflow

AI and Machine Learning capabilities
Bringing actionable insight and order to complex data