

Shades of climate risk

Categorizing climate risk for investors

Investor Approaches and Information Gap Analysis

Investors' Climate Risk Approaches (based on survey results from CICERO Climate Finance Advisory Board) ¹		Information Gaps & Challenges
Portfolio level	Climate risk analysis <ul style="list-style-type: none"> Portfolio or fund carbon foot-printing Carbon intensity of revenue Risk/opportunity analysis with scenarios for next 10-15 years 	<ul style="list-style-type: none"> No standard method for foot-printing funds, access to data varies and suppliers use different methods Valuing environmental impacts is a challenge Comparing across different green products is challenging
	Green investment products <ul style="list-style-type: none"> Dedicated green bond portfolio or fund Issuing and underwriting green bonds Offering green investment products e.g. renewable energy mutual fund, green car loans Dedicated investments to green technologies Fossil-free and sustainably-optimized investment products (e.g. excluding companies with significant revenue from oil, gas and coal in addition to wider exclusion policy) 	
Company or asset level	ESG analysis <ul style="list-style-type: none"> In-house sustainability ratings including climate change: business practice profile and indicators for positioning on climate (physical and regulatory) trends by sector Physical climate change assessment for agriculture and forestry Technology-Policy-Energy substitution dynamics for energy sector Policy, water, and climate change risk analysis for utilities, oil and gas, mining Water scarcity risk mapping where geographic information is available Forecasts for extreme weather events and temperature change inform state economic and productivity forecasts Post-investment ESG analysis 	<ul style="list-style-type: none"> Difficult to determine which are the most credible information sources GHG emissions not sufficient for investment decisions on climate risk Lack of asset-level data on climate risks, e.g. need more information on connection between companies earnings and climate risk Lack of disclosure on company planning for low carbon future Lack of scenario information for sector/company/country impacts Lack of country-by-country reporting from companies on water risk and more granular data on water stress areas Challenging to interpret which scenarios to use
	Active ownership and engagement <ul style="list-style-type: none"> Questions and expectations for companies on climate change and water management Dialogue with companies on ESG strategies Exercising voting rights and shareholder resolutions based on 2 degree target and to end oil sands activities in Canada Letters sent to external fund managers encouraging carbon footprint reporting Participation in initiatives to accelerate companies progress towards government target 	
	Divestment and exclusions <ul style="list-style-type: none"> Divestment from companies with substantial climate risk in coal, oil, gas, utilities sectors Based on ethical criteria of unacceptable levels of GHG emissions Sustainability and climate related exclusions e.g. 30 % threshold on revenues from coal: palm oil and oil sands exclusions 	

Table 1: Investor climate risk approaches and information gaps

Investor Approaches & Information Gap Analysis

Key messages:

CO₂ footprint reporting does not reflect how well a company is prepared for changes in transitional or physical risk. Current company-level reporting provides a snapshot that is immediately out-of-date, and largely omits exposure to physical impacts.² In general, there is limited transparency on exposure to physical climate risk, and water footprints don't capture future risk preparedness.

Companies do not know what to report or how to report it.³ There is a lack of consistent company level data on climate risk such as scenario and planning information that draws links to company financials.

The CICERO survey results presented in table 12 on the previous page reflect a range of different investor types (pension funds, asset managers, and banks) and mandates. At the portfolio level, investors employ carbon foot-printing and offering/seeking green investment products such as green bonds. At the company or asset level, analysis of different climate change factors is performed for specific sectors, e.g. focusing on policy risk for mining, oil and gas, and utilities.

The most common information gap cited was a lack of consistent company level data on climate risk such as scenario and planning information and links between climate risk and company financials. This fits well with the top ESG information challenges cited by Blackrock: 1) reliance on self-reported data, 2) inconsistent collection, management and distribution of ESG data, and 3) disparate approaches to measure and report ESG information to investors⁴. The initial stocktaking of the Financial Stability Board's TCFD reported that current disclosure based in static carbon footprints is incomplete and fragmented⁵.

