

CASE STUDY

An Asian Resource-Based Manufacturing Company Develops Climate Mitigation Plans in Line with TCFD

THE CLIENT:

A large resource-based manufacturing company in Asia

USERS:

The sustainability team

A new report from the United Nations Intergovernmental Panel on Climate Change (IPCC) warns of major and intensifying climate-related risks in the decades to come.¹ This includes:

- **Physical risks** related to floods, droughts, typhoons and more.
- **Transition risks** related to the market, technological, policy, legal and reputational costs associated with transitioning to a low-carbon economy.

This large resource-based manufacturing company in Asia adheres to both international and national sustainability standards for its businesses. The company had established goals for reducing its carbon footprint and wanted to report on climate change risks and opportunities in line with the guidelines of the Task Force on Climate-related Financial Disclosures (TCFD). The sustainability team was quite small, however, and didn't have the expertise to undertake a TCFD initiative, so needed external support.

¹ "Climate Change 2022: Impacts, Adaptation and Vulnerability", IPCC, February 28, 2022, www.ipcc.ch/report/sixth-assessment-report-working-group-ii/.



Pain Points

In preparation for its upcoming sustainability report, the company wanted to undertake a climate-related risk assessment of its businesses to manage physical and transition risks in line with TCFD requirements. This information would inform the company's longer-term strategy, help prioritize risk management activities and disclose information in a standardized manner. The sustainability team needed assistance for such an undertaking and wanted to identify a reputable third-party firm that could:

- **Conduct a study** of the company's different locations and vulnerabilities to physical and transition risks.
- **Help refine the targets** that had been set for reducing greenhouse gas (GHG) emissions.
- **Prepare a report** in line with the TCFD guidelines.
- **Present the findings** to senior management and the Board and discuss recommendations for moving forward.

The sustainability team reached out to S&P Global Market Intelligence ("Market Intelligence") to discuss how to solve their challenges.

The sustainability team had been accessing publicly available and in-house data to evaluate climate risks. It was clear that a more advanced approach was needed given the growing importance of climate issues and potential threats to the company's businesses.



The Solution

Market Intelligence described a consultative approach that would deliver actionable insights for the company, along with a TCFD report to share with stakeholders. Market Intelligence would gather operational data on the company's different businesses and combine this with its specialized datasets and models to assess climate-related risks and opportunities as per TCFD recommendations, which involves the use of scenario analysis. This would include assessing the quality, completeness and suitability of the data for the necessary calculations and using a unique methodology to fill in any gaps where needed. The end result would be business-relevant metrics for ongoing management and reporting of climate-related issues. The assignment would leverage Trucost capabilities, the data and analytical engine for many of S&P Global's sustainability solutions, to enable Market Intelligence specialists to:



Access deep environmental data

Trucost Environmental Dataset contains information on the direct and supply chain environmental impacts for a universe of over 15,000² companies, representing 98% of global market capitalization. Information about each company's environmental impact is updated annually using a mix of disclosed and, where gaps are present, modeled data. The data covers hundreds of environmental issues encompassing carbon and other pollutants, water dependency, natural resource efficiency and waste disposal.



Estimate carbon data when not available

Trucost Environmentally-Extended Input-Output (EEIO) Model brings together a vast database of industry-specific environmental impact data with quantitative macroeconomic data on the flow of goods

²Data as of January 2022.

and services between different sectors of the economy. The EEIO model lets users estimate environmental impacts for a company's own operations and across their entire global supply chain, given the availability of company revenue details by industry sector.



Delve into asset-level details

Trucost Physical Risk Dataset offers an asset-level approach to the assessment of physical risk at the company and portfolio level. This include data that provides detailed information to help understand the exposure of company-owned facilities and capital assets to seven climate-related physical impacts (i.e., flood, water stress, heatwave, cold wave, hurricanes, sea level rise, and wildfire) under different climate change scenarios. Scores at an asset level can then be aggregated to a company level.



Assess the ability to absorb future carbon prices

Trucost Carbon Earnings at Risk Dataset can be used to stress test a company's current ability to absorb future carbon prices and understand potential earnings at risk from carbon pricing. Integral to this analysis is the calculation of the Unpriced Carbon Cost, which is defined as 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 a given policy price scenario.



Track progress on meeting the Paris Agreement goals

Trucost Paris Alignment Dataset assesses company-level alignment with the Paris Agreement goal to limit global warming to well below 2°C from pre-industrial levels. This dataset can help track performance against scenarios that limit global warming to 1.5°C and 2°C.



Evaluate financials

S&P Capital IQ Fundamentals provides standardized data for over 5,000 financial, supplemental and industry-specific data items for over 150,000 companies globally, including more than 95,000 active

and inactive companies across multiple industries. Data is available at numerous frequencies.



Establish targets and metrics

Targets and metrics can be established to measure and manage GHG emissions and become more efficient and resilient over time.



Create a TCFD report

End-to-end TCFD reporting services help quantify climate-related financial risks and opportunities for disclosure to company stakeholders, helping to turn metrics into action.



Key Benefits

The sustainability team saw many benefits to the Market Intelligence solution and proceeded with the assignment. This involved a kick-off meeting to confirm the project's scope and timing, an interim meeting to discuss progress to date and a final climate scenario workshop for senior management and Board members. The consultative approach provided:

- **Backing by a team of climate specialists** with extensive experience evaluating climate-related risks and opportunities.
- **Access to deep environmental data** not available elsewhere that was delivered in Excel spreadsheets for future use.
- **The ability to fill in data gaps** when necessary using a time-tested methodology.
- **Analytical rigor to assess both the physical and transition risks** associated with climate change and alignment with the Paris Agreement.
- **Reputable TCFD reporting** to demonstrate the company's commitment to reducing its GHG emissions.

- **The ability to monitor targets** and establish an appropriate mitigation and resilience plan, especially for sites that face possible physical risks that could have a material impact on the company's financial performance.

Click [here](#) to explore some of the solutions used in this case study.

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