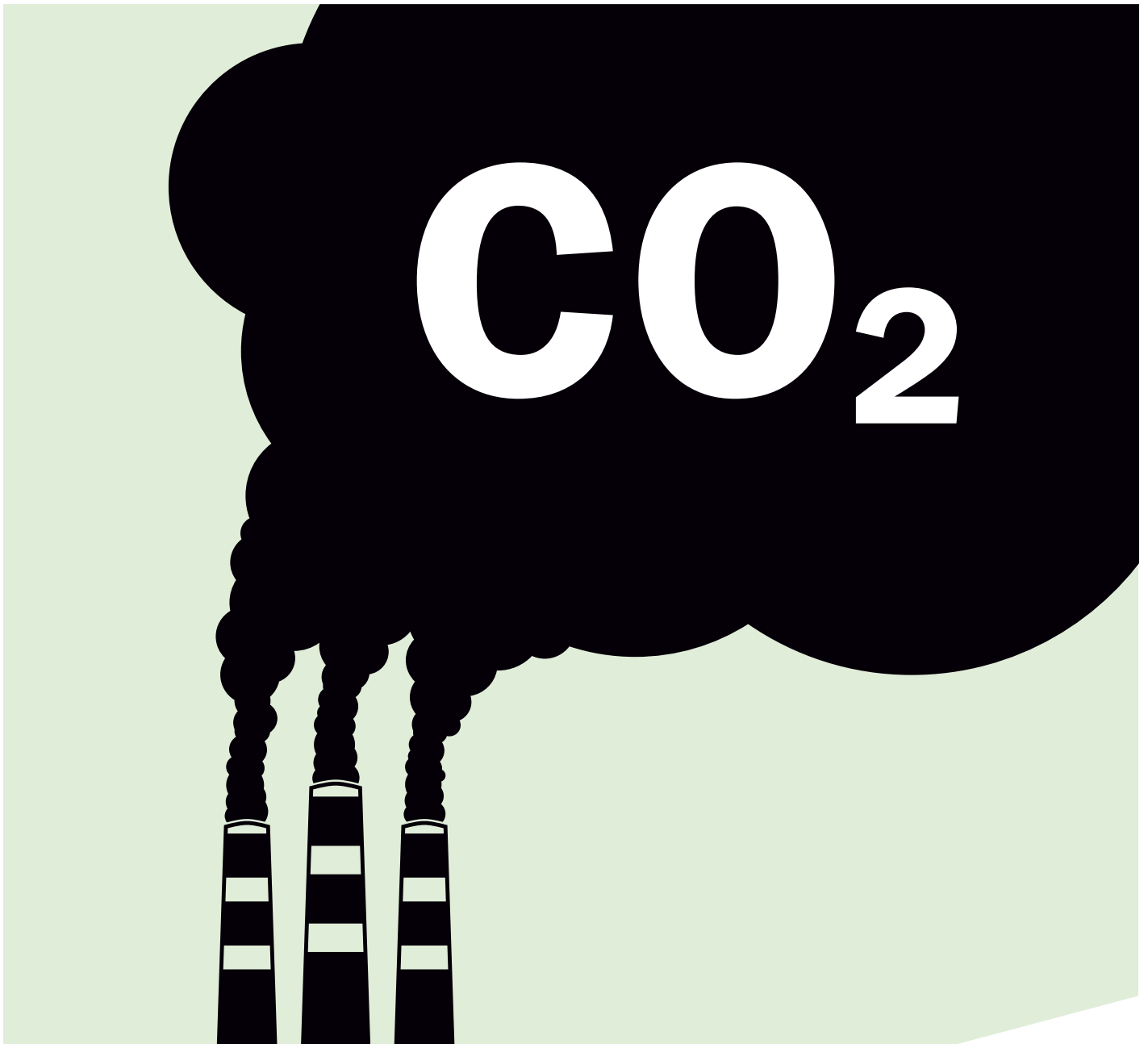


# What are the principal considerations and obstacles to climate change risk management?

Chris Wagstaff, Head of Pensions and Investment Education, Columbia Threadneedle Investments and Senior Visiting Fellow, Finance Faculty, the Business School (formerly Cass), London



## WHAT ARE THE PRINCIPAL CONSIDERATIONS AND OBSTACLES TO CLIMATE CHANGE RISK MANAGEMENT?

**Chris Wagstaff reflects on the principal considerations in approaching, and the obstacles to be overcome in implementing, an effective climate change risk management policy.**

