

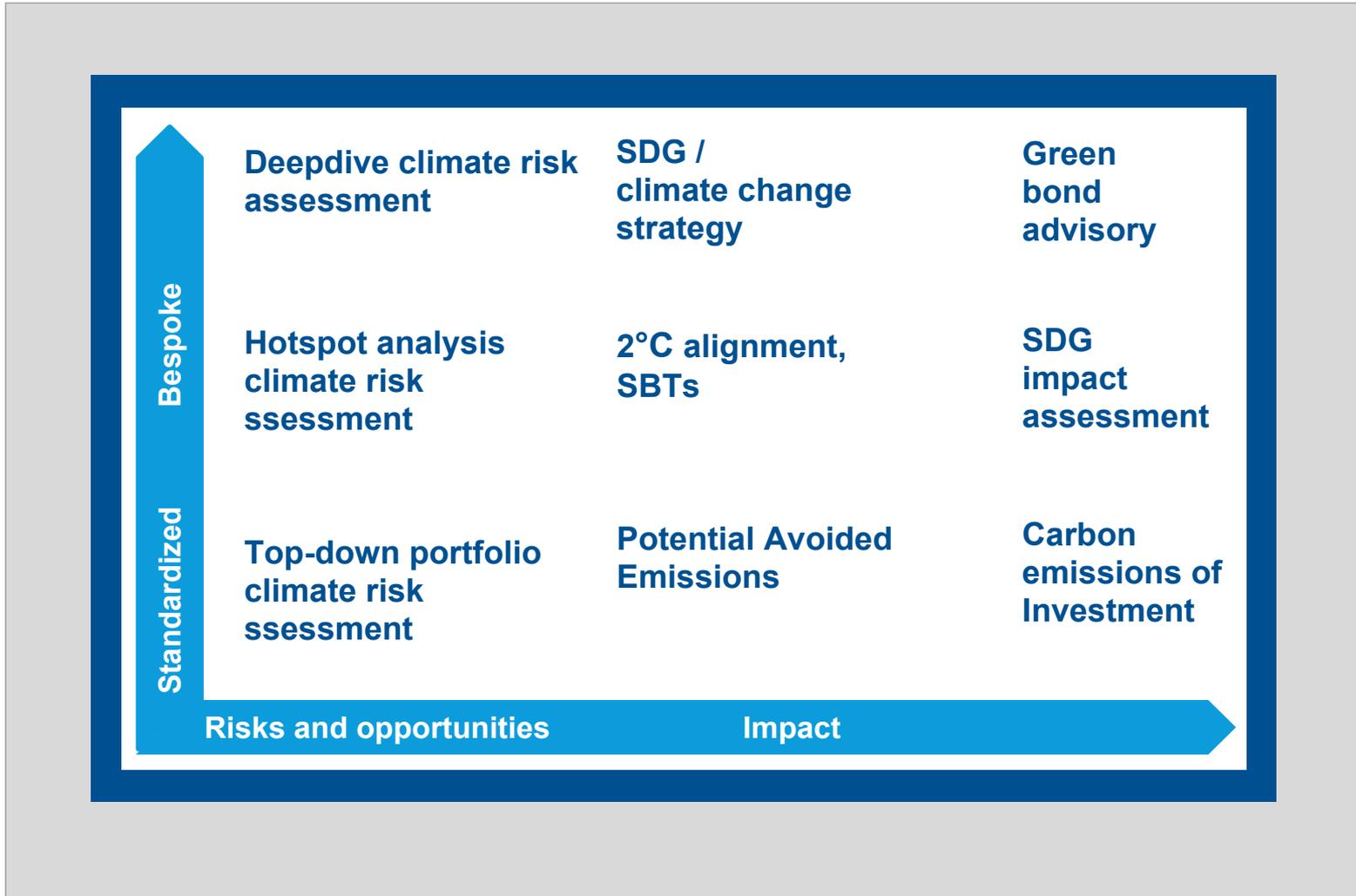
South Pole

South Pole's Climate Risk