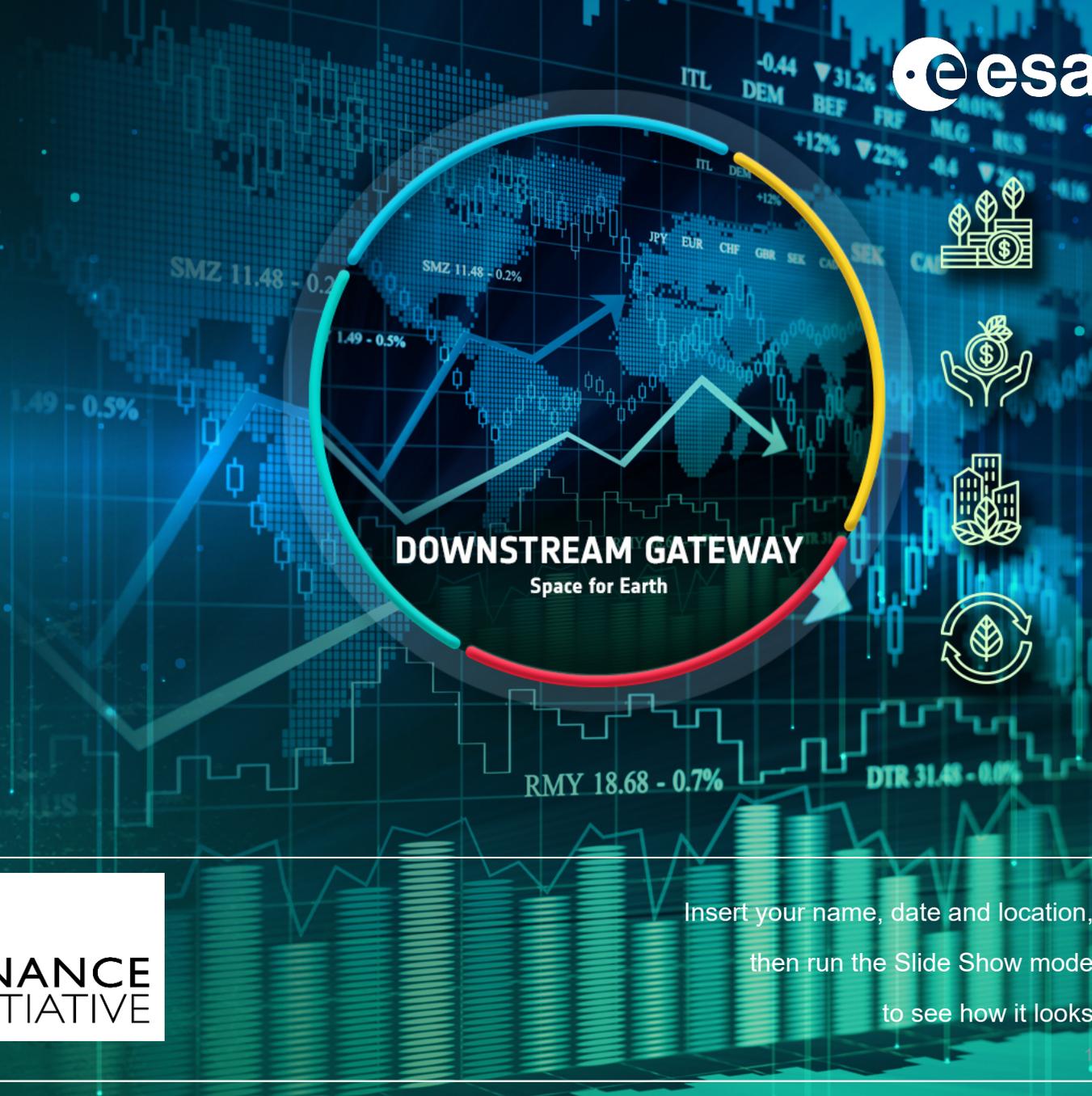


SPACE FOR FINANCE



TCFD Programs and Outputs



Insert your name, date and location, then run the Slide Show mode to see how it looks