For physical impacts, information gaps were noted in our survey on company-level water risk and granular information on water stress areas. To highlight the importance of improving granular information on physical climate risk, material impacts from physical climate change are reported by 75% of the 2,449⁶ companies through the Climate Disclosure Project (CDP) disclosure system in 2016. Of these companies, 45% reported material risk from physical climate change from change in precipitation extremes and droughts (Figure 8 on next page).

A list of useful references for physical impacts at the global and regional level are provided on our website at <http://www.cicero.uio.no/en/climateriskreport>.

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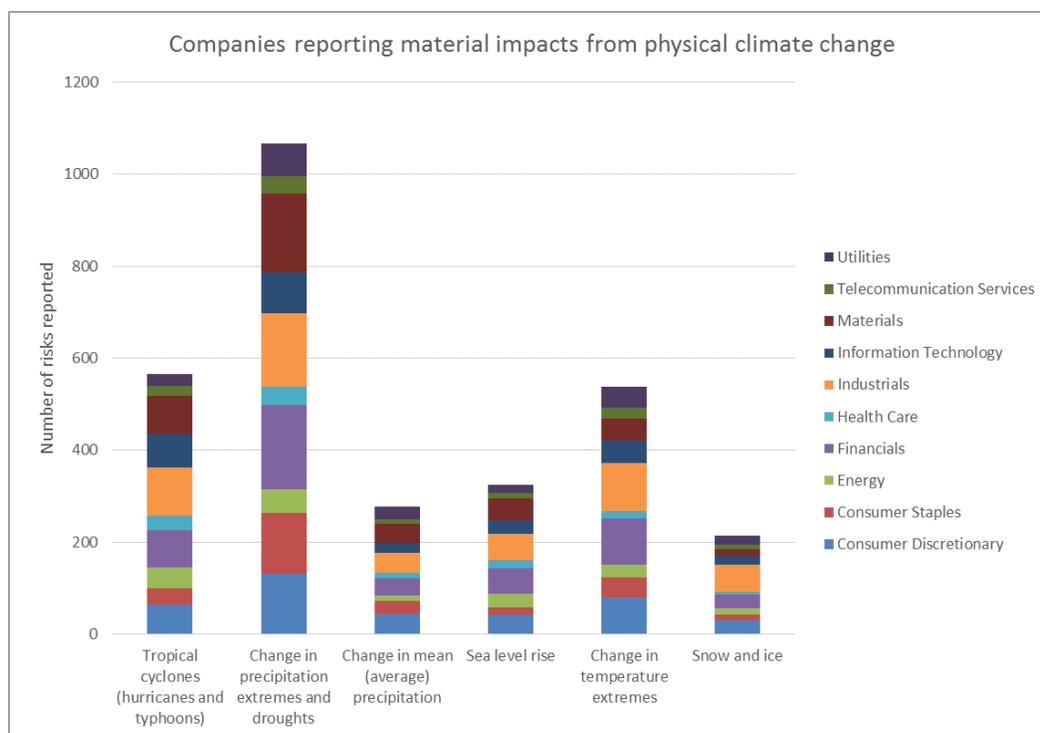


Figure 1: Companies by sector reporting material impacts from physical climate change
 Notes: Data provided by CDP based on CDP 2016 Company Reports, based on 2,449 companies reporting. Companies can report on more than one risk

¹ See list of Advisory Board members here: <http://www.cicero.uio.no/en/cicero-climate-finance/advisory-board>

² Caldecott, B. and L. Kruitwagen (2016). “How asset level data can improve the assessment of environmental risk in credit analysis”, Guest Opinion, S&P Global Ratings, 3 October 2016.

³ Carney, M. (2016). “Resolving the Climate Paradox”, Speech given by Mark Carney, Governor of the Bank of England, Chair of the Financial Stability Board, Arthur Burns Memorial Lecture, Berlin, 22 September 2016. <http://www.bankofengland.co.uk/publications/Pages/speeches/2016/923.aspx>

⁴ BlackRock (2016). “Exploring ESG: A Practitioner’s Perspective”, June 2016.

⁵ Carney, M. (2016). “Resolving the Climate Paradox”, Speech given by Mark Carney, Governor of the Bank of England, Chair of the Financial Stability Board, Arthur Burns Memorial Lecture, Berlin, 22 September 2016.

⁶ Reporting to Institutional investors