Tool for Investors

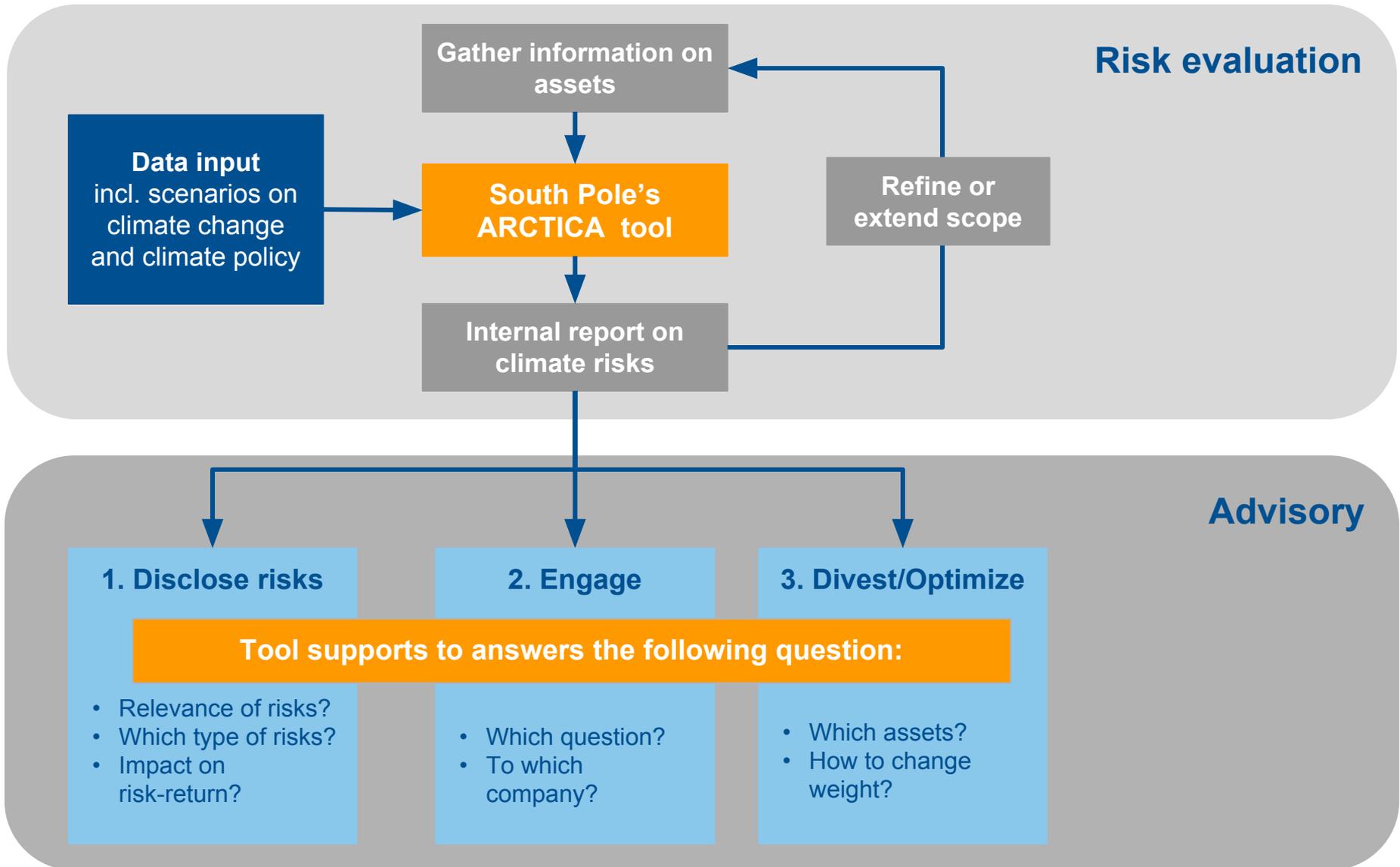
November 2018