As we know, climate change, as a global systemic risk, is one that is increasingly integral to asset owners' risk management. However, in approaching, and ultimately implementing, a climate change risk management policy, asset owners must first ask themselves some fundamental questions, while taking on board a number of key considerations. These include:

- Determining at which point of the portfolio construction process climate change risk management considerations should be implemented and whether they should be a primary or secondary consideration. For most, climate change risk management will be integral to manager selection but perhaps secondary to considerations such as the portfolio's required rate of return, risk parameters, diversification and liquidity when determining the Strategic Asset Allocation, given the potential to significantly alter the risk/return, diversification and liquidity characteristics of the portfolio.
- Whether to align portfolios with the objectives of the Paris Agreement,<sup>1</sup> as many asset owners are already starting to do, some in anticipation of regulation potentially moving in that direction. However, this is no easy task, given that there is no single validated approach for measuring and evaluating the temperature alignment and, indeed, the carbon intensity of a portfolio. Not to mention the transition pathways of a portfolio's holdings, with data availability being largely limited to equities, credit and sovereign bonds. Thankfully, the publication of the *IIGCC Paris Aligned Investment Initiative* will assist asset managers and asset owners in implementing investment policies in line with the Paris Agreement's goals.<sup>2</sup>
- Establishing what 'good' looks like. Although the Paris Agreement sets a very long-term target to aim at, asset owners will invariably look to their peer group for an initial baseline comparison and ongoing monitoring of their chosen climate metrics. To do so successfully will require greater levels of transparency from all and each setting realistic interim milestones.

<sup>1</sup> The Paris Agreement's central aim is to keep a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C by 2100.

<sup>2</sup> The Institutional Investors Group on Climate Change (IIGCC) is the European membership body for investor collaboration on climate change, whose mission is to mobilise capital for a low carbon transition. The Paris Aligned Investment Initiative is led and coordinated by IIGCC with a steering group of leading asset owners.

## THREE KEY OBSTACLES TO ASSESSING CARBON AND GHG EMISSIONS EXPOSURES

With the above in mind, asset owners (assisted by their investment consultant and asset managers) must navigate their way around three key obstacles to assessing the carbon and GHG emissions exposure of their portfolios. These are: the paucity of quality Scope 1, 2 and particularly Scope 3 GHG emissions data analytics; the inconsistency of ESG data, of which climate risk is a key “E” risk factor; and inadequate disclosures by companies of their GHG emissions. The latter severely compromises the accuracy of ESG data and the GHG emissions data compiled by data vendors and analysed by asset managers.

### Scope 1, 2 and 3 emissions data analytics

Measuring emissions is not an exact science. Scope 3 emissions in particular are poorly defined, largely estimated and subject to double counting, while there is significant disparity among data providers in capturing the data, as each adopt different methodologies and take a different view on the same factor. Despite these limitations, investors are using the available data (principally Scope 1 and 2 but also Scope 3 – often after making judgmental adjustments) to formulate views on which companies are striving to boost their sustainability credentials and then using the data to track how these companies progress over time.

### Inconsistent ESG data

As many ESG data providers have inconsistent coverage, lack standardised methodologies, provide subjective ESG assessments of companies and attempt to differentiate themselves by adopting proprietary metrics, this makes it extremely difficult to measure ESG factors consistently. Reassuringly, those asset managers with strong stewardship and ESG credentials are working on class-leading and differentiated solutions which, over time, will enable them to provide asset owners with more accurate data to further inform their decision making.

### Inconsistent company disclosures of GHG emissions

However, this aspiration continues to be compromised by inconsistent company disclosures of GHG emissions. While there are a number of global reporting frameworks, such as the Task Force on Climate-related Financial Disclosures (TCFD), that help companies *voluntarily* report sustainability information to a wide range of stakeholders, not all pull in the same direction. Of course, given how new the science of climate disclosure is, it is perhaps inevitable that these bodies are each grappling with what good looks like and which metrics best capture the climate-related risks of (and opportunities offered by) reporting entities operating in myriad sectors. However, each continues to adapt in order to provide investors with the information they need to make informed decisions about the sustainability of a company’s activities.

Indeed, with greater disclosure and transparency comes the ability to better assess and price climate-related risks and opportunities pertaining to each business which, in turn, leads to more accurately priced securities, more price efficient financial markets and more efficient capital allocation. Thankfully, the direction of travel is for companies to fully disclose the climate risks associated with their activities in a more standardised and consistent manner.

Ideally benchmarked to science-based targets aligned with the Paris targets, asset managers and asset owners will be better able to back the winners – those with the technologies and competitive advantages to thrive in the transition to a low carbon emissions world. They will also be able to use this information to make informed decisions around excluding or tilting a portfolio away from particular industries or stocks.

