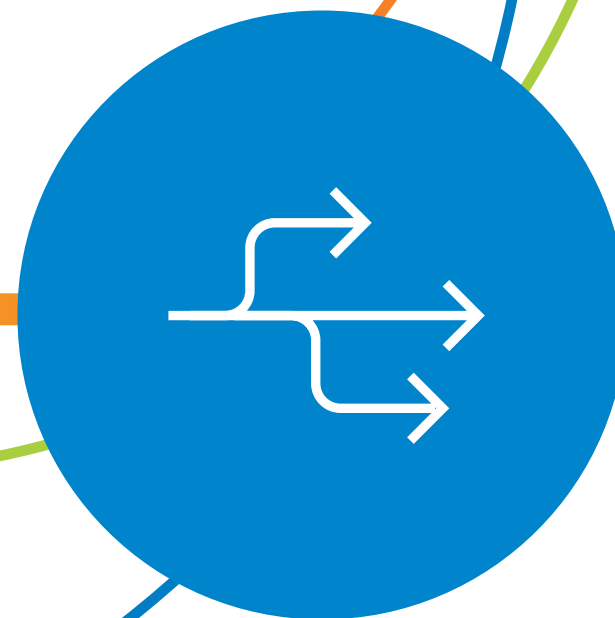




CLIMATE MAPS

Systemic Climate Risk-Aware Economic
and Financial Scenarios

Climate & ESG Solutions



Navigate a Changing Climate

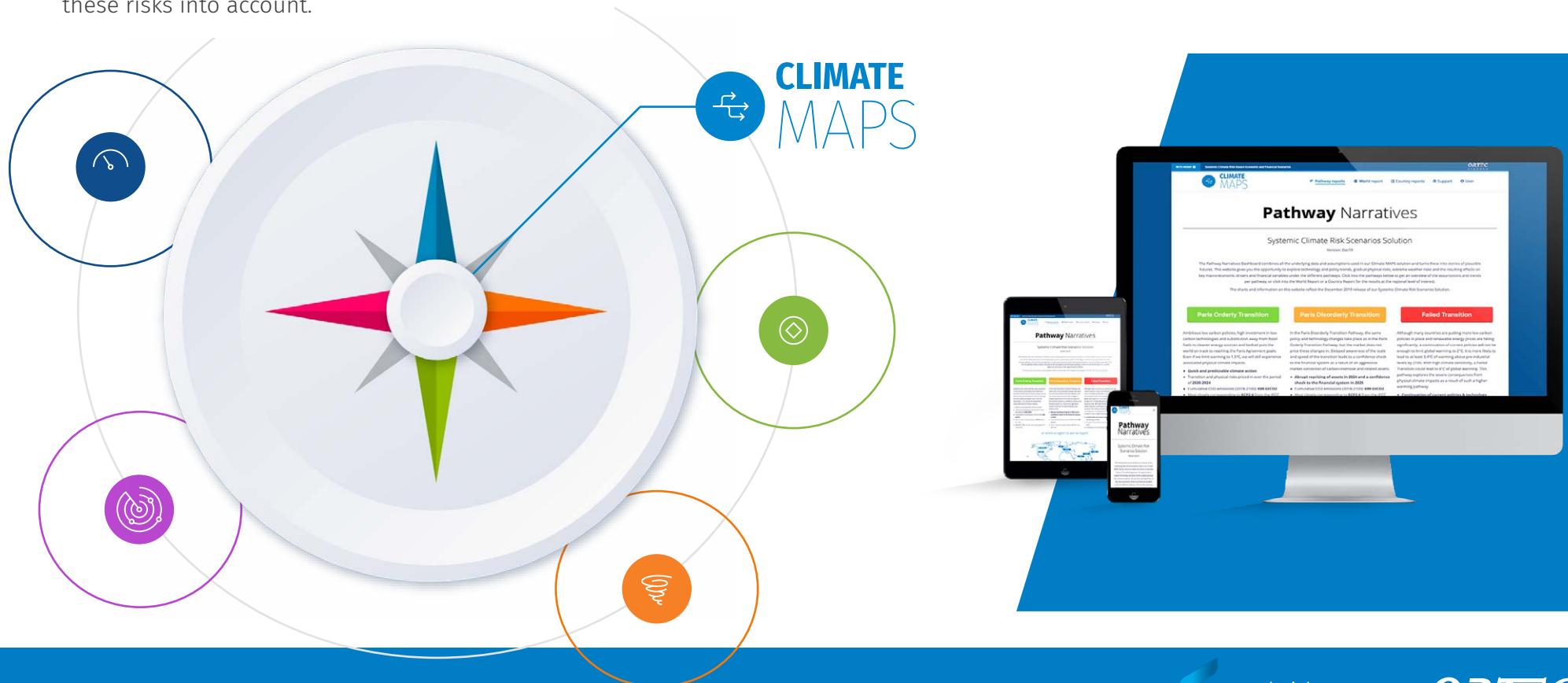
With Ortec Finance's Climate & ESG Solutions