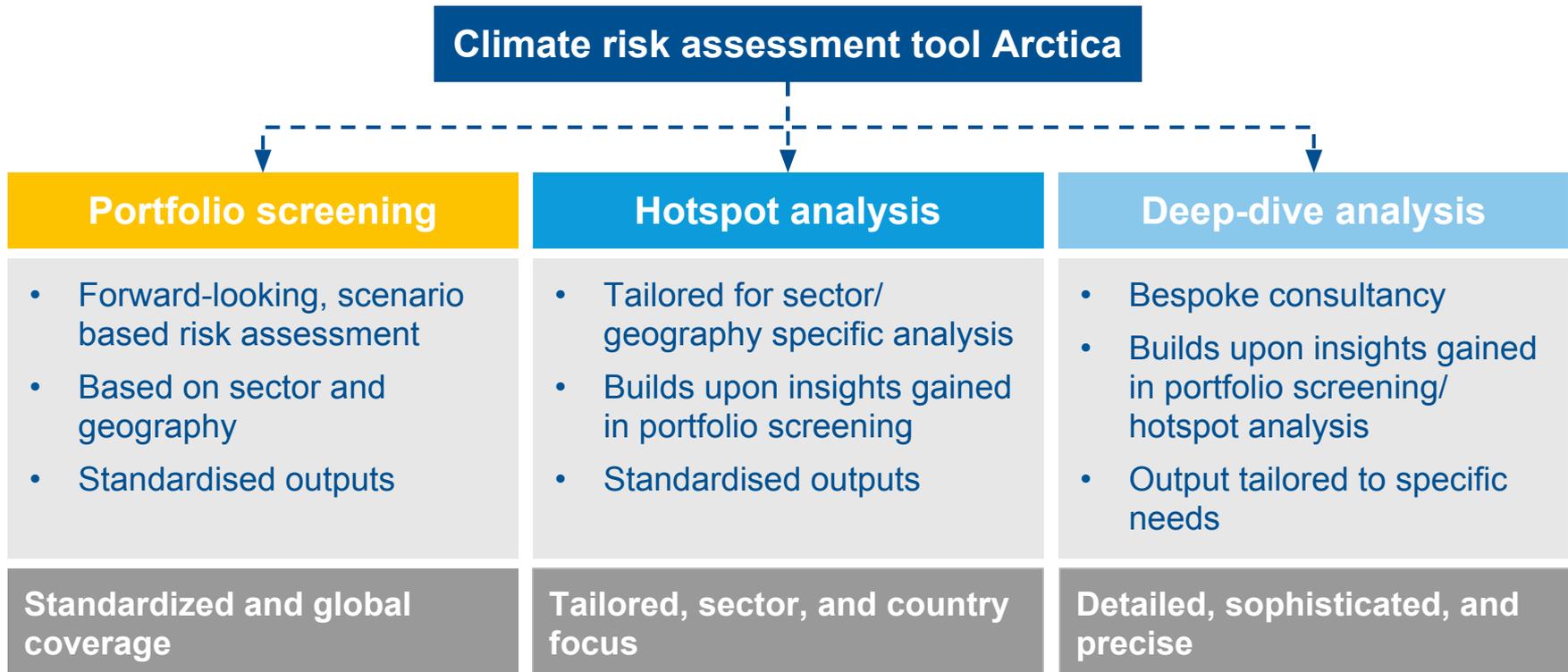
Investments and climate change



