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Seven Ways to Inform Better Decisions with TCFD Reporting

The Task Force on Climate-related Financial Disclosures (TCFD) is helping to bring transparency to climate risk throughout capital markets, with the aim of making markets more efficient and economies more stable and resilient.

There are many stakeholders involved in the initiative, across corporations and financial institutions. Each can apply TCFD reporting intelligence to inform better decisions in different ways.



Finance Director



Investor Relations Manager



Purchasing Manager



Portfolio Manager



Sustainability Manager



Chief Investment Officer



Risk Officer

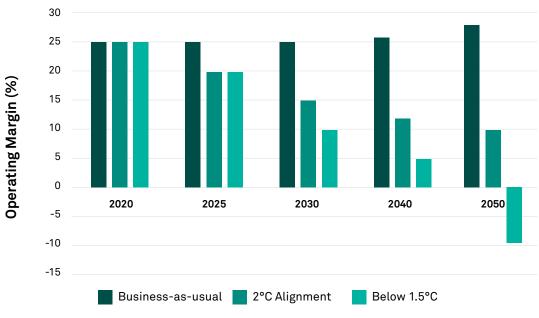
1. Finance Director:

Developing a business case to increase capital expenditure on carbon-mitigation projects



A global manufacturing company wanted to undertake a **carbon pricing risk assessment** to understand the current and potential future financial implications of carbon regulation, and related price increases, on operating margins. The Finance Director felt the results could strengthen the business case for investment in low-carbon innovation at operational sites around the world. He used the Trucost carbon pricing risk assessment in Figure 1 to illustrate the differences the company might see in its operating margins under different climate change scenarios and highlight where investment in carbon-mitigation projects would matter most.

Figure 1: Hypothetical Business Model Stress Test under Different Carbon Price Scenarios



2. Purchasing Manager:

Minimizing supply chain disruption by identifying suppliers that are vulnerable to physical risks



A global energy company wanted to undertake a **physical risk assessment** to understand the firm's potential exposure to climate hazards, such as heatwaves, wildfires, droughts, and sea level rise that could lead to supply chain disruptions and increased operating costs for the business. The Purchasing Manager felt the results could help identify raw material suppliers that may be affected by these hazards and provide an opportunity to speak with them about steps they are taking to mitigate these risks. As shown in Figure 2, a physical risk assessment can pinpoint vulnerable sites that could cause problems down the road.

Heatwave
Exposure Score
0 - 10 (Icow Risk)
11 - 20
21 - 30
31 - 40
41 - 50
51 - 60
51 - 60
91 - 100 (High Risk)

Power Plant (Nicaragua)
Heatwave Risk: 75 / 100
(High Risk)

Wind Farm (Chile)
Heatwave Risk: 6 / 100
(Low Risk)

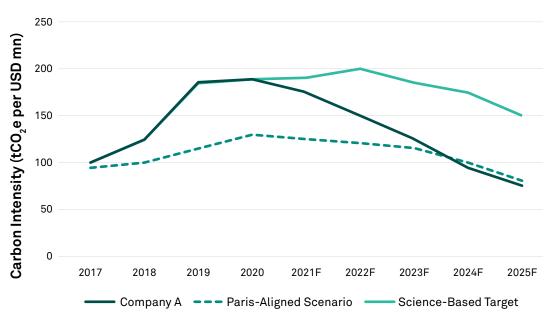
Figure 2: Hypothetical Heatwave Risk for the Assets of a Global Energy Company

3. Sustainability Manager: Setting science-based targets for company greenhouse gas (GHG) emissions



A global beverage company wanted to **quantify its carbon footprint** for its own operations and global supply chain. The Sustainability Manager saw this as an excellent starting point to set **science-based targets** for a reduction in emissions, with the targets reflecting the UN Paris Agreement and carbon reduction plans for countries in which the company did business. As shown in Figure 3, targets could help the company understand the reduction in emissions that would be needed to move to a low-carbon economy and enhance innovation.

Figure 3: Hypothetical Company-Level Paris Alignment and Science-Based Targets

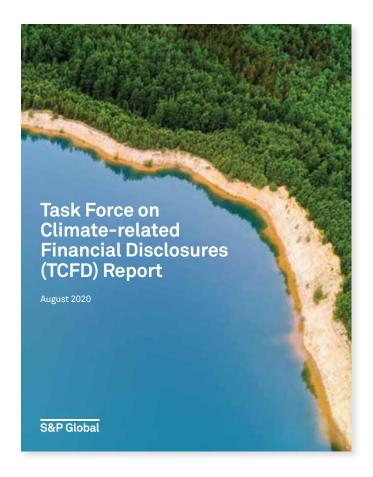


4. Investor Relations Manager: Publishing a TCFD-aligned report



A large consumer goods company wanted to assess the firm's **climate-related risks and opportunities** in accordance with the recommendations of the TCFD. Using four core elements – governance, strategy, risk management, and metrics and targets – the TCFD assessment helps quantify the financial impacts of climate-related risks and opportunities. The Investor Relations team wanted to report these findings alongside traditional financial metrics to publicize that the company was taking steps to manage climate-related issues. To illustrate what could be done, the team pointed to the TCFD Report shown in Figure 4 that was completed by S&P Global for its own operations.