Climate MAPS quantifies your portfolio's exposure to systemic climate-related financial risks & opportunities across different climate scenarios

Our solution equips investors with climate-informed risk-return metrics, including in absolute dollar value, that quantify exposure to systemic climate risks & opportunities across asset classes, regions, sectors and holdings. This enables investors to consistently integrate climate risk into risk-management, strategic asset allocation and asset liability management for investment decision-making.

Climate Risks are Systemic:

Transmission channels & dynamic feedback loops between companies, sectors and countries amplify risk. Climate risk will therefore fundamentally impact how economies & markets perform as a whole. That is why financial regulatory bodies recommend that investors take these risks into account.



Key Strengths

Know your climate-related financial risk: What? When? Where? And How Much?



Independent and **research-based**, combining latest climate science with econometric and financial modeling technology



Results expressed in **financial metrics** (e.g. risk-return) that are **easily integrated** into any SAA/ALM software



Transition and physical risks, including unique climate-attributable **extreme weather events** modeling



Captures market **'pricing-in' effects** of transition and physical risks, in addition to climate-adjusted growth expectations



Enables integral climate risk exposure assessment across (sub-)asset classes, regions, sectors and holdings



Flexible approach, we can adjust to client specific views



Applications

How we can help you integrate climate risk into financial decision-making

Climate MAPS enables you to measure, monitor, and manage the impact of climate change on your financial performance at total portfolio, asset class, sector, country and holding levels. Here are some example use cases:

Asset Owners

Insight in resilience of portfolio's risk budget under different climate scenarios.

Insurers

Insight in how to increase resilience through asset, regional and sector reallocation.

Personal Wealth Advisors

Provide retail or high net-worth clients with climate risk-aware personal wealth management advice.

Asset Managers

Develop systemic climate risk-aware investment products.



Disclosure:

Fulfilling forward-looking scenario-based analysis in line with TCFD, UN PRI, etc.

Quantified, systemic climate risk portfolio scan results fulfill requirements of pillar 2 'Strategy' of the TCFD disclosure recommendations.

A Tool Built on Robust Climate Science

Opt for standardized or bespoke global warming pathways



Global Warming Pathways Modeled

Paris Orderly Transition

Orderly transition
pathway
Locked-in physical
impacts

Paris Disorderly Transition

Disorderly transition
pathway
Locked-in physical
impacts

Failed Transition

Business-As-Usual
(only currently committed
transition effects)
Dramatic physical impacts

Our global warming pathways are aligned with the RCP scenarios put forth by UN Climate Change's (UNFCCC) appointed scientific body IPCC.

Climate MAPS is based on scenario analysis, using the combination of a macroeconomic and financial model. Scenario analysis is a powerful method for assessing uncertainty, to help you gain insight into what lies ahead, whether the coming period will be one of high growth or high volatility. Climate MAPS aims to help you determine which asset mix is most suitable or robust across a range of potential futures.