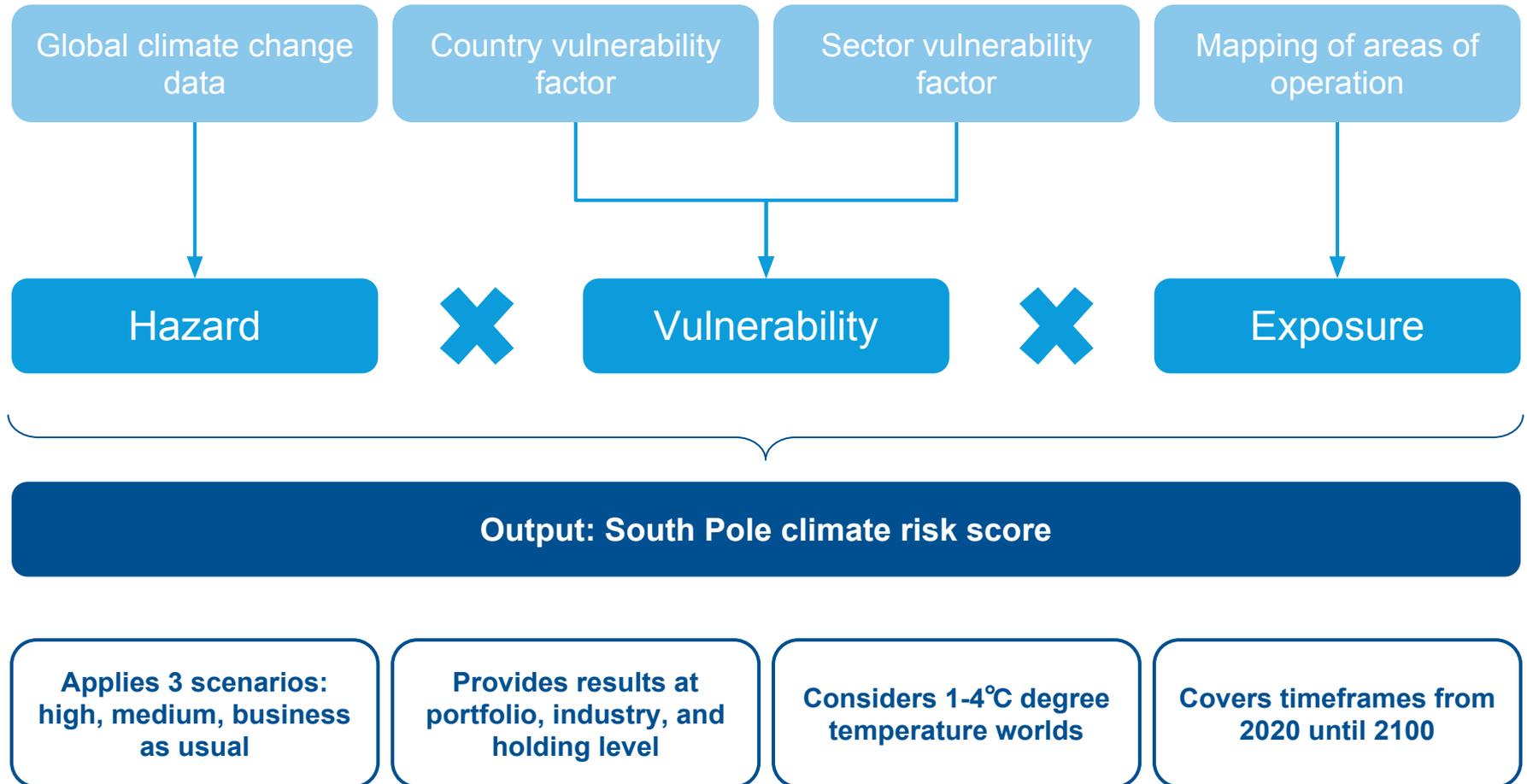
South Pole's support to address climate risks