Figure 4: Sample TCFD Report for S&P Global



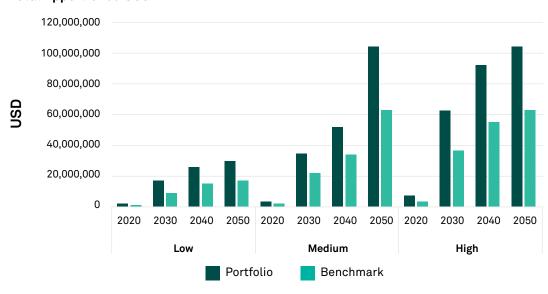
5. Portfolio Manager: Screening a portfolio for carbon earnings at risk using scenario analysis



An asset management firm wanted to test its investment strategy by assessing the current ability of companies to absorb future carbon prices so its analysts could estimate **potential earnings at risk**. Integral to this analysis is the calculation of the Unpriced Carbon Cost (UCC), which is the difference between what a company pays for carbon today and what it may pay at a given future date based on its sector, operations, and carbon price scenario. A Portfolio Manager wanted to use the findings, like those shown in Figure 5, to report these estimates of financial risk to stakeholders, and engage with portfolio constituents on their preparedness for policy changes and strategies for adaptation.

Figure 5: Sample Portfolio-level Carbon Earnings at Risk – The UCC Apportioned to a Portfolio and Benchmark under Three Scenarios and Reference Years

Total Apportioned UCC

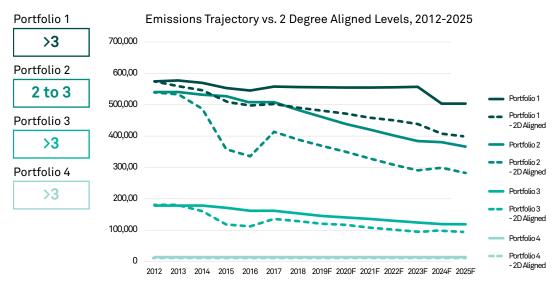


6. Chief Investment Officer (CIO): Using TCFD-aligned reporting as a way to engage asset managers on climate issues



A large pension plan wanted to undertake a **climate change alignment assessment** of their global equity and bond portfolios to understand how in sync they were with the goals of the Paris Agreement, and where there could be potential future carbon risk exposure. The CIO wanted to publish the results and use the findings, like those shown in Figure 6, to engage with the firm's asset managers to determine how they were integrating climate risk into investment decisions.

Figure 6: Sample Portfolio-level Paris Alignment



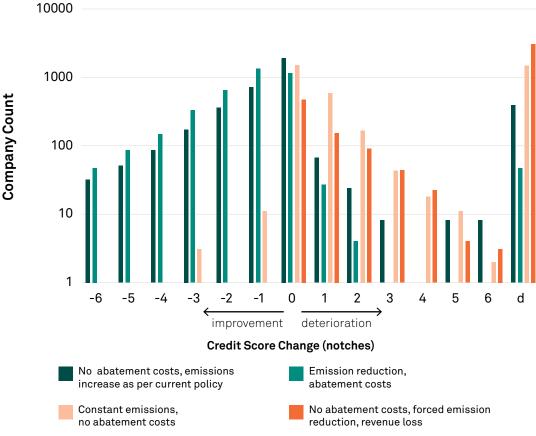
7. Risk Officer:

Assessing exposure to climate-linked credit risk



A large commercial bank wanted to estimate the **impact of a carbon tax on the credit risk of companies** in their loan book. The Risk Officer felt this would add an important dimension to the assessment of creditworthiness. Figure 7 highlights the changes that might be seen in quantitatively-derived credit scores for the Materials sector under a fast transition scenario. This shows a rapid increase in carbon tax, with companies reacting in various ways. Some invest in greener technology to meet the reduction targets in 2050 (green bars), while others do not invest and may pay a higher carbon tax or experience lost revenue resulting from bans on the use of certain materials (red bars).

Figure 7: Sample Distribution of Credit Score Changes by 2050 for Public Companies in the Materials Sector over a Fast Transition



Source: S&P Global Market Intelligence, September 2019. For illustrative purposes only.

For more information visit spglobal.com/marketintelligence/tcfd

There are many more examples of how TCFD reporting is helping organizations inform better decision-making and capture new opportunities in the transition to a low-carbon economy.

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