# Climate science in industry: governance, standards and accessibility

## A joint initiative of Future Earth Australia and Climate-KIC Australia

Future Earth Australia's second flagship program—Climate risk and equity—commenced in November 2018 with an event held in conjunction with Climate-KIC Australia and the University of Sydney's Sydney Environment Institute. The morning consisted of an opening plenary lecture, followed by two panel discussions that were open to the public. The public event was followed by an invitation-only expert roundtable.

### BACKGROUND—THE PUBLIC DISCUSSIONS Part II

Seeing a need for open and carefully defined standards in applying climate science to calculating and disclosing climate risk, Dr Tayanah O'Donnell of FEA and Kate Mackenzie of Climate-KIC Australia initiated a gathering of minds. They partnered with the University of Sydney and invited 25 experts from government, industry and academia to a roundtable discussion under the Chatham House Rule to explore how other sectors are using climate science to guide business and policy, and how this might be made more transparent.

### Peter Stoker—AMC Consultants Pty Ltd

Peter talked about the development of the mining industry JORC (Joint Ore Reserves Committee) Code. The Code was in response to the damaging effects of over-reporting of mineral deposits by listed mining companies in the late 1960s. A Senate inquiry led to the formation of the JORC committee—comprising members of mining professional bodies, mining industry peak body and ASX representatives—which issued the JORC Code in 1989 following earlier reports and guidance that set standards for public reporting of mineral assets. The Code is principles-based; materiality, transparency and competence.

### Andrew Stringer—Director, Accounting & Audit Support Services P/L

Andrew was the inaugural head of audit at the Institute of Chartered Accountants and works with the Clean Energy Regulator. He spoke about the need for more and better data around climate risk and increased disclosure of climate risk, pointing out that Australian companies are falling short in measuring and quantifying this. Andrew raised ideas around increasing the ability to properly audit carbon emission and climate risk disclosure data. To be auditable, Andrew considered that reporting requirements need to be either legislated or in some other generally accepted form. The benefits of auditable data include increased transparency, comparability and credibility.

### Rowan Douglas—CBE, CEO Capital, Science and Policy Practice; Chairman, Willis Research Network

Rowan provided a portrait of how both insurance and reinsurance is a sector that has experience of devising a risk-based approach to most weather hazards that are exacerbated by climate change. Uncertainties and irregularities due to weather changes can be turned into something that can be considered in accounts, regulations and ratings that investors and stakeholders will understand. It is possible that this could be a basis for this framework to be expanded to cover climate change more generally. Rowan considered Australia well-placed to work in this space as we have highly qualified experts in catastrophe modelling, climate science and insurance.

## Expert roundtable under the Chatham House Rule

*Participants from research, industry, regulation, and civil society discussed the possible responses to the confluence of demand from both the private sector and regulators with the need for publicly available information that ensured the public interest.* ***If we were to create an open source standard, or code of conduct for the disclosure of climate risk to physical assets, what would it look like? Who should be involved? How would we develop it?***

Capital is shifting, and there is an appetite in the private sector to manage physical climate risk and to gain exposure to returns from adaptation-related services and measures.

The roundtable discussion began by exploring the Task Force on Climate-related Financial Disclosures (TCFD). It was broadly agreed that the TCFD is a useful framework that has already helped improve the understanding of financial climate risk factors. However, it does not define metrics in detail, and TCFD-aligned disclosures have been mostly limited to bigger companies. Further, these disclosures have led to a variety of tools designed to assist disclosure, but with no baseline from which to measure the adequacy of the disclosure.

Technical barriers to robust application of climate science in industry were also identified: for example, financial models and reporting templates do not easily incorporate climate modelling data.

### *Several necessary characteristics were identified for an effective climate risk disclosure framework:*

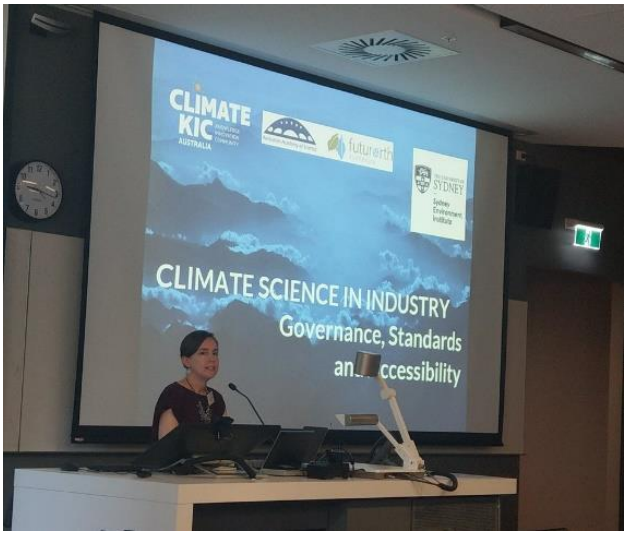
**Competent persons:** experts whose advice is backed by professional experience, membership of a professional body with an enforceable code of ethics, and liability cover.

**Detailed standards:** that allow flexibility but limited discretion.

**Comparability:** to ensure that disclosing entities cannot all claim to be the most resilient.

**Open source:** an accessible and publicly-available resource; not the proliferation of 'black boxes' to the detriment of the public interest.

There was much enthusiasm in the room for a collaborative approach to develop a taxonomy or standards, specifically around climate science, to ensure transparency and legitimacy.




*Kate Mackenzie introduces speakers at the roundtable*

### NEXT STEPS: What might be required to achieve such a code of conduct?

A partnership between the not-for-profit sector, government, industry and universities to develop and implement a code, and to ensure independence and legitimacy. Industry participants also wanted to convene an industry-led initiative.

An independent advisory group will be assembled by FEA and Climate-KIC in 2019 to determine the next steps in this important process, with a focus on ensuring independence and transparency.

It was also agreed among participants that some layers of information required in reference datasets and scenarios would vary across sector and scale, highlighting again the importance of a publicly available baseline.

It was agreed that an independent process was needed to develop a code of conduct, or similar, to underpin the science used for disclosure. It was also noted that two additional relevant processes are under way:

- The National Taskforce on Resilience, currently underway by the Australian Federal Government; and
- The EU taxonomy for sustainable finance, which includes an adaptation component.