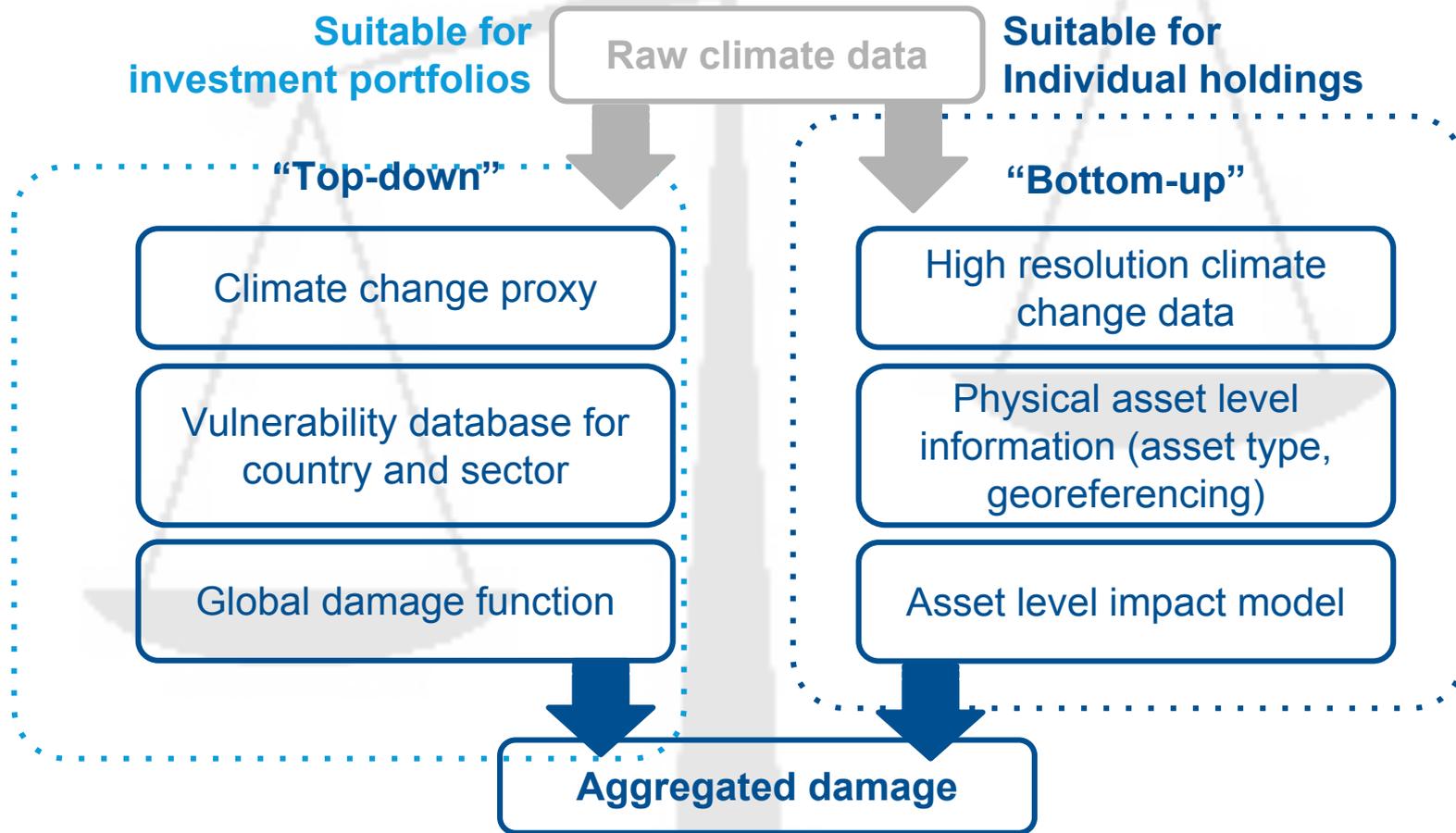
We provide portfolio, hotspot and deep-dive analysis