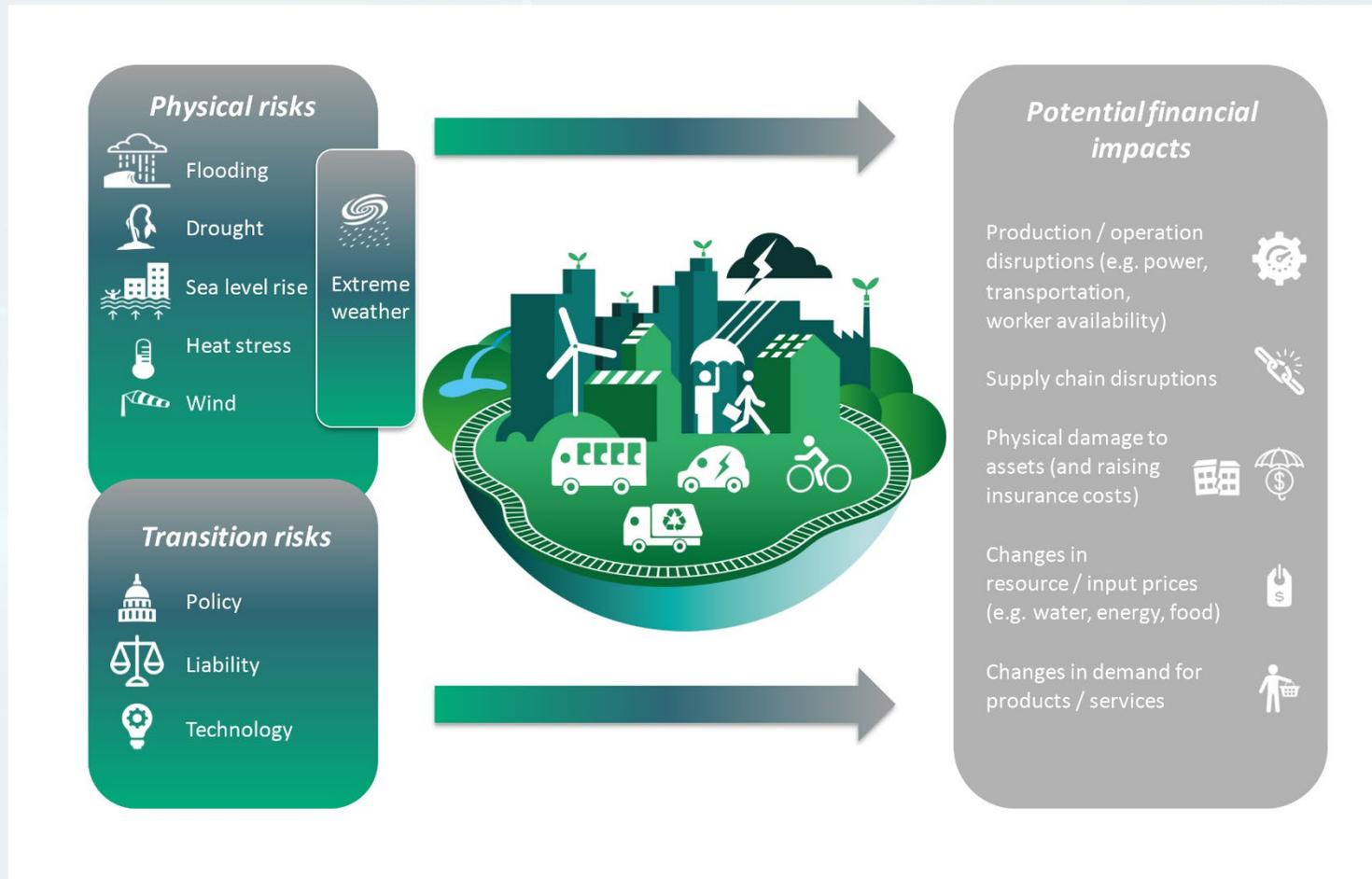
“Changes in climate policies, new technologies and growing physical risks will prompt reassessments of the values of virtually every financial asset. Firms that align their business models to the transition to a net zero world will be rewarded handsomely. Those that fail to adapt will cease to exist.”

