

# ICE Sustainable Finance Data

## Climate Transition Value-at-Risk Dashboard

### Overview

ICE's Climate Transition Analytics Climate Transition Value-at-Risk (CTVaR) Dashboard key features:

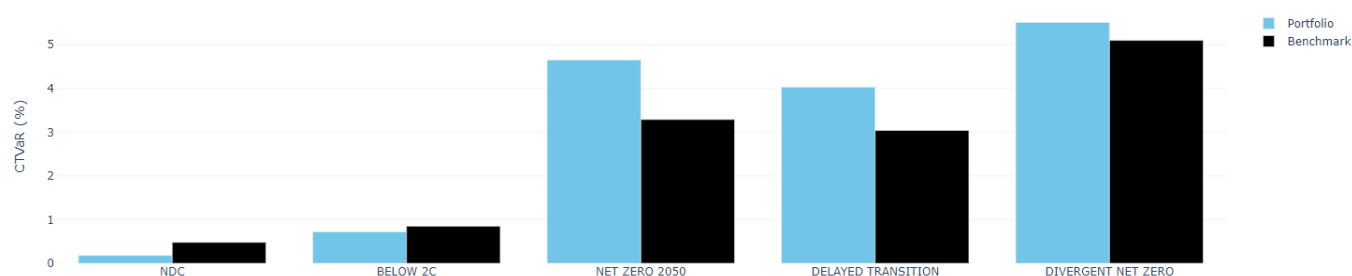
- 30,000+ Global Companies<sup>1</sup>
- Scope 1+2 and Scope 1+2+3 Emissions
- Consistent with widely used climate transition scenarios
- Company specific decarbonisation targets
- Transparent presentation of results and underlying drivers
- Upload custom financial assumptions (public & private companies)

### Objective

The CTVaR Dashboard can be used to assess the climate transition risks of a portfolio or company. The metric utilizes a climate-financial model to calculate the potential financial risk of a company that does not align its emissions to a relevant climate-transition scenario. The user can select to include or exclude company greenhouse gas (GHG) targets and view the associated climate-financial metrics at the Portfolio, Sector and Company level, as well as upload custom financial assumptions to produce tailored CTVaR metrics.

This product guide can be reviewed alongside the CTVaR Dashboard on the ICE Climate Transition Analytics Platform.

Portfolio Climate Transition Value-at-Risk



Source: Climate Transition Value-at-Risk - Portfolio CTVaR, ICE Climate Transition Analytics Platform, as of June 2024; figure provided for illustrative purposes only

<sup>1</sup> As of June 2024.

## Dashboard Analytics

The below screens are available as part of the CTVaR Dashboard:

### Portfolio Analysis

- Compare a portfolio's CTVaR against a benchmark across multiple climate transition scenarios.
- Assess portfolios Earnings and Emission projections under different climate scenarios.

### Company Analysis

- Compare a company's CTVaR against its peer group.
- Download company-level CTVaR for multiple climate transition scenarios. Sector Allocation effect - illustrates the impact of sector weighting on the carbon intensity against the benchmark.

### Categorical Analysis

- Assess sector or regional CTVaR distribution and overall contribution to portfolio across multiple climate transition scenarios.

### Custom Assumptions

- Upload financial assumptions for individual companies in your portfolio to view CTVaR analysis based on the custom inputs.
- Uploaded custom assumptions can be included or excluded from portfolio, categorical and company analysis.
- Uploaded custom assumptions are user specific.

## CTVaR Dashboard Description

The following descriptions explain the different approaches used to create the analytics within the Dashboard:

### CTVaR Calculation

The CTVaR metric uses a climate financial model to measure the transition risk of a company. Depending on the business-as-usual (BAU) pathway and the potential future pathway (e.g., 2C), an economic actor may face transition risk, each typically measured as CTVaR. It is calculated as the share in earnings being lost due to the additional costs associated with not aligning its emissions to a climate-transition scenario.

### The Magnitude of Emission Misalignment

This is calculated as the emissions difference between the business-as-usual pathway and that of the relevant climate transition scenario.

**BAU:** This can either represent current policies or future emissions trajectory of a company incorporating targets it has set to reduce GHG.

**Scenario Aligned Pathway:** Pathways start with the company’s historical emissions and follow the sectoral emission growth (or decarbonization) rate of the climate transition scenario. For example, if a sector is expected to halve its emissions by 2030, then we expect the company to also halve its emissions by 2030.<sup>2</sup>

### Climate Transition Cost

To calculate the annual costs associated with not aligning to a climate transition scenario, the “excess emissions” of a company are multiplied by the relevant regional carbon price of the scenario.

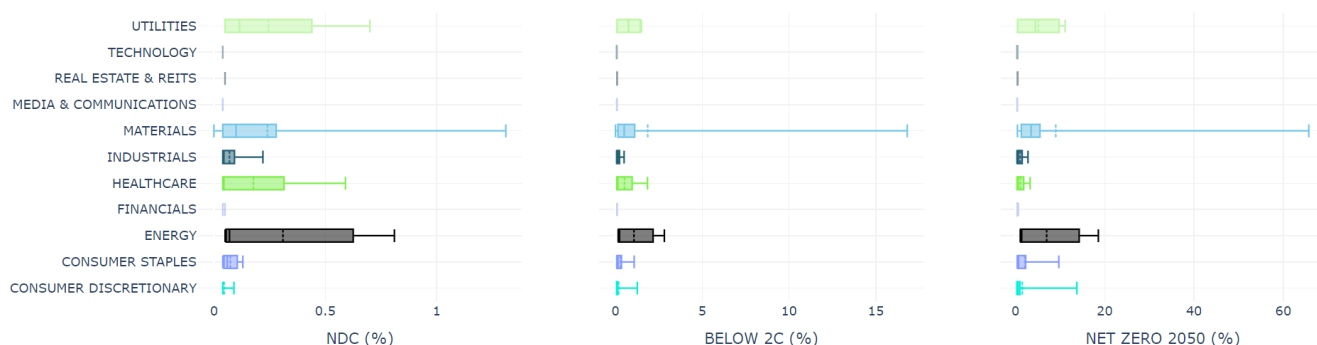
### Financial Modelling

A company’s future earnings are adjusted for climate transition costs and discounted to present value to calculate the final CTVaR of each company. This is done by projecting the earnings before interest, taxes, depreciation, and amortization (EBITDA) up to 2050 to capture the impact of transition risks over a relevant time span. According to our analysis of key climate scenarios, decarbonization policies are expected to produce the largest part of the structural transformation required to transition to a low-carbon economy by 2050. The projected EBITDA are then discounted back to present value using the weighted average cost of capital of the company.

### Portfolio CTVaR

The Portfolio CTVaR is calculated as the investment weighted average CTVaR of each company within a portfolio.

**Portfolio Sector CTVaR Distribution**



Source: Climate Transition Value-at-Risk - Sector CTVaR Distribution within a Portfolio, ICE Climate Transition Analytics Platform, as of June 2024; figure provided for illustrative purposes only

<sup>2</sup> For more details on Scenario Aligned Pathways refer to the “ICE Sustainable Finance CTA Net Zero Analysis Module Product Guide”.

## FAQs

**Which climate scenarios are used in the CTVaR metric?** Currently for CTVaR modelling, we use Network for Greening the Financial System (NGFS) Phase 4 climate scenarios. In the future we look to support other climate scenarios developed by providers such as Intergovernmental Panel on Climate Change (IPCC) and International Energy Agency (IEA).

**Why are both Scope 1 and Scope 2 emissions used for CTVaR calculation?** This is in line with the objective of the CTVaR metric to represent a conservative measure of potential financial risk. Scope 2 emissions are within the control of companies and could lead to direct costs. For example, utility companies could pass-through their Scope 1 costs to their customers, and Scope 2 emissions could be included in carbon pricing mechanisms. However, we also allow the user to include Scope 3 emissions to calculate CTVaR.

**Which growth rates are used in the financial modelling?** The earnings for all companies are projected based on historical Compound Annual Growth Rate (CAGR) and the earnings margin in the short-term and based on the Gross Domestic Product (GDP) growth rate assumed in the relevant climate scenario in the medium- and long-term.

**How does the custom assumption upload work?** For **public companies**, users can download a custom assumptions template, where the users can fill in the template and upload it to the dashboard. At least one assumption needs to be provided to be used within the dashboard. For example, if you provide custom values for the discount rate and earnings margin, then the model will calculate CTVaR metrics using the custom values provided and use ICE default values for short-term revenue growth. The values of the assumptions must be greater than 0 and less than or equal to 1. For example, if the discount rate is 10% then the input value in the template must be 0.1.

*Discount rate:* A discount rate is the rate of return used to discount future cash flows back to their present value. The typical discount rate used in corporate finance is a company's Weighted Average Cost of Capital (WACC). A discount rate is used to calculate the Net Present Value (NPV) of a business as part of a Discounted Cash Flow (DCF) analysis.

*Earnings (EBITDA) margin:* The EBITDA margin measures a company's earnings before interest, tax, depreciation, and amortization as a percentage of the company's total revenue.

*Short-term growth:* The compound annual growth rate (CAGR) of company's revenue over a period of time, typically 3-5 years.

Once submitted on the platform, using the provided inputs, CTVaR metrics will be calculated overnight and be available for analysis within the dashboard the following day.

At present, custom assumptions can be provided for **private companies** upon request. This will involve a two-step process:

1. Private Inference - whereby we ask clients to provide the following inputs: Revenue, Sector Classification and Geographic location to estimate emissions and future emissions projections.
2. Custom Assumptions for CTVaR - clients to provide at least one of the three assumption inputs (discount rate, earnings, or short-term growth) or use ICE default values to calculate CTVaR metrics.

**Can I update previously uploaded custom assumptions?** Yes. Once the user uploads new assumptions, the system will recalculate based on the latest values provided by the user.



More information: [ice.com/sustainable-finance-data](https://ice.com/sustainable-finance-data)

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