Define Risk

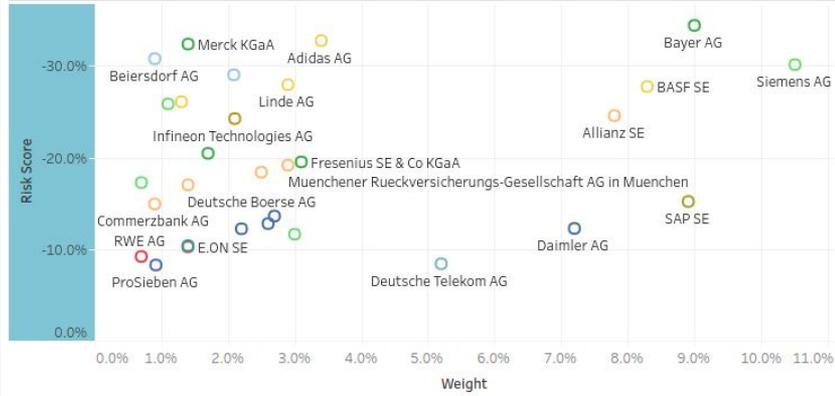


Approach to calculate risk components

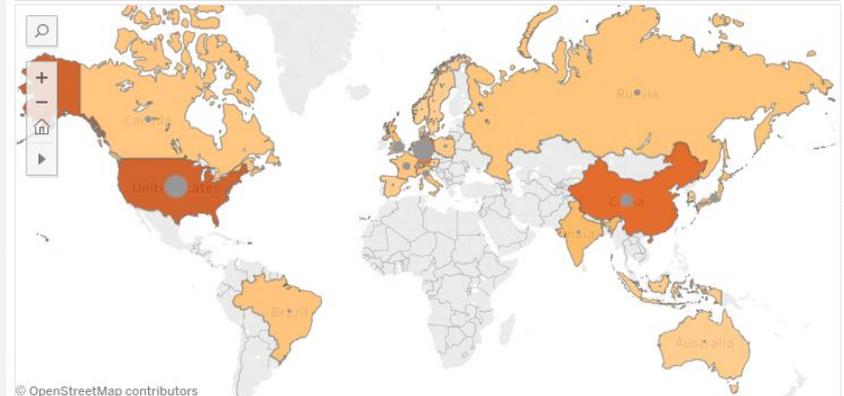


Analysis of the DAX

Risk contribution by ticker



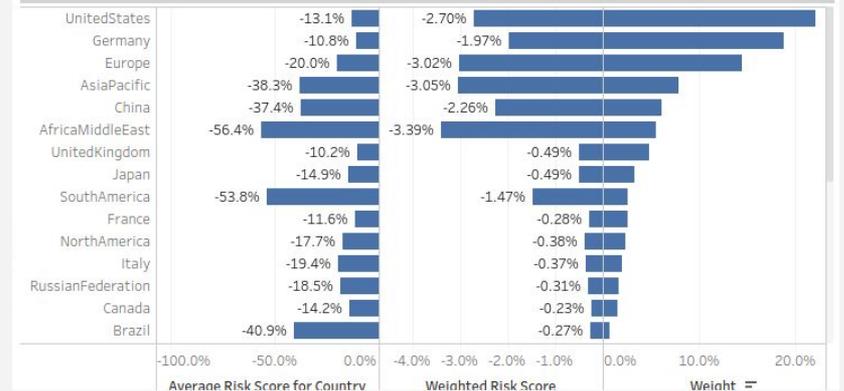
Risk contribution by region



Risk contribution by sector



Region details



The benefits of South Pole's top-down approach to risk screening

- Assesses **physical (acute and chronic) risks** of investment portfolios
- Covers **equity and fixed income** across all sectors and geographies
- Goes beyond footprint with a forward-looking, **scenario based analysis**
- Results in **quantitative risk measures** at individual asset level
- Complies with **TCFD requirements** and reporting
- Allows for **benchmarking** across portfolios, portfolio **optimization** and input to **engagement** measures