– Mark Carney, Chair of the Financial Stability Board 2011-2018

How Climate Risks impact financial institutions

Climate risks are financial risks

Climate risks and financial impacts₁



Since 2017, UNEP FI's TCFD Programs have engaged dozens of institutions Thirty-nine Global banks participated in phase II of the TCFD Banking Pilot



UNEP FI consortium

- Following the publication of the TCFD recommendations, UNEP FI convened a consortium of **16 international banks** to pilot climate scenario analysis
- UNEP FI and the consortium collaborated with Oliver Wyman and Acclimatise to develop a **methodology for assessing climate change-related risks and opportunities**



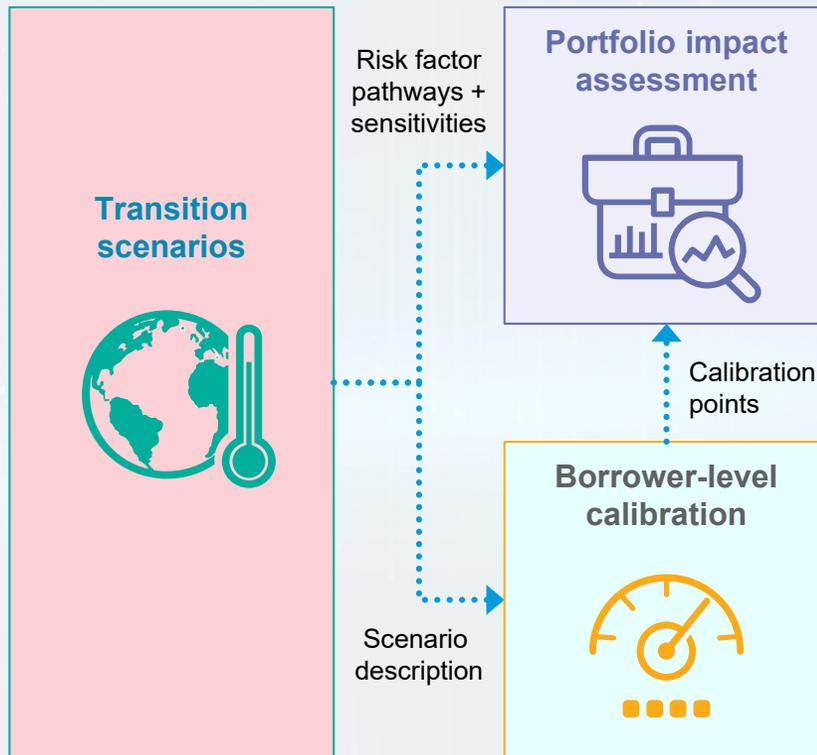
Key outcomes

- Increased the amount of **reliable information** on exposure to climate
- Promoted **consistency and comparability** in climate change assessments
- Developed a methodology that is **adaptable and flexible** for banks in all geographies
- Enhanced the ability to **implement the TCFD recommendations**

ICFD Banking Phase I: Transition risk assessment framework

This methodology integrates climate science with credit risk metrics to produce portfolio loss estimates

Overview of the transition risk framework



 **Transition scenarios** describe an evolving economic environment in a consistent manner across time, sectors, and geographies. Scenarios provide detailed outputs to define sector-level exposure to transition impacts.

 **Borrower-level calibration** addresses the lack of empirical data on corporate exposure to transition risk by using industry experts to estimate the scenario's impact on individual borrowers. Calibration specifies the relationship between economic scenarios and credit outcomes.

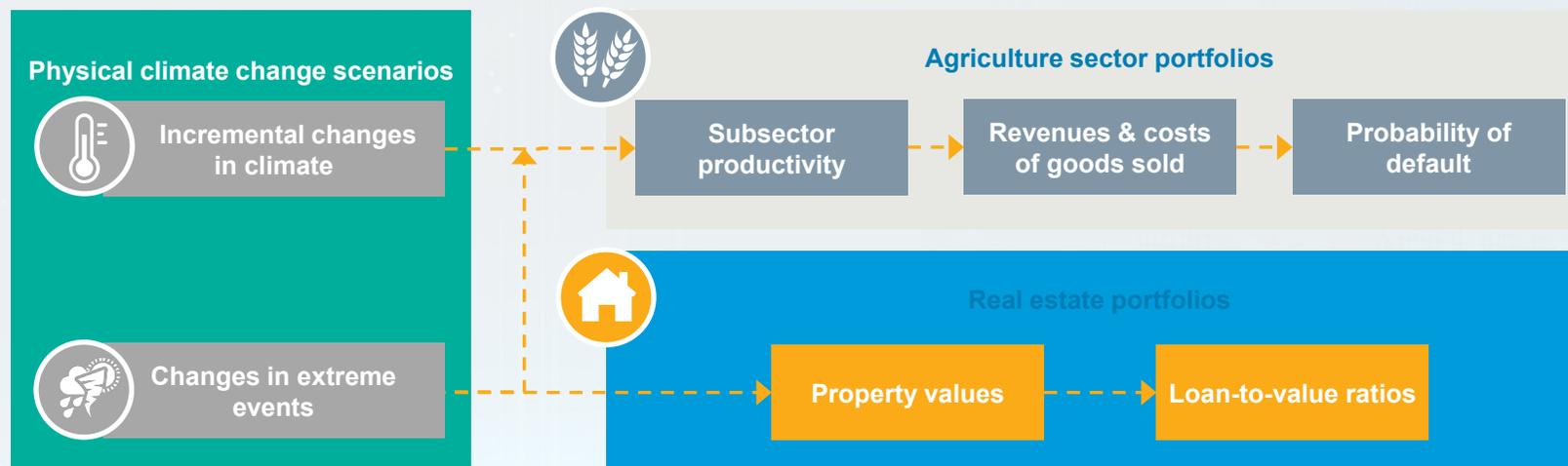
 **Portfolio impact assessment** uses a systematic and repeatable approach to extrapolate the risk assessed by the other modules to the remainder of the portfolio.

TCFD Banking Phase I: Physical risk assessment framework

The Physical risk methodology explored both extreme events and incremental changes



Overview of the physical risk framework



Agriculture

1. Select representative sample of borrowers to assess
2. Identify climate change impacts on subsector productivity, price, downtime
3. Assess implications for borrowers' finances: changes in revenue & costs of goods sold
4. Estimate changes in probability of default: stress the factors/ratios in banks' internal credit rating models that have revenue and cost components
5. Extrapolate findings to whole portfolio subsector



Real estate

1. Identify properties facing risk of extreme events using existing online risk assessment platforms
2. Estimate probabilities of properties encountering extreme events in future
3. Assess potential changes in property values for 'at risk' properties
4. Calculate revised loan-to-value ratios



Climate scenarios

- Explore the spectrum of climate scenarios
- Identify scenario differences and key assumptions
- Learn how to use scenarios to assess risks and opportunities
- Identify relevant internal and comparable reference scenarios



Data and methodology

- Determine availability of climate relevant asset-level data
- Advance and refine phase I methodologies for risk and opportunity assessment
- Create a comprehensive risk taxonomy across sectors and geographies
- Develop best-practices around sector/geographical assessments



Reporting and governance

- Understand expectations around TCFD disclosures
- Develop approaches to standardize disclosures
- Develop practices for creating an internal climate risk program
- Draft TCFD disclosures

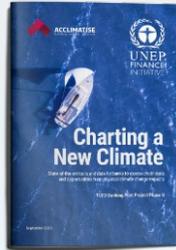
TCFD Banking Phase II: Outputs

These deliverables provide industry perspectives on scenarios, methodologies, and disclosures



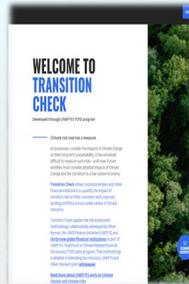
Physical risk blueprint

- Developed with Acclimatise
- Assessment of existing data portals
- Piloting of physical risk tools
- Piloting of correlation analysis
- Exploration of opportunities



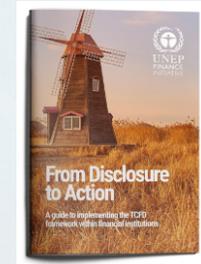
Transition risk webtool

- Developed with Oliver Wyman
- Open to all UNEP FI members
- Publicly available scenario visualizer
- Can incorporate most IAM scenarios



Transition risk perspective papers

- Financial sector use of climate scenarios
- Evaluating a disorderly transition
- Extending the phase I methodology
 - Transition risk heatmaps
 - Expansion to new sectors
- Climate risk governance and application



TCFD template and database

- Collaboration with IIF
- Guide to best practices on disclosure
 - Illustrative examples
 - Specific details for each disclosure
- Database to assess existing disclosures
 - Evaluation of methodologies used
 - Opportunity for peer benchmarking