Ortec Finance has the capability to offer bespoke scenarios or to model a range of standard scenarios designed by regulatory or policy bodies.

Our Methodology at A Glance

In partnership with Cambridge Econometrics



Climate-Informed Input Data & Assumptions



Physical Risk Factors:

Gradual and extreme weather drivers

Transition Risk Factors:

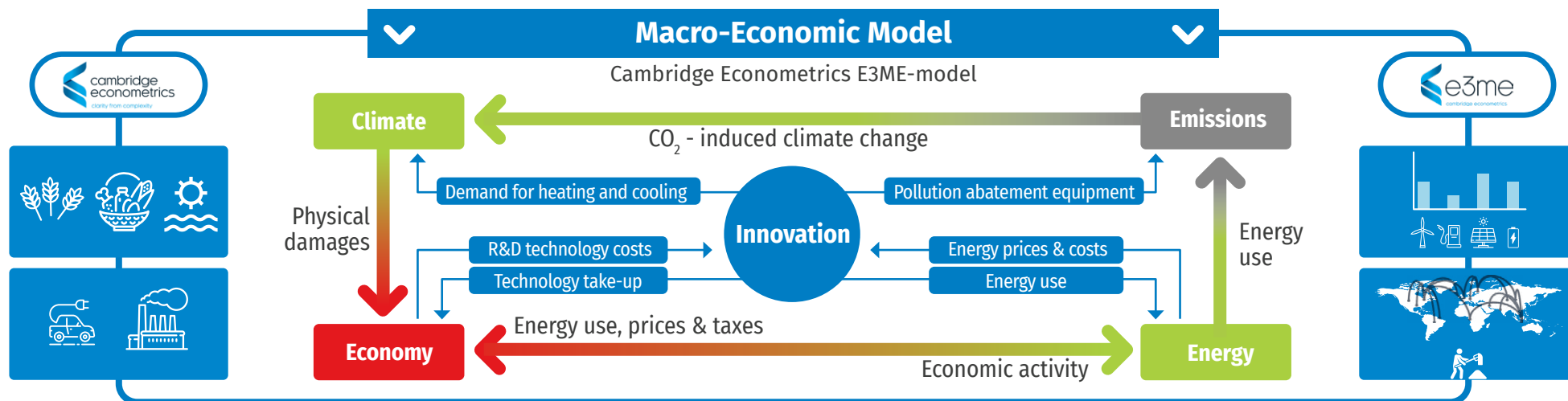
Policy and technology drivers



Macro-Economic Model



Cambridge Econometrics E3ME-model



Stochastic Financial Model



Translates climate-adjusted GDP, inflation and sector GVA expectations over time to 600+ financial and economic variables via stylized facts based on historic relations per year, per country, per sector and per holding.