## TRANSITION AND PHYSICAL RISK ANALYSIS AND REPORTING

Transition and physical risks analysed by asset managers are reported to asset owners, many of whom are increasingly analysing these risks themselves, and, in turn, reporting the carbon-intensity of their portfolios (against appropriate benchmarks) to their members or beneficiaries.

Portfolio exposures to these risks are typically reported through carbon footprinting. The TCFD recommends that *asset owners* report the weighted average carbon intensity of their portfolios (per individual security weightings), based on scope 1 and 2 emissions (those within an organisation's control) and expressed in terms of tonnes of CO<sub>2</sub> equivalent (tonnes CO<sub>2</sub>e)/\$m sales). However, many asset managers in their reporting to asset owners, especially for equity portfolios, provide additional metrics such as carbon emissions (tonnes CO<sub>2</sub>e/\$m invested) and total carbon emissions (tonnes CO<sub>2</sub>e).

As noted in our first article, perhaps the most obvious limitation of carbon footprinting is that it doesn't capture the costs associated with *reducing* a company's carbon footprint. Indeed, two companies in different industries, or any two industries, may share the same carbon exposure but one may find it much easier and less costly to reduce its carbon footprint than the other, having a transition pathway that isn't as compromised by carbon lock-in.<sup>3</sup> This is where more analytical effort needs to be concentrated.

Likewise, physical risk analysis can be approached from several different angles. For instance, where a portfolio's assets are "geo-locatable", it is possible to measure exposure to physical risks associated with climate change directly using catastrophe risk modelling tools, analysing the portfolio's physical risks by perils, such as floods, earthquakes and wildfires. This, in turn, can trigger more detailed analysis as to how such a risk exposure is managed or insured.

As an extension of this risk analysis, although very much work in progress and notwithstanding the three limiting factors identified earlier, asset managers and asset owners are seeking to add to their climate change risk management by developing *climate Value-at-Risk (VaR)* measures of their portfolio climate exposures to estimate potential portfolio losses under a given climate scenario.

## NEXT STEPS

With all of this in mind, in our final article we consider the potential mitigating actions to climate change risk available to asset owners, the practicalities of each and how effective they may be.

<sup>3</sup>See: Kyle J. Bergacker, CFA (2019). *Climate Risk Modelling*, Columbia Threadneedle Investments.

To find out more visit  
**COLUMBIATHREADNEEDLE.CO.UK**



**Important information:** For use by Professional and/or Qualified Investors only (not to be used with or passed on to retail clients). Past performance is not a guide to future performance. The value of investments and any income is not guaranteed and can go down as well as up and may be affected by exchange rate fluctuations. This means that an investor may not get back the amount invested. Your capital is at risk. This material is for information only and does not constitute an offer or solicitation of an order to buy or sell any securities or other financial instruments, or to provide investment advice or services. The analysis included in this document has been produced by Columbia Threadneedle Investments for its own investment management activities, may have been acted upon prior to publication and is made available here incidentally. Any opinions expressed are made as at the date of publication but are subject to change without notice and should not be seen as investment advice. Information obtained from external sources is believed to be reliable but its accuracy or completeness cannot be guaranteed. The mention of any specific shares or bonds should not be taken as a recommendation to deal. Columbia Threadneedle Investments does not give any investment advice. If you are in doubt about the suitability of any investment, you should speak to your financial adviser. This document includes forward looking statements, including projections of future economic and financial conditions. None of Columbia Threadneedle Investments, its directors, officers or employees make any representation, warranty, guaranty, or other assurance that any of these forward-looking statements will prove to be accurate. This document is distributed by Columbia Threadneedle Investments (ME) Limited, which is regulated by the Dubai Financial Services Authority (DFSA). For Distributors: This document is intended to provide distributors' with information about Group products and services and is not for further distribution. For Institutional Clients: The information in this document is not intended as financial advice and is only intended for persons with appropriate investment knowledge and who meet the regulatory criteria to be classified as a Professional Client or Market Counterparties and no other Person should act upon it. Issued by Threadneedle Asset Management Limited. Registered in England and Wales, Registered No. 573204, Cannon Place, 78 Cannon Street, London EC4N 6AG, United Kingdom. Authorised and regulated in the UK by the Financial Conduct Authority. Columbia Threadneedle Investments is the global brand name of the Columbia and Threadneedle group of companies.  
[columbiathreadneedle.com](http://columbiathreadneedle.com) Issued 08.20 | Valid to 08.21 | J30840 | 3219141