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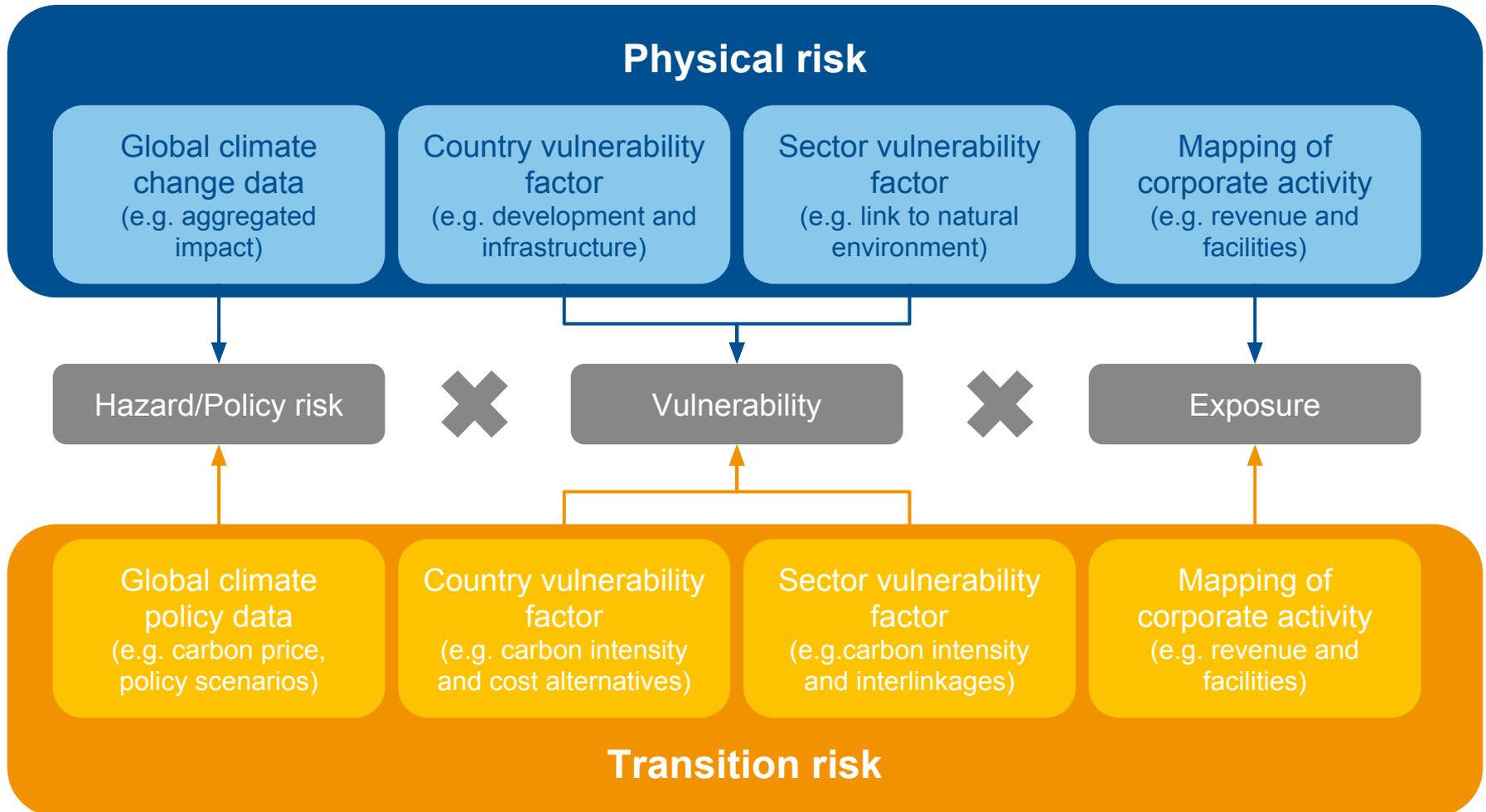
Thank you



Back up



South Pole's unique forward-looking approach provides global coverage across major climate risks



Results applicable for risk management and strategic planning

Metrics and Targets

A quantitative risk metric allows for comparisons across portfolio holdings and sectors.

Risk Management

Include the risk metric as an additional data point in risk analysis and management.

Strategy

Apply comparable climate risk metrics to investment strategies and communication.

Process for conducting a top-down portfolio screening



Approach to calculate risk components

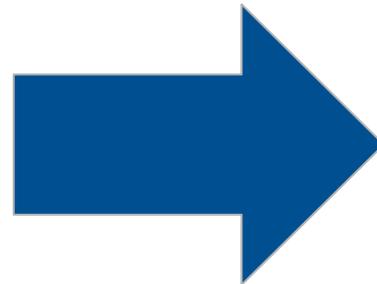
Top down versus Bottom up

Constraints:

- Quality and accessibility to key data-points
- Speed
- Cost
- Coverage



- Large size
- Diverse (*geographical, sectoral*)
- Coverage



Top down!

Key barriers in measuring climate risks

What are the key challenges in identifying and measuring climate risks?