Systemic Climate Risk-Aware Scenarios Sets



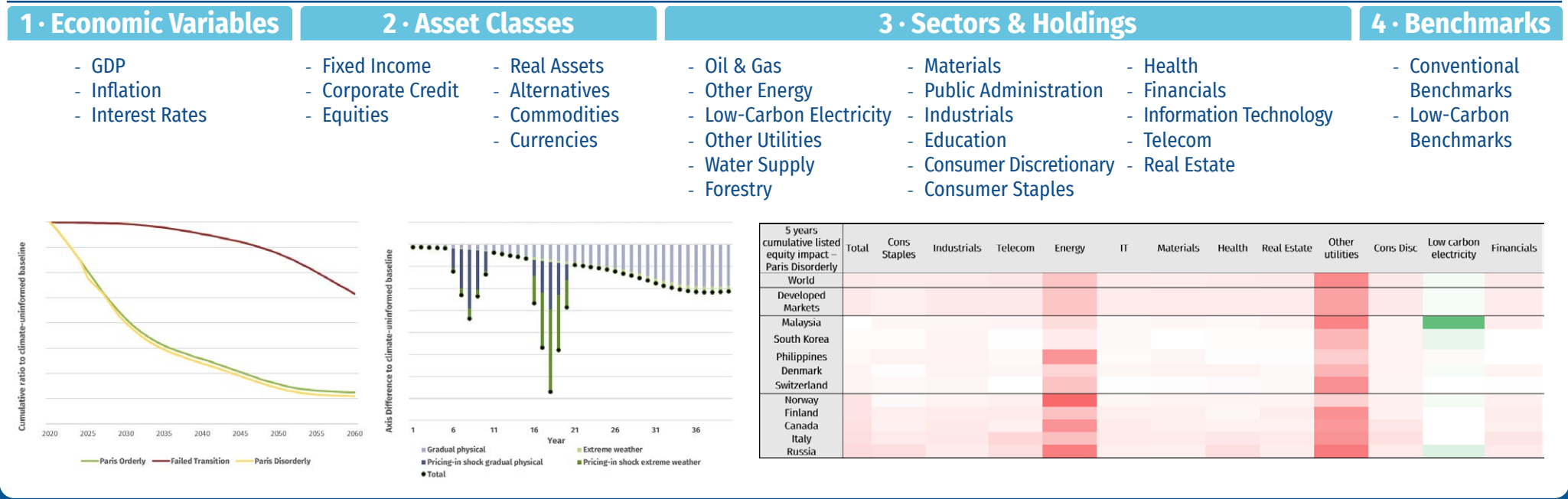
Climate-adjusted growth expectations and pricing-in dynamics up to the year 2060.

Outputs You'll Receive

Delivery options: online portal, dataset or report



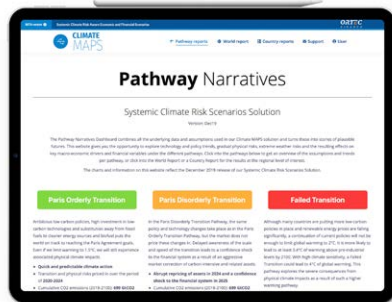
Model OUTPUT = Climate-adjusted risk-return metrics up to 40 years ahead (annual time steps) for...



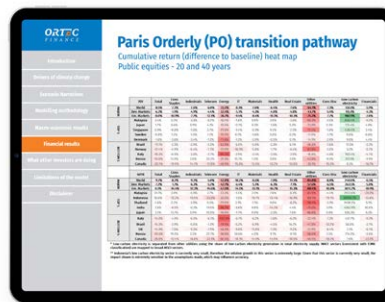
Client Deliverables

Our comprehensive modular offering

Access to the Climate Scenario Narratives Dashboard



Portfolio-Specific Climate Risk Report



Climate-Informed Economic & Financial Scenario Dataset License



In-depth Climate Risk Methodology & Insights Workshop



Optional Module: Climate SIGNS



Access to Climate SIGNS dashboard

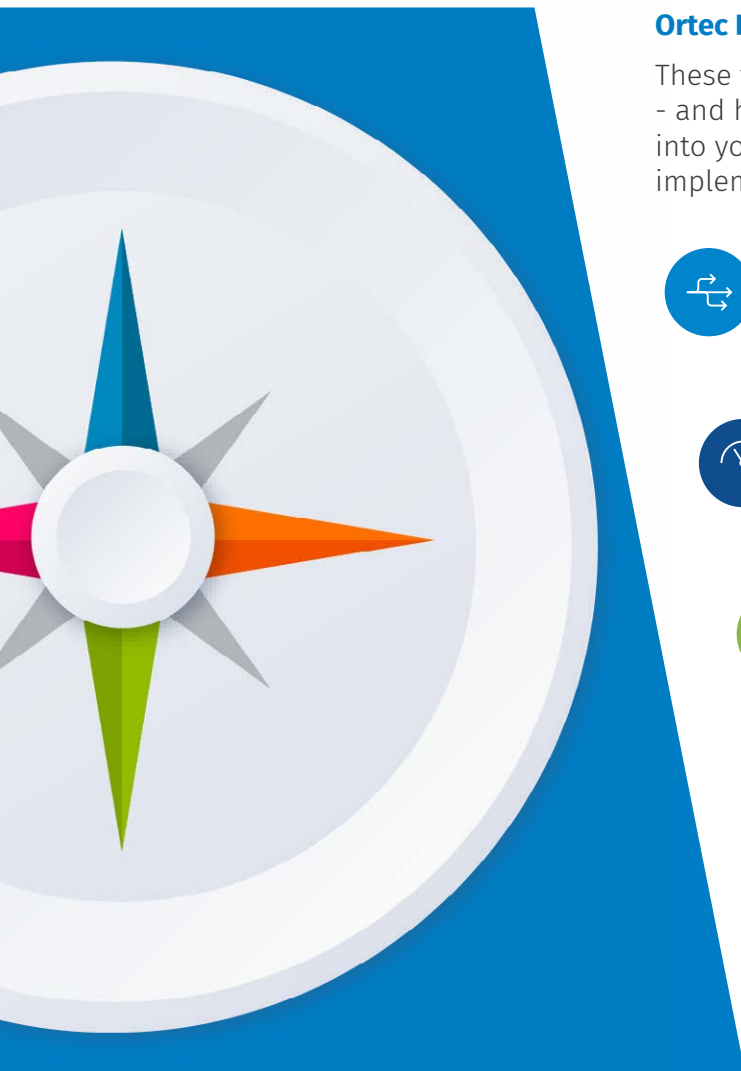
Optional Module: Climate PREDICT



Access to Climate PREDICT dashboard

The Compass

Climate & ESG Solutions



Ortec Finance has developed five tools to support you as an investor to navigate climate change.

These tools offer economic and financial insights into your investments' vulnerabilities and opportunities - and how to act on them. Insights are **quantified** and expressed in **financial metrics** for easy integration into your investment decision-making & reporting frameworks. Our tools can be integrated into **software**, implemented separately, or utilized in various combinations depending on your **specific needs**.



CLIMATE
MAPS

Maps out your portfolio's exposure to systemic, economic and financial climate risks.

In partnership with Cambridge Econometrics



CLIMATE
SIGNS

Signposts the world's actual climate trajectory.



CLIMATE
ALIGN

Monitors portfolio alignment with net-zero GHG emissions by 2050.



CLIMATE
PREDICT

Assesses your real assets' exposure to future extreme weather events.







ESG
RADAR

Alerts you to material ESG breaking news.

Do you have other challenges?

Other solutions provided by Ortec Finance

	Insurance Companies	Pension Funds	Sovereign Wealth Funds	Wealth Management / Banks	Asset Manager
 GLASS for Pensions and Insurance Asset and liability scenario solution that improves financial decision making and risk management by simulating the short and long-term solvency position.	✓	✓	✓		✓
 PEARL The acclaimed performance measurement & attribution solution.	✓	✓	✓		✓
 OPAL Goal-based financial planning and monitoring solution.	✓	✓		✓	✓
 Real world economic scenarios Ortec Finance Scenarioset (OFS) generated by the Dynamic Scenario Generator (DSG). Ortec Finance also offers Risk Neutral scenarios	✓	✓	✓	✓	✓

Contact Us

Speak to one of our experts



Ortec Finance is a leading provider of technology and solutions for risk and return management.

It is our purpose to enable people to manage the complexity of investment decisions. We do this through delivering leading technologies and solutions for investment decision making to financial institutions around the world. Our strength lies in an effective combination of advanced models, innovative technology and in-depth market knowledge. This combination of skills and expertise supports investment professionals in achieving a better risk-return tradeoff and thus better results.

Headquartered in Rotterdam, Ortec Finance has offices in:
Amsterdam, London, Toronto, Pfäffikon and Melbourne.

Willemijn Verdegaal

Co-Head Climate & ESG Solutions



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20+ countries represented



500+ customers



96% retention rate



3 trillion euro total